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IN CHANCERY OF NEW JERSEY

To His Honor, Edwin Robert Walker,
Chancellor of the State of New Jersey:

The complainant, Igoe Brothers, Inc., a corporation of the State of New Jersey having its principal office in the City of Newark, County of Essex and State of New Jersey, respectfully shows:

1. At the times herein stated the complainant was and still is the owner of certain lands and premises situated on and south of Poinier Street and Avenue A, in the City of Newark, County of Essex and State of New Jersey, and at the times herein stated complainant was a manufacturer and conducted its business at the place aforesaid.

2. At the times herein stated the defendants, National Ben Franklin Fire Insurance Company of Pittsburgh, Pa., Phoenix Assurance Company, Ltd., of London, Hartford Fire Insurance Company, Continental Insurance Company, St. Paul Fire and Marine Insurance Company, Rhode Island Insurance Company, National Fire Insurance Company of Hartford, Great American Insurance, New York, Hudson Insurance Company of New York, American Central Insurance Company; National Union Fire Insurance Company of Pittsburgh, Pa., and United States Fire Insurance Company of New York, were and still are corporations and they and each of them were duly incorporated with power to insure against loss or damage by fire and they and each of them

were duly authorized and licensed to conduct the business of insurers against loss or damage by fire in the State of New Jersey.

3. Heretofore and on or about January 29th, 1925, the said defendant, National Ben Franklin Fire Insurance Company of Pittsburgh, Pa., in consideration of the sum of One hundred twenty-three dollars ($123), duly paid to it by the complainant, executed and delivered to the complainant, its policy of insurance bearing policy number 697689 in an amount not exceeding Ten thousand dollars ($10,000), therein and thereby insuring the complainant with respect to the use and occupancy of the manufacturing plant of the complainant described in said policy of insurance. The original policy will be produced by complainant for all purposes of the within bill of complaint.

4. On or about January 29th, 1925, the said defendant, Phoenix Assurance Company, Ltd. of London, in consideration of the sum of One hundred twenty-three dollars ($123) in hand duly paid to it by the complainant, executed and delivered to the complainant, its policy of insurance bearing policy number 662271, in an amount not exceeding Ten thousand dollars ($10,000), therein and thereby insuring the complainant with respect to the use and occupancy of the manufacturing plant of the complainant described in its said policy of insurance. The original policy will be produced by the complainant at all times and for all purposes of the within bill of complaint.

5. Heretofore and on or about January 31st, 1925, the said defendant, Hartford Fire Insurance Company,

in consideration of the sum of One hundred and twenty-three dollars ($123) in hand duly paid to it by the complainant, executed and delivered to the complainant, its policy of insurance bearing policy number 97701 in an amount not exceeding Ten thousand dollars ($10,000), therein and thereby insuring the complainant with respect to the use and occupancy of the manufacturing plant of the complainant described in its said policy of insurance and which original policy complainant will produce for all purposes in connection with the within bill of complainant.

6. Heretofore and on or about January 29th, 1925, the said defendant, United States Fire Insurance Company of New York, in consideration of the sum of One hundred twenty-three dollars ($123), duly paid to it by the complainant, executed and delivered to the complainant, its policy of insurance bearing policy Number 2304571, in an amount not exceeding Ten thousand dollars ($10,000), therein and thereby insuring the complainant with respect to the use and occupancy of the manufacturing plant of the complainant described in its said policy of insurance. The original policy will be produced by the complainant for all purposes in connection with the within bill of complaint.

7. Heretofore and on January 29th, 1925, the said defendant, The Continental Insurance Company, in consideration of the sum of Two hundred and forty-six dollars ($246), in hand duly paid to it by the complainant, executed and delivered to the complainant, its policy of insurance bearing policy number 18608 in an amount not exceeding Twenty thousand dollars ($20,000.00),

therein and thereby insuring the complainant with respect to the use and occupancy of the manufacturing plant of the complainant described in its said policy of insurance, and which original policy the complainant will produce at all times and for all purposes in connection with the within bill of complaint.

8. Heretofore and on or about January 29th, 1925, the said defendant, St. Paul Fire & Marine Insurance Company, in consideration of the sum of One hundred and twenty-three dollars ($123), in hand duly paid to it by the complainant, executed and delivered to the complainant, its policy of insurance bearing policy number 443533, in an amount not exceeding Ten thousand dollars ($10,000), therein and thereby insuring the complainant with respect to the use and occupancy of the manufacturing plant of the complainant described in its said policy of insurance. The original policy will be produced by the complainant at all times and for all purposes of the within bill of complaint.

9. Heretofore and on or about January 31st, 1925, the said defendant, Rhode Island Insurance Company, in consideration of the sum of One hundred twenty-three dollars ($123), in hand duly paid to it by the complainant, executed and delivered to the complainant, its policy of insurance bearing policy number 1880717, in an amount not exceeding Ten thousand ($10,000) dollars, therein and thereby insuring the complainant with respect to the use and occupancy of the manufacturing plant of the complainant, described in its said policy of insurance. The original policy will be produced by the complainant at all times and for all purposes of the within bill of complaint.

10. Heretofore and on or about January 28th, 1925, the said defendant, National Fire Insurance Company of Hartford, in consideration of the sum of Three hundred and sixty-nine dollars ($369), in hand duly paid to it by the complainant, executed and delivered to the complainant, its policy of insurance bearing policy number 920730, in an amount not exceeding Thirty thousand ($30,000) dollars, therein and thereby insuring the complainant with respect to the use and occupancy of the manufacturing plant of the complainant described in its said policy of insurance. The original policy will be produced by the complainant at all times and for all purposes of the within bill of complaint.

11. Heretofore and on or about January 28th, 1925, the said defendant, Great American Insurance Company, New York, in consideration of the sum of One hundred and twenty-three dollars ($123), in hand duly paid to it by the complainant, executed and delivered to the complainant, its policy of insurance bearing policy number 238768, in an amount not exceeding Ten thousand dollars ($10,000), therein and thereby insuring the complainant with respect to the use and occupancy of the manufacturing plant of the complainant described in its said policy of insurance. The original policy will be produced by the complainant at all times and for all purposes of the within bill of complaint.

12. Heretofore and on or about January 29th, 1925, the said defendant, Hudson Insurance Company of New York, in consideration of the sum of One hundred and twenty-three dollars ($123), in hand duly paid to it by the complainant, executed and delivered to the com-

plainant its policy of insurance bearing policy number 344081, in an amount not exceeding Ten thousand dollars ($10,000), therein and thereby insuring the complainant with respect to the use and occupancy of the manufacturing plant of the complainant described in its said policy of insurance. The original policy will be produced by the complainant at all times and for all purposes of the within bill of complaint.

13. Heretofore and on or about January 29th, 1925, the said defendant, American Central Insurance Company, in consideration of the sum of One hundred twenty-three dollars ($123), in hand duly paid to it by the complainant, executed and delivered to the complainant, its policy of insurance bearing policy number 8575, in an amount not exceeding Ten thousand ($10,000) dollars, therein and thereby insuring the complainant with respect to the use and occupancy of the manufacturing plant of the complainant described in its said policy of insurance. The original policy will be produced by the complainant at all times and for all purposes of the within bill of complaint.

14. Heretofore and on or about January 29th, 1925, the said defendant, National Union Fire Insurance Company of Pittsburgh, Pa., in consideration of the sum of One hundred and twenty-three dollars ($123), in hand duly paid to it by the complainant, executed and delivered to the complainant, its policy of insurance bearing policy number 10005, in an amount not exceeding Ten thousand ($10,000) dollars, therein and thereby insuring the complainant with respect to the use and occupancy of the manufacturing plant of the complainant, described

in its said policy of insurance. The original policy will be produced by the complainant at all times and for all purposes of the within bill of complaint.

15. Each of the aforesaid fire insurance policies were issued for the term of one year from the date thereof.

16. It was provided in said policies of insurance issued by the said defendants to complainant, amongst other things as follows:

"The conditions of this contract are that if the building(s) situate on and south of Poinier Street and Avenue "A", Newark, New Jersey and occupied as for the manufacture of wire and nails and/or machinery and/or equipment and/or stock contained therein, be destroyed or damaged by fire occurring during the term of this policy so as to necessitate a total or partial suspension of business, this Company shall be liable under this policy for the actual loss sustained, consisting of net profits on the business which it thereby prevents, such fixed charges and expenses pertaining thereto as must necessarily continue during a total or partial suspension of business and such expenses as are necessarily incurred for the purpose of reducing the loss under this policy, for not exceeding such length of time as shall be required with the exercise of due diligence and dispatch to rebuild, repair or replace such part of said building(s) and machinery and equipment and/or stock as may be destroyed or damaged (commencing with the date of the fire and not limited by the date of expiration of this policy),

subject to the following conditions and limits, to wit:

"TOTAL SUSPENSION: The per diem liability under this policy during the time of total suspension of business of all the properties described herein shall be limited to the "Actual Loss Sustained," not exceeding 1/300 of the amount of this policy for each business day of such suspension, due consideration being given to the experience of the business before the fire and the probable experience thereafter.

"PARTIAL SUSPENSION: The per diem liability under this policy during the time of a partial suspension of business shall be limited to the "Actual Loss Sustained," not exceeding that proportion of the per diem liability that would have been incurred by a total suspension of business which the actual per diem loss sustained, during the time of such partial suspension, bears to the per diem loss which would have been sustained by a total suspension of business, for the same time, of all properties described herein, due consideration being given to the experience of the business before the fire and the probable experience thereafter."

17. Heretofore and on the 9th day of April 1925, while each of the aforesaid policies of insurance was in full force and effect the buildings on the property of the complainant at the place aforesaid were totally destroyed by fire and the business of the complainant was totally suspended.

18. Subsequent to the fire the complainant and the defendants sought to amicably adjust the loss sustained by the complainant, but were unable to agree thereon.

19. In view of the inability of the complainant and each of the defendants to agree upon the amount of the loss sustained by the complainant an agreement in writing was entered into on the 21st day of June, 1926, by and between the complainant and each of the aforesaid defendants, a copy of which agreement is hereto annexed and made a part hereof as if recited at length.

20. The said agreement provided for the appointment of appraisers for and on behalf of the complainant and for and on behalf of the defendants, and it further provided for the manner in which an umpire should be selected in the event that the said appraisers were unable to agree upon a competent and disinterested umpire. The appraisers being unable to agree upon the appointment of an umpire, application was made to the Inferior Court of Common Pleas of the County of Essex for the appointment and selection of an umpire, and as a result of the proceedings in said court, Charles F. Lynch, Esq., was duly appointed umpire.

21. The said agreement in writing amongst other things provided as follows:

> "3. The appraisers shall thereupon together first estimate and appraise the loss sustained by the party of the first part under and within the meaning of all of said policies but taking into consideration in determining such loss only the use and occupancy of the buildings and structures formerly used by

the insured in the manufacture of wire and nails; and failing to agree on the amount of such loss they shall submit their differences to the umpire; and the award in writing of any two shall determine the amount of the loss as hereinafter provided.

"4 The appraisers shall together then next estimate and appraise the loss sustained by the insured under and within the meaning of all of the policies but taking into their consideration the use and occupancy of all of the buildings used by the insured at the place aforesaid; and, failing to agree, shall submit their differences to the umpire; and the award in writing of any two shall determine the amount of such loss as hereinafter provided.

"5. The appraisers together shall next estimate and appraise the loss sustained by the insured at the place aforesaid, but shall take into consideration the use and occupancy of all of the buildings used by the insured at the place aforesaid, but excluding, however, the use and occupancy of such buildings which were used by the insured in its business as jobbers and/or distributors in nails received from the plant of the insured or those purchased by the insured in open market; and, failing to agree shall submit their differences to the umpire; and the award in writing of any two shall determine the amount of such loss, as hereinafter provided.

"6. If either of the parties hereto shall feel aggrieved by the award of the appraisers (or the award in writing of one of the appraisers and the umpire) in that the appraisers (or one of the ap-

praisers and umpire) have taken into consideration in arriving at their award matters which were improper or illegal for their consideration, such party, shall, within ten days from the entry of the aforesaid awards, institute proper proceedings in the Court of Chancery for the purpose of correcting and reforming the awards in accordance with the practise of that court and either party taking such action shall proceed with all reasonable dispatch. In the event that no such action shall be taken by either of the parties hereto within ten days from the date of the awards made as aforesaid the awards in their respective amounts shall be conclusive and final and for all purposes of this agreement binding upon the parties hereto."

22. Thereafter the appraiser selected by the complainant and the appraiser selected by the defendants conferred with each other for the purpose of estimating and appraising the loss sustained by the complainant, and both of said appraisers agreed as to certain items of loss sustained by the complainant and they disagreed as to other items of loss, and the appraisers thereafter submitted their differences to the umpire aforesaid. Eight disputed points were submitted to the umpire for his consideration and determination and the umpire made his decision on said disputed points and made a final award in favor of the complainant in the amount of Seventy-nine thousand seven hundred and eight dollars ($79,708.00).

23. The aforesaid award of $79,708.00 was joined in by E. F. McCrossen, appraiser for the defendant companies, and the award was filed on November 29th, 1927.

24. Complainant is particularly aggrieved by the decision arrived at by the umpire on the fifth and eighth points submitted to the umpire for his decision, to wit:

"5th. What were the profits of Igoe Brothers, Newark, New Jersey, before the fire?

8th. What length of time would be required before the assured's operations after the fire would absorb the overhead charges?"

25. Complainant is aggrieved as to the decision made by the umpire on point number 5 for the following reason, to wit, the umpire found that the complainant had an average adjusted profit for one year in the amount of $144,401.09 and that this profit was derived from manufacturing sales and from jobbing sales, the complainant having been in the business of manufacturer and jobber. He found that of the total sales both jobbing and manufacturing, that the percentage of manufacturing sales amounted to 62.628 per cent of the total sales, and that the percentage of jobbing sales amounted to 37.372 per cent of the total sales. The umpire then applied the percentage of manufacturing sales, to wit, 62.628 per cent against the average adjusted profit for one year, which gave him the result of $90,435.51. The profits on $90,435.51 were thereupon divided by three hundred (300) days, giving an average daily manufacturing profit of $301.45. *The umpire aforesaid erred in arriving at the average daily manufacturing profit in the manner aforesaid because he erroneously assumed that the profit from the manufacturing business amounted to 62.628 per cent of the total profits of the complainant, whereas and in fact the manufacturing profits amounted to 81.075*

per cent of the total profits of the complainant and the jobbing profits amounted to 18.925 per cent. The umpire erred in assuming that the appraisers were in accord on the percentage that the manufacturing profits bore to the total profits of the complainant and he, the said umpire, erroneously and mistakingly assumed that the manufacturing profits bore to the total profits of the company the same percentage that the manufacturing sales bore to the total sales of the complainant company. The umpire should have ascertained, from the accurate data submitted to him that the profits derived from manufacturing sales amounted to 81.075 per cent of the total sales of the company and instead of making an allowance to the complainant of $60,290.00 as the complainant's allowance for loss of net profits, he should have allowed the sum of $89,024.00.

26. Complainant is further aggrieved at the decision arrived at by the umpire with respect to the eighth point which was submitted to him for his decision, to wit, what length of time would be required before the assured's operations after the fire would absorb the overhead charges. The umpire found that since the assured continued manufacturing operations after the fire, that these operations gradually absorbed the overhead charges, and, in his opinion, an allowance of one hundred (100) days within which to absorb the overhead charges would be fair to the assured. The umpire decided that in his opinion it would require two hundred (200) days before the profit making facilities of the complainant were restored. The umpire determined that the total fixed charges per day of the complainant amounted to $194.18. (*Accurate information was before the umpire*

showing the average production per day prior to the fire and the actual production after the fire for the purpose of determining when and within which time the fixed charges of the complainant would be absorbed.) The average production per day before the fire amounted to 62,285 pounds and multiplied by 200 days which is the time fixed by the umpire when the profit making facilities would be restored, amounts to 12,456,800 pounds. The total production of the complainant for the two hundred (200) days following the fire amounted to $2,003,843, showing that 16.09 per cent of the fixed charges were absorbed during the two hundred (200) days following the fire and applying 16.09 per cent to $194.18, the total fixed charges shows that the complainant absorbed but the sum of $31.24 per day, leaving a balance of $162.94 unabsorbed fixed charges for a period of two hundred (200) days. The complainant should have been allowed the sum of $32,588. for the unabsorbed fixed charges, instead of the sum of $19,418., which was allowed by the umpire under his erroneous calculations.

27. Complainant alleges and asserts that the award arrived at by the umpire in fixing the loss of complainant's net profits at $60,290.00 was the *result of a mistake on the part of the said umpire and that the said umpire did not exercise his own judgment in arriving at said award on this disputed question, but that the said umpire assumed a percentage not warranted by any fact submitted to him or by any data submitted by either of the appraisers* and that as a result of the error and mistake of said umpire the award of the said umpire does not embody his real judgment, and further that the umpire in adopting the erroneous percentage aforesaid exceeded his

jurisdiction and that the umpire thereby also exceeded his authority.

28. Complainant further alleges and asserts that the said umpire erroneously and mistakingly determined that the fixed charges of the complainant, to wit, $194.00 per day would be absorbed in one hundred (100) days. This finding by the umpire was the result of a mistake on the part of the said umpire and was not based upon any fact or data submitted to or before the said umpire and the award thereby arrived at by the said umpire, due to the mistake of said umpire, was not the real judgment of the said umpire and the said umpire by his failure to consider the facts submitted to him exceeded his authority as well as his jurisdiction.

29. As a result of the error aforesaid committed by the said umpire injustice has been done to the complainant.

Complainant is without adequate remedy in the courts of law, and therefore prays:

1. That National Ben Franklin Fire Insurance Company of Pittsburgh, Pa., Phoenix Assurance Company, Ltd. of London, Hartford Fire Insurance Company, The Continental Insurance Company, St. Paul Fire & Marine Insurance Company, Rhode Island Insurance Company, National Fire Insurance Company of Hartford, Great American Insurance, New York, Hudson Insurance Company of New York, American Central Insurance Company, National Union Fire Insurance Company of Pittsburgh, Pa., and United States Fire Insurance Company

of New York, who are the defendants to this suit, may answer this bill of complaint without oath, and each statement therein made.

2. That the award heretofore entered on November 29th, 1927, be reformed to the end that the same will carry out the terms of the agreement hereinbefore referred to dated June 21st, 1926, and to the end that the same will properly show the losses sustained by the complainant under the policies of insurance hereinbefore set forth.

3. That the award be reformed to the end that the complainant will be awarded the sum of $89,024.00 as the amount of the loss of net profits sustained by the complainant and that the said award be reformed to the end that the complainant be allowed the sum of $32,586.00 for its fixed charges, and that the final award be made in favor of the complainant in the amount of $121,612.00, and that complainant may have such further relief as may be equitable and just.

4. That a writ of subpoena may issue, commanding said defendants to answer this bill of complaint and to abide by such decree as this court may make in the premises.

WOLBER & GILHOOLY,
Solicitors for and of Counsel
with Complainant.

THIS AGREEMENT, entered into this 21st day of June, 1926, by and between Igoe Brothers, Inc., a corporation, party of the first part hereinafter designated

as the insured, and United States Fire Insurance Company of New York; Rhode Island Insurance Company; National Ben Franklin Insurance Company; Continental Insurance Company of the City of New York, Phoenix Assurance Company Ltd., of London; Great American Insurance Co. of New York; St. Paul Fire & Marine Insurance Co., St. Paul, Minn.; Hartford Fire Insurance Co.; National Fire Insurance Co. of Hartford, Conn.; American Central Insurance Company, St. Louis, Mo.; National Union Fire Insurance Co. of Pittsburgh, Pa. and Hudson Insurance Company, each for itself and not jointly, parties of the second part, hereinafter designated as the insurer.

WHEREAS, the parties of the second part hereto did issue to the party of the first part certain policies of insurance on the use and occupancy of certain property of the party of the first part situated on and South of Poinier Street and Avenue A in the City of Newark, County of Essex and State of New Jersey.

AND WHEREAS the party of the first part has sustained a loss under said policies by reason of a fire which occurred on the 9th day of April, 1925 in respect to the use and occupancy of the buildings aforesaid and mentioned in the policies of insurance held by the said party of the first part in the companies designated herein as the parties of the second part;

AND WHEREAS the party of the first part conducted in the buildings owned by them at the place aforesaid three different branches of their business as follows:

(a) Manufacture of wire and nails;

(b) Jobbers in metal bars used in reinforced concrete work;

(c) Jobbers in nails.

AND WHEREAS a dispute has arisen between the parties hereto as to the true construction to be placed on the terms of the policies held by the party of the first part in the companies aforesaid and the said parties hereto are not in accord with respect to the amount of loss suffered by the party of the first part under said policies;

AND WHEREAS it is the desire of the parties hereto to have the loss sustained by the party of the first part appraised and determined in the manner hereinafter set forth and to have the true meaning and application of the said policies properly construed;

AND WHEREAS the party of the first part heretofore and on April 8, 1926, instituted a suit in the New Jersey Supreme Court to recover its loss under said policies and all of the parties of the second part hereto were made parties defendant in said suit; and the parties hereto and each of them are desirous of expediting the determination of the true amount of the loss suffered by the party of the first part and with that end in view have entered into the within agreement.

NOW THEREFORE THIS AGREEMENT WITNESSETH that for and in consideration of the premises and the mutual covenants herein contained, the parties hereto do agree as follows;

1. The party of the first part hereby selects and appoints Clifford McEvoy of No. 505 Orange Street, Newark, New Jersey, and the party of the second part hereby selects and appoints E. F. McCrossin of No. 82 Beaver Street, New York City, as to the respective appraisers for the parties hereto to estimate and appraise, in accordance with the terms, conditions and requirements of said policies, the amount of loss or damages sustained by the party of the first part under the policies aforesaid, it being understood that the said Clifford McEvoy has been selected by the party of the first part as its appraiser and the said E. F. McCrossin has been selected by the parties of the second part as their appraiser.

2. The said appraisers shall within ten days of the date of the execution of this agreement, first select a competent and disinterested umpire as provided by said policies and in the event that the appraisers so selected as herein provided shall fail or neglect, for a space of ten days from the date of this agreement, to agree upon and select an umpire, either the party of the first part or the parties of the second part shall be at liberty to apply to the inferior Court of Common Pleas of the County of Essex, on five days' notice, in writing, to the attorney or attorneys for the respective parties hereto of the intention of either party so to do, to appoint a competent and disinterested umpire; and the acts of the umpire so appointed shall be binding upon the insured and the insurer to the same extent as if such umpire had been selected in the manner provided for in said policies of insurance.

3. The appraisers shall thereupon together first estimate and appraise the loss sustained by the party of

the first part under and within the meaning of all of said policies but taking into consideration in determining such loss only the use and occupancy of the buildings and structures formerly used by the insured in the manufacture of wire and nails; and failing to agree on the amount of such loss they shall submit their differences to the umpire and the award in writing of any two shall determine the amount of the loss as hereinafter provided.

4. The appraisers shall together then next estimate and appraise the loss sustained by the insured under and within the meaning of all of the policies but taking into their consideration the use and occupancy of all of the buildings used by the insured at the place aforesaid; and, failing to agree, shall submit their differences to the umpire; and the award in writing of any two shall determine the amount of such loss as hereinafter provided.

5. The appraisers together shall next estimate and appraise the loss sustained by the insured at the place aforesaid but shall take into consideration the use and occupancy of all of the buildings used by the insured at the place aforesaid, but excluding, however, the use and occupancy of such buildings which were used by the insured in its business as jobbers and/or distributors in nails received from the plant of the insured or those purchased by the insured in open market; and, failing to agree, shall submit their differences to the umpire; and the award in writing of any two shall determine the amount of such loss, as hereinafter provided.

6. If either of the parties hereto shall feel aggrieved by the award of the appraisers (or the award in writing

of one of the appraisers and the umpire) in that the appraisers (or one of the appraisers and umpire) have taken into consideration in arriving at their award matters which were improper or illegal for their consideration, such party shall, within ten days from the entry of the aforesaid awards, institute proper proceedings in the Court of Chancery for the purpose of correcting and reforming the awards in accordance with the practise of that court and either party taking such action shall proceed with all reasonable despatch. In the event that no such action shall be taken by either of the parties hereto within ten days from the date of the awards made as aforesaid, the awards in their respective amounts shall be conclusive and final and for all purposes of this agreement binding upon the parties hereto.

7. Either party hereto at any time after the respective awards as aforesaid have become finally determined, may apply to the New Jersey Supreme Court, the Essex County Circuit Court, the Essex County Court of Common Pleas, or the Court of Chancery of New Jersey, to have the policies of insurance and the true meaning and application thereof construed, in the manner and in accordance with the provisions and the practise of an act of the legislature of the State of New Jersey entitled "An Act Concerning Declatory Judgments and Decrees," Chapter 140, Laws of 1924, and a final judgment or decree as the case may be, shall be entered in the amount of such award as shall conform to the true construction and meaning of the aforesaid policies of insurance. The right of either of the parties hereto to appeal from any order, judgment or decree is expressly reserved.

8. Upon an award being arrived at by the appraisers (or appraiser and umpire) the insurer may, at its option, pay to the insured the amount of any of the awards arrived at by the appraisers (or appraiser and umpire). In the event that the parties of the second part makes such payment and it shall be ultimately determined that the payment so made is excessive, the party of the first part does hereby agree to refund to the parties of the second part in proportionate amounts, the excess. In the event that the parties of the second part shall not make payment of any of the awards as last mentioned the party of the first part shall become entitled to interest on the amount of the award to which it shall finally be determined to have been entitled and such interest shall be computed from the date of the award by the appraisers (or appraiser and umpire) to the date of payment by the insurer. The parties of the second part may, however, tender payment to the party of the first part of any time during the proceeding, of such sum of money as it shall elect to pay and thereafter no interest shall be computed on the amount so paid by the parties of the second part irrespective of the ultimate and final judgment or decree. The words "finally determined," "ultimately determined," "ultimate final judgment or decree," shall be construed to mean that result arrived at after all appeals have been exercised, lost or waived.

9. It is agreed by and between the parties hereto that the present suit instituted by the party of the first part against the parties of the second part shall not be discontinued, but that the insured will not proceed with said suit during the pendency of the within agreement

and during the faithful performance of the provisions hereof, and should the insured elect to proceed with said suit, notice in writing shall be given to Messrs. Arthur T. Vanderbilt, and Lum, Tamblyn & Colyer, as attorneys for the parties of the second part, of its intention to proceed with said suit, and the parties of the second part shall thereafter have twenty days from the service of such a notice to plead, answer or demur to the complaint now filed. The parties of the second part do hereby agree that they, or any of them, will not urge as a defense to the claim of the insured the provision in the policies reading as follows:

> "No suit or action on this policy for the recovery of any claim shall be sustainable in any court of law or equity until after full compliance by the insured with the foregoing requirements, nor unless commenced within twelve months next after the fire."

And the time to institute suit or action on behalf of the insured is hereby extended by the insurers to such time or times as shall be necessary to give the parties hereto an opportunity to effectually carry out the intent and purposes of the within agreement.

10. In the event that all of the courts hereinbefore mentioned (New Jersey Supreme Court, Essex County Circuit Court, Essex County Court of Common Pleas and the Court of Chancery of New Jersey) shall decline to take jurisdiction to determine the true construction and application of the aforesaid policies (and only in that event) it is understood and agreed by and between

the parties hereto that the true construction and application of said policies shall be determined by the appraisers and the umpire, and the award so arrived at shall be final and conclusive except in so far as the same may be reformed and corrected by an application in the Court of Chancery of New Jersey. In the event of such a contingency and either party should be aggrieved at the award so made, such party shall make application within ten days from the date of said award to have the same reformed and in the event of the failure to make such application within that time the same shall be considered as waived and the party of the first part shall be at liberty to enter judgment forthwith in the amount of the award.

11. The attorneys for the respective parties hereto do represent by their signatures hereto that they are duly and lawfully authorized to execute the foregoing agreement on behalf of their principal or principals.

IN WITNESS WHEREOF the parties hereto have caused these presents to be signed by their respective attorneys the days and year first above written.

WOLBER & GILHOOLY,
Attorneys for Igoe Brothers, Inc.

LUM, TAMBLYN & COLYER,
Attorneys for National Ben Franklin Insurance Co.

ARTHUR T. VANDERBILT
Attorney for Other Defendants

IN CHANCERY OF NEW JERSEY
66/365

Between
IGOE BROTHERS, INC., a corporation,
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants.

ON BILL ETC.

AMENDMENT TO BILL OF COMPLAINT

The bill of complaint heretofore filed in the above entitled cause is hereby amended to the end that paragraphs 25, 26 and 27 be stricken out and that the following paragraph be inserted in the place of the said paragraphs 25, 26 and 27.

Complainant is further aggrieved at the decision arrived at by the Umpire wherein the Umpire found that the fixed charges of the complainant's operations would have been absorbed within one hundred days after the fire occurred. The Umpire decided on the seventh question submitted to him that it would require two hundred days before the profit making facilities of the complainant were restored. The Umpire also determined that the

fixed charges per day of the complainant amounted to One hundred ninety-four dollars and eighteen cents ($194.18). Complainant alleges that in order for the Umpire to make an award under the terms of the policy he was required to make a finding as to the amount of actual loss sustained and the length of time required to rebuild, and the amount of his award should be the product of the first and second figures. Complainant further alleges that in determining the length of time of suspension the Umpire should have determined, first, the period of total suspension and second, the period of partial suspension, if any. As to the length of time of suspension the Umpire has found that it would take two hundred manufacturing days to restore the plant to its usual profit making capacity. Complainant further alleges that the Umpire has given his findings as to the amount of the actual loss sustained as follows:

Average daily profit $301.45: Average daily overhead expense $194.18, making a total loss actually sustained of $495.63.

Complainant further alleges that in calculating his award, the Umpire has not used figures bearing out his findings in that he has allowed the total actual loss sustained of $495.63 for a period of one hundred days only and has allowed the sum of $301.45 as the actual loss sustained for the remaining period of one hundred days. Complainant alleges that inasmuch as the Umpire has determined that the length of time of suspension was two hundred manufacturing days that he should have made an award for the actual loss sustained in the amount of $495.63 for two hundred days and that because of the

failure of the Umpire to make such award he has committed a mistake which is prejudicial to the complainant.

The complaint is further amended by striking out paragraph three of complainant's prayer for relief and inserting therein and in place of said paragraph the following:

3. That the award be reformed to the end that the complainant be allowed the sum of Thirty-eight thousand eight hundred and thirty-six dollars ($38,836.00) for its fixed charges, and that complainant may have such further relief as may be equitable and just..

WOLBER & GILHOOLY,
Solicitors for Complainant.

I hereby consent to the foregoing amendment.

ARTHUR T. VANDERBILT,
Solicitor for Defendants.

IN CHANCERY OF NEW JERSEY

Between
IGOE BROTHERS, INC.
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY, et als.
Defendants.

ANSWER AND COUNTERCLAIM

Defendants National Ben Franklin Fire Insurance Company of Pittsburgh, Pa., Phoenix Assurance Company, Ltd. of London, Hartford Fire Insurance Company, The Continental Insurance Company, St. Paul Fire & Marine Insurance Company, Rhode Island Insurance Company, National Fire Insurance Company of Hartford, Great American Insurance Company, New York, Hudson Insurance Company of New York, American Central Insurance Company, National Union Fire Insurance Company of Pittsburgh, Pa. and United States Fire Insurance Company of New York, answering the bill of complaint, say that:—

1. They admit paragraphs 1 and 2 of the bill of complaint.

2. They admit the execution and delivery of the policies mentioned in paragraphs 3, 4, 5, 6, 7, 8, 9, 10,

11, 12, 13 and 14 of the bill of complaint, and as to the terms and conditions of said policies beg leave to refer to said policies in complainant's possession and their records thereof.

3. They admit paragraph 15 of the bill of complaint.

4. They admit paragraph 16 of the bill of complaint, and as to the terms and conditions of said policies beg leave to refer to said policies in complainant's possession and their records thereof.

5. They deny paragraph 17 of the bill of complaint.

6. They admit paragraphs 18, 19, 20, 21 and 22 of the bill of complaint.

7. They admit paragraph 23 of the bill of complaint and say that said E. F. McCrossin signed said award without consultation with,, or authorization from, these defendants.

8. They deny paragraph 24 of the bill of complaint.

9. They deny the first sentence of paragraph 25 of the bill of complaint. They admit the second, third and fourth sentences of said paragraph. They deny the fifth sentence of said paragraph. They deny the sixth sentence of said paragraph and say that said umpire came to the conclusion therein mentioned on the basis of evidence submitted to him through James J. Hastings, accountant for these defendants. They deny the seventh sentence of said paragraph.

10. They deny the first sentence of paragraph 26 of the bill of complaint. They admit the second, third, fourth, fifth and sixth sentences of said paragraph. They deny the seventh and eighth sentences of said paragraph.

11. They deny paragraphs 27, 28 and 29 of the bill of complaint.

COUNTERCLAIM

By way of counterclaim, these defendants say that:—

1. They repeat the allegations of paragraphs 1 to 16, inclusive, and 18 to 23, inclusive, of the bill of complaint; and its answer to said paragraphs.

2. These defendants are aggrieved by the decision of the umpire on the fourth and fifth points submitted to the umpire for his decision, to wit:—

> 4th Would the business of Igoe Bros., Newark, N. J. be as profitable for the period after the fire as the period before the fire?
>
> 5th. What were the profits of Igoe Bros., Newark, N. J. before the fire?

3. These defendants are aggrieved as to the decision arrived at by the umpire with respect to point 5 for the following reason, to wit:—

The umpire erred in allowing 75 per cent of repairs of 1924 (which amounted to $45,319.37) to be capitalized, thereby increasing the net profit of 1924 by $33,989.52.

Messrs. Courter & Rhyne, auditors for complainant, audited the books of complainant for 1924, and under date of June 27, 1925 certified to complainant that the net profit from operations for the year 1924 was $57,-134.16. In arriving at said profit of $57,134.16, said accountants for complainant and complainant, through its officers, after careful consideration and deliberation on the matter, charged $45,319.37 to repairs on the books of complainant and treated said repairs of 1924 as an expense of 1924 in establishing the net profit of 1924 as $57,134.16. Said net profit of 1924 has never been changed on the books of complainant and has been consistently and continuously used by complainant in all of its records, statements and reports, with the exception of the pending matter.

Notwithstanding these facts, complainant urged before the umpire that the entire sum of $45,319.37, repairs of 1924, should be capitalized. These defendants urged, on the contrary, that these items were in fact all repairs, *as such*, none of which should be capitalized and all of which should properly be treated as current expenses for the year 1924, as they were in fact treated on the books of complainant, as above stated, and further, that complainant was bound by its books, said figures admittedly as to repairs of 1924 having been entered as expenses of 1924 after consideration and deliberation on the matter between said auditors of complainant and the officers of complainant, and that complainant is estopped, therefore, to deny the correctness of its own books. In allowing 75 per cent of said repairs of 1924 to be capitalized, thereby increasing the net profit of 1924 by $33,989.52, the umpire erred and made a mistake not warranted by any evidence before him or any data submitted to him.

4. These defendants are further aggrieved as to the decision made by the umpire on points 4 and 5 for the following reason, to wit:—

After first deciding that the percentage of profits in the manufacturing and jobbing departments was the same; and after adjusting the net profits of 1924 by adding $33,989.52 (being 75 per cent of repairs of 1924, which aggregated $45,319.37) in the manner complained of in paragraph 3 hereof, the umpire, in determining question 4, used a two year average based on the net profits of the two years before the fire (1923 and 1924).

These defendants contended before the umpire that he should take as the basis of his calculations the one year period, using the net profit from sales of 1924 as shown on the books of complainant ($57,134.16). The net profits from sales in 1920 to 1924 as per the books were as follows:—

Year	1924	$57,134.16
"	1923	197,678.50
"	1922	53,066.64
"	1921	50,941.27
"	1920	286,771.20

The complainant contended that the umpire should use a five year period, taking the figures from 1920 to 1924, inclusive (using for 1924 the adjusted net profit of $91,123.68, complained of in paragraph 3 hereof). The adjusted net profits from sales in 1920 to 1924 were as follows:—

Year	1924	$91,123.68
"	1923	197,678.50
"	1922	53,066.64
"	1921	50,941.27
"	1920	286,771.20

The average net profit per day in the Manufacturing Department based on a one, two, three, four and five year average, using the net profit as shown by the books is as follows:—

Net Profit per day in the Manufacturing Department based on one year average	$119.28
Net Profit per day in the Manufacturing Department based on two year average	265.94
Net Profit per day in the Manufacturing Department based on three year average	214.23
Net Profit per day in the Manufacturing Department based on four year average	187.26
Net Profit per day in the Manufacturing Department based on five year average	269.54

The average net profit per day in the Manufacturing Department, based on a one, two three, four and five year average, as adjusted by the umpire, is as follows:—

Net Profit per day in the Manufacturing Department based on one year average	$190.23
Net Profit per day in the Manufacturing Department based on two year average	301.45
Net Profit per day in the Manufacturing Department based on three year average	237.89
Net Profit per day in the Manufacturing Department based on four year average	205.01

Net Profit per day in the Manufacturing Department based on five year average 283.74

The average net profit per annum, based on a one two, three, four and five year average, as taken from the books, is as follows:—

$57,134.16	Average net profit for 1 year as per books
127,406.33	Average net profit for 2 years as per books
102,626.43	Average net profit for 3 years as per books
89,705.14	Average net profit for 4 years as per books
129,118.35	Average net profit for 5 years as per books

The average net profit per annum, as adjusted by the umpire, based on a one, two, three, four and five year average, is as follows:—

$91,123.68	Average net profit 1 year
144,401.09	Average net profit 2 years
113,956.37	Average net profit 3 years
98,202.52	Average net profit 4 years
135,916.26	Average net profit 5 years

Thus, in taking the two year basis, the umpire allowed to complainant a higher net profit per day basis than it asked, i.e., complainant contended for a net profit per day basis of $283.74, whereas the umpire has allowed it a net profit per day basis of $301.45. Moreover, as is shown by the foregoing figures, the year 1923 was clearly abnormal in the business of complainant and it is, therefore, manifest error for the umpire to take as the basis of his calculation that year (1923) with another single year (1924) which does not permit of the averaging of this abnormal element reeflcted in the adjusted net profits from sales in 1923.

5. These defendants assert that as the result of the errors and mistakes mentioned in paragraphs 3 and 4 hereof, the award of said umpire does not embody his real judgment, and that said umpire, in including in the net profits of 1924 the sum of $33,989.52 (representing 75 per cent of repairs of 1924, which aggregated $45,319.37) and further in basing his determination of question 4 on a two year average of 1923 and 1924 involving the use of the abnormal business of 1923, and in allowing to complainant a net profit per day basis of $301.45 where complainant only contended for a net profit per day basis of $283.74, made an award which does not embody his real judgment, and, further, that the umpire, in adopting said erroneous figures, exceeded his jurisdiction and authority in the premises. These defendants further assert that the umpire should have arrived at an award of $43,274.00, representing (1) loss of net profit in the Manufacturing Department of $23,856.00, based on the net profits for the one year 1924 for a two hundred day suspension at $119.28 per day, plus (2) fixed charges of $19,418.00, based on one hundred days at $194.18 per day.

6. As a result of the errors aforesaid, injustice has been done to these defendants.

These defendants are without adequate remedy in the courts of law and therefore pray:—

1. That complainant may answer this counterclaim and each statement therein made.

2. That the award heretofore entered may be reformed to the end that same will carry out the terms of

the agreement hereinbefore referred to, and to the end that the same will properly show only the loss sustained by complainant under the policies of insurance hereinbefore referred to.

3. That the award be reformed to the end that complainant will be awarded $43,274.00, representing (1) loss of net profit in the Manufacturing Department of $23,856.00, based on the net profits for the one year 1924 for a two hundred day suspension at $119.28 per day, plus (2) fixed charges of $19,418.00, based on one hundred days at $194.18 per day, and that defendants may have such further relief as may be equitable and just.

ARTHUR T. VANDERBILT,
Solicitor for Defendants.

IN CHANCERY OF NEW JERSEY
66/365

Between
IGOE BROTHERS, INC., a corporation,
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants.

ON BILL ETC.
STIPULATION

WE HEREBY STIPULATE AND AGREE that the answer heretofore filed by the defendants in the above entitled cause stand as an answer to the bill of complaint as amended.

WOLBER & GILHOOLY,
Solicitors for Complainant.

IN CHANCERY OF NEW JERSEY
66/365

Between
IGOE BROTHERS, INC., a corporation,
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants.

ON BILL ETC.
ORDER OF REFERENCE AND ORDER ALLOWING AMENDMENT TO BILL OF COMPLAINT

This matter being opened to the Court by Wolber and Gilhooly, solicitors for the complainant and in the presence of Arthur T. Vanderbilt, solicitor for the defendants, and application having been made by the solicitors for the complainant and the defendants that the matters contained in the complaint, amended complaint, the answer thereto and the counter claim of the defendant and the answer thereto be referred to a Special Master of this Court; and application having been made by the solicitor for the complainant for leave to amend the bill of complaint, and upon reading the content hereunder written:

It is on this 3rd day of July 1928, ORDERED that the complainant be given leave to amend its bill of

complaint and that the answer and counter claim heretofore filed by the defendants stand as an answer to the bill of complaint as originally filed and as amended;

AND IT IS FURTHER ORDERED that the matters set forth in the bill of complaint as originally filed and as amended as well as the answer thereto and the counter claim of the defendants be referred to CHARLES F. LYNCH, ESQ., one of the Special Masters of this Court to take the testimony produced by the complainant and the defendants in substantiation of the matters set forth in the pleadings and to report to this court his recommendations as to what decree should be therein made.

IT IS FURTHER ORDERED that the said Master report with all convenient speed.

Respectfully Advised,

JOHN H. BACKES.
V. C.

We hereby consent to the entry of the foregoing order.

WOLBER & GILHOOLY,
Solicitors for Complainant.

ARTHUR T. VANDERBILT,
Solicitor for Defendants.

IN CHANCERY OF NEW JERSEY
66/365

Between
IGOE BROTHERS, INC., a corporation,
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants.

ON BILL, &c.

REPORT OF SPECIAL MASTER

Pursant to an order entered in the above entitled matter on the 4th day of December, 1928, whereby it was referred to the subscriber, one of the special masters of the Court of Chancery of New Jersey to take the testimony produced by the complainant and the defendants in substantiation of the matters set forth in the pleadings, and to report to this court what decree should therein be made and that said report be made with all convenient speed,

I do respectfully report that I have been attended by Edward J. Gilhooly, Esq., of Wolber and Gilhooly, Esqs., solicitors for Complainant.
Arthur T. Vanderbilt, Esq., Solicitor for Defendants,

Hearings were held on the 16th day of May, the 3rd day of June, and on the 11th, 26th and 29th days of July, 1929, at which hearings testimony produced by the parties hereto was taken. Briefs were filed on the 5th day of September and on the 24th day of October, 1929, and on the 20th day of January and the 7th day of February, 1930.

The facts as presented to me are as follows:

On the 9th day of Apil, 1925, the complainant, Igoe Bros., Inc. suffered a loss by fire to its plant located at Poinier Street and Avenue A, in the City of Newark, New Jersey. The complainant was, at the time, engaged in the manufacture of wire and wire nails and also as a jobber in nails. At the time the complainant was covered by use and occupancy policies issued by the defendant insurance companies, as hereinafter set forth:

Policy Number	Defendant Insurance Companies	Amount
2304571	U. S. Fire Insurance Co.	$10,000.00
10005	National Union Fire Insurance Co. of Pittsburgh, Pa.	10,000.00
662271	Phoenix Assurance Co., Ltd.	10,000.00
8575	American Central Ins. Co.	10,000.00
344081	Hudson Insurance Company	10,000.00
238768	Great American Ins. Co.	10,000.00
920730	National Fire Insurance Co.	30,000.00
1880717	Rhode Island Insurance Co.	10,000.00
443633	Saint Paul Fire and Marine Insurance Company	10,000.00
18608	Continental Insurance Company	20,000.00
97701	Hartford Fire Insurance Co.	10,000.00
697689	National Ben Franklin Fire Insurance Co.	10,000.00

Said policies contain the following clauses:

"The conditions of this contract are that if the buildings situate on and south of Poinier St., and Avenue A. Newark, N. J., and occupied for manufacture of nails and/or machinery and/or equipment and/or stock contained therein, be destroyed or damaged by fire occurring during the term of this policy so as to necessitate a total or partial suspension of business, this Company shall be liable under this policy for the actual loss sustained, consisting of net profits on the business which is thereby prevented, such fixed charges and expenses pertaining thereto as must necessarily continue during a total or partial suspension of business and such expenses as are necessarily incurred for the purpose of reducing the loss under this policy, for not exceeding such length of time as shall be required with the exercise of due diligence and dispatch, to rebuild, repair or replace such part of said buildings and machinery and equipment and/or stock as may be destroyed or damaged (commencing with the date of the fire and not limited by the date of expiration of this policy), subject to the following conditions and limits, to wit:

TOTAL SUSPENSION: The per diem liability under this policy during the time of total suspension of business of all the properties described herein shall be limited to the "Actual Loss Sustained," not exceeding 1/300 of the amount of this policy for each business day of such suspension, due consideration being given to the experience of the business before the fire and the probable experience thereafter.

PARTIAL SUSPENSION: The per diem liability under this policy during the time of a partial

suspension of business shall be limited to the "Actual Loss Sustained," not exceeding that proportion of the per diem liability that would have been incurred by a total suspension of business which would have been sustained by a total suspension of business, for the same time, of all properties described herein, due consideration being given to the experience of the business before the fire and the probable experience thereafter."

After the fire the complainant and the defendants, being unable to amicably adjust the loss sustained by the complainant under the various policies of the defendants hereinbefore enumerated (Exhibits C-1 to C-12 inclusive), entered into an agreement in writing on the 21st day of June, 1926, (Exhibit C-13), whereby the complainant named Clifford F. McEvoy as its appraiser and the defendants named E. F. McCrossin as their appraiser. The two appraisers being unable to agree upon a competent and disinterested umpire, an application was made to the Inferior Court of Common Pleas of the County of Essex, and the Hon. Dallas Flannagan, one of the judges of said court, on the 6th day of July, 1926, appointed Charles F. Lynch, Esq., to act as umpire with the two appraisers selected by the parties hereto.

Numerous hearings were had before the umpire, at which the appraisers submitted to him the matters in difference between them. On the 29th day of November, 1927, said umpire filed his decision upon the disputed points as presented to him and made a final award in favor of the complainant in the sum of $79,708.00, which award was joined in by E. F. McCrossin, appraiser for the defendants.

The agreement dated the 21st day of June, 1926, contained the following provision:

> "If either of the parties hereto shall feel aggrieved by the award of the appraisers (or the award in writing of one of the appraisers and the umpire) in that the appraisers (or one of the appraisers and umpire) have taken into consideration in arriving at their award matters which were improper or illegal for their consideration, such party shall, within ten days from the entry of the aforesaid awards, institute proper proceedings in the Court of Chancery for the purpose of correcting and reforming the awards in accordance with the practice of that court and either party taking such action shall proceed with all reasonable dispatch.*******"

On the 7th day of December, 1927, the complainant filed its bill of complaint in the Court of Chancery, which bill was subsequently amended on or about the 4th day of December, 1928. The defendant filed an answer thereto and a counter claim and, upon consent, the order of reference to the subscriber as special master was entered on the 4th day of December, 1928.

Stripped of all surplusage there are three issues presented:—

The complainant attacks the umpire's finding upon the eighth point, which reads as follows:

> "8. What length of time would be required before the assured's operations after the fire would absorb the overhead charges?

> While it is my opinion that it would require 200 days before the profit making facilities were restored it is evident that since the assured continued manufacturing operations after the fire, these operations gradually absorbed the overhead charges and, in my opinion, an allowance of 100 days of overhead would seem to be fair."

I am not convinced that any mistake occurred when the umpire and the appraiser, who joined him in the award, determined that the profit making facilities and the plant could be restored and put into full operation in a period of 200 manufacturing days.

At the original hearings before the umpire the advantage was had of the viewpoint of the two appraisers, both competent men, and it is not necessary to herein repeat the umpire's comment, as set forth in the original award.

The testimony on this point, as adduced by both sides before me as Special Master, does not warrant any change in the previous estimate of 200 days. One has but to look out of one's window to see skyscrapers very speedily erected. Certainly there was no fraud, accident or mistake in the original finding of the umpire as to the 200 day period, and this will not be changed.

However, it is quite clear to me after considering the case that the umpire was mistaken in determining that the complainant absorbed its fixed charges within 100 days. This 100 day period was an estimate and an estimate was not justified in the premises because actual calculations were available. These calculations show that

the operations partially continued in a temporary plant during construction actually absorbed 21.3019 per cent of the fixed charges. The defendants make an issue in their argument, but not in their pleadings, of the fact that there might have been a profit on the partial operations during the time the plant was under construction. While this item is not properly under consideration by the Master, not having been raised by the pleadings, there is no satisfactory proof that any loss or profit resulted from these partial operations. As has been indicated, a mistake has actually occurred, because the award of the umpire and the appraiser who joined with him contains a finding that 50 per cent of the fixed charges were absorbed during the 200 day period, whereas review of the evidence discloses the finding should have been that the amount of the fixed charges actually absorbed was 21.-3019 per cent.

The complainant's recovery under the policies is limited to net profits and fixed charges actually lost.

The award under this point should therefore be as follows:

200 days x $194.18 per day loss for fixed charges previously awarded equals	$38,836.00
Less 21.3019 per cent of fixed charges recouped by partial operations	8,272.80
Net loss of fixed charges	$30,563.20

and the umpire's award is accordingly so modified.

The defendant contests findings No. 4 and No. 5 which read as follows:

"4. Would the business of Igoe Brothers, Newark, N. J. be as profitable for the period after the fire as the period before the fire?

The assured claims that the prospects after the fire were much brighter than previously thereto and consequently the rate of profit would have been 25 per cent, or some other percentage, higher. The insurance companies contend that the profits would have been lower because business was poorer. Data is submitted by both sides in support of their respective contentions. One set of data leads one to believe that business was on the improve after the fire, while the other set tends to show that business after the fire was not so good as before. I think that probably a fair decision on this point would be to assume that the profits after the fire would continue at the same *level as they averaged for the previous two years before the fire.*

5. What were the profits of Igoe Brothers, Newark, New Jersey, before the fire?

The accountants are in agreement that the books of the company show the following figures of sales, gross profits, selling and administrative expenses and net profits from sales:—

As per Books

Year	Sales	Gross Profit	Selling and Administrative Expenses	Net Profits From Sales.
1924	$1,378,816.02	$240,499.27	$183,365.11	$57,134.16
1923	1,460,482.94	371,804.67	174,126.17	197,678.50
1922	1,113,701.11	205,361.08	152,314.44	53,066.64
1921	842,282.20	182,554.10	131,612.83	50,941.27
1920	1,666,787.57	480,858.25	194,087.05	286,771.20

The assumption that the profits after the fire would continue at the same level as before the fire raises the question as to what were the profits before the fire after careful consideration of the above figures I am of the opinion that a period of two years would furnish stable information as to the general average of activities and net profits of the business.

I have figured the average daily net profits on the basis of two years as follows:—

		TWO YEARS
Net Profit from Sales	1924	$57,134.16
Net Profit from Sales	1925	$ 197,678.50
Net Profit from Sales for years 1924-1925 as per books		$ 254,812.66
ADD:		
Additional Profit for 1924 Capital expenditures charged on books to expenses 45,319.37 x 75%		33,989.52
Adjusted profit for two years		$ 288,802.18
Average Adjusted Profit for one year		$ 144,401.09

This average adjusted profit for one year represents both the manufacturing and jobbing business, but since we are only concerned with the manufacturing profits, it is necessary to apply the percentage of manufacturing profit which is 62.628% as follows:

$ 144,401.09 x 62.628% =$90,435.51

$ 90,435.51 divided by 300 days gives an average daily manufacturing profit of $301.45."

The umpire's findings are attacked by the defendants on the ground that in arriving at his conclusions he used an actual manufacturing loss per day based on a two-year period, and also included an item of $33,989.52 as additional profit for the year 1924, which amount had been previously classified as an expense and which in the umpire's calculation of the profit he had capitalized. The defendants do not attack findings No. 2 in which such expense charges were found to be actual capital expenditures, but proceed on the theory that the complainant should be estopped from determining its true income for the year 1924 because of the fact that it had previously charged this item to expenses. The reports rendered by Messrs. Courter and Rhyne, accountants, to their client, the complainant, in no way prejudice the rights of the defendants. The policies were not issued on the basis of any warranty as to the result of operations for the year 1924. I am confident that had the defendants on their audit of the complainant's books discovered items capitalized that should have been charged to expense they would have demanded that the necessary adjustments be made. I cannot agree to any theory which would estop the complainant from using figures for the years involved which reflect the true income of complainant.

The finding of the umpire in using the two year figure is also attacked on the ground that it grants to the complainant more than the complainant requested as an allowance. This is not borne out by the facts. The counterclaim states that the complainant requested a net profit

per day basis of $283.74, whereas the umpire allowed a net profit per day basis of $301.45, but fails to mention the fact that the complainant requested an allowance of $283.74 plus 25% because of the probability of larger profits for the period after the fire on account of improved business conditions. As a matter of fact, the umpire's finding is some $50.00 per day below that requested by the complainant.

Neither party contends that the umpire and appraisers were incompetent or biased, but the claim is made that the award is the result of a mistake. A review of the testimony, adduced before the umpire and special master, together with the briefs submitted, leads to the conclusion that the mistake in the umpire's eighth finding was one which materially affected the complaint and hence the award should be reformed to that extent.

As stated in Collings Carriage Company vs. German American Insurance Company, et al. 86 Equity 53 (at page 56) "With errors of judgment on the part of the parties making the award this court has no concern; but if the award which is returned does not embody their real judgment on the matters submitted for their award this court should relieve against its operations as an award."

However, where a finding is the result of the exercise of sound judgment by the umpire in determining the matters in dispute between the parties, and the umpire is joined in his report by one of the appraisers, the finding should in my opinion, be dispositive of the matter.

For, as stated in Melton Bros., Inc., et als. vs. Phila-

delphia Fire & Marine Insurance Company, et als. (Errors and Appeals) 144 Atlantic 726 (at page 730), 'Where the insured has sustained a loss, and an award is made by an umpire and one of the appraisers duly appointed pursuant to the appraisal agreement, the Court will not weigh the technicalities of the method of arriving at the award and making the appraisal, when the appraisers and umpire were competent and disinterested, and no injustice or fraud has been committed, citing Calendonia Insurance Company vs. North Dutch Reformed Church, 96 N. J. Eq. 342, 124 A. 703."

After an entire review and comparison of the evidence and testimony submitted, both to the umpire and the special master, the conclusion is reached that that portion of the award attacked by the defendants was determined by the exercise of sound judgment upon the facts submitted, and should not be disturbed.

I do therefore respectfully recommend that the award heretofore made by the umpire, and joined in by an appraiser, except as herein modified, be established as binding on all parties, and that a decree be accordingly entered.

Dated: May 29, 1930.

CHARLES F. LYNCH,
Special Master in Chancery
of New Jersey.

IN CHANCERY OF NEW JERSEY

Between
IGOE BROTHERS, INC., a corporation,
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants.

ON BILL ETC.
STIPULATION

IT IS HEREBY STIPULATED by and between the solicitors of the complainant and the solicitor of all of the defendants that the following procedure be adopted with respect to the report of Charles F. Lynch, Special Master, dated May 29, 1930:

1. That the complainantt and the defendants may file any exception which they may have to said report in this court on or before June 27th, 1930 and that the argument with respect to the confirmation of the said Special Master's report be confined to the exceptions so filed.

2. That the argument on said exceptions be held before Honorable Alonzo Church, one of the Vice Chan-

cellors of this court on Friday, June 27th, 1930, or such date thereafter as may be fixed by the court.

3. That the requirements of the rules of the Court of Chancery with respect to the notice of hearing on the exceptions and the requirement of said rules with respect to the time of the filing of exceptions to the Master's report be waived and dispensed with.

WOLBER & GILHOOLY,
Solicitors for Complainant.

ARTHUR T. VANDERBILT,
Solicitor for Defendants.

IN CHANCERY OF NEW JERSEY

Between
IGOE BROTHERS, INC., a corporation,
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants.

ON BILL, ETC.

EXCEPTIONS TO MASTER'S REPORT

Exceptions taken by defendants to the report of Charles F. Lynch, one of the special masters of this court to whom it was referred to determine whether and in what manner the award rendered on November 29th, 1927, should be reformed.

FIRST: These exceptions object to that part of said master's report in which said master finds that the umpire was mistaken in determining that the complainant absorbed its fixed charges within one hundred days on the following grounds; (a) the evidence displayed that the finding was correct, (b) the determination of fact by the umpire and appraiser was conclusive and (c) the umpire and appraiser did not upon the face of the award consider improper or illegal matters and accordingly their finding was conclusive.

SECOND: These exceptants object to that part of said master's report in which said master finds that the complainant should be awarded $30,563.20 for loss of fixed charges on the grounds stated in the First Exception.

THIRD: These exceptants object to that part of said master's report in which said master finds that complainant should be awarded for loss of fixed charges any sum in excess of the award of the umpire and appraiser on the grounds stated in the First Exception.

FOURTH: These exceptions object to that part of said master's report in which said master finds that $33,989.52 capitalized by the umpire and appraiser was not mistakenly or improperly capitalized and added to the profits for 1924 on the ground that under the circumstances complainant's books were binding upon complainant.

FIFTH: These exceptions object to that part of said master's report in which said master finds that the conclusion of the umpire and appraiser that a two year average in ascertaining profits lost was not improper or the result of mistake, on the grounds that (a) it awarded complainant more that it requested (b) it was without warrant in law and the facts called for a different average.

SIXTH: These exceptions object to that part of said master's report in which said master finds that the two year average did not grant to complainant more than complainant requested on the ground that the evidence displayed that the two year average granted to complainant more than it requested.

In all which particulars the report of said master is as the said exceptants are advised erroneous and said defendants appeal therefrom to the judgment of this Honorable Court.

ARTHUR T. VANDERBILT,
Solicitor for and of Counsel
with Defendants.

IN CHANCERY OF NEW JERSEY
66/365

Between
IGOE BROTHERS, INC., a corporation,
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants.

ON BILL, ETC.
EXCEPTIONS TO
REPORT OF
SPECIAL MASTER

The complainant, Igoe Brothers, Inc., hereby excepts to the report filed in this cause by Charles F. Lynch, one of the Special Masters of this court, bearing date the 29th day of May, 1930, for the following reason:

1. The said Master has reported that the fixed charges actually absorbed during the two hundred days in which it would have taken to restore the profit making facilities of the complainant amounted to 21.3019 per cent. All of the policies of insurance provided that in the event of fire that the defendant companies shall be liable for the actual loss sustained by the assured as must necessarily continue during a total or partial suspension of business, as well as such expenses as are neces-

sarily incurred for the purpose of reducing the loss under this policy, for not exceeding the length of time as shall be required with the exercise of due diligence and dispatch, to rebuild, repair or replace such part of the buildings, machinery and equipment as may be destroyed or damaged. It was further provided that the actual loss sustained consisted of net profits on the business which was thereby prevented, and such fixed charges and expenses pertaining thereto as must necessarily continue during the total or partial suspension of business, and such expenses as are necessarily incurred for the purpose of reducing the loss under the policies.

Inasmuch as the operations conducted by the complainant for over a period of two hundred days and upwards after the fire were conducted at an exceedingly heavy loss all of which was disclosed by the testimony produced before the Special Master, the Special Master should have reported that the complainant was entitled to have the Umpire's findings reformed to the end that the complainant should have been allowed the sum of Thirty-eight thousand eight hundred thirty six dollars ($38,836.00), whereas in his report the Special Master recommends that the award made by the Umpire be modified to the extent that the net loss of fixed charges of the complainant should be thirty thousand five hundred sixty three dollars and twenty cents ($30,563.29). The complainant it is contended, should have been entitled to the additional sum of Eight thousand two hundred seventy two dollars and eighty cents ($8,272.90).

Respectfully submitted,
WOLBER & GILHOOLY,
Solicitors of Complainant.

IN CHANCERY OF NEW JERSEY

Between
IGOE BROTHERS, INC., a corporation,
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants.

MEMORANDUM
(Not for print)

THIS MEMORANDUM IS NOT TO BE PUBLISHED IN THE OFFICIAL OR UNOFFICIAL REPORTS

Messrs. Wolber and Gilhooly, for complainant

Mr. Arthur T. Vanderbilt, for defendants

CHURCH, V. C.

I have considered the report of the Special Master in this case and have read the voluminous testimony taken before him. I agree with the conclusions reached by the Special Master. I will dismiss the exceptions to his findings and advise a decree accordingly.

IN CHANCERY OF NEW JERSEY
66/365

Between
IGOE BROTHERS, INC., a corporation,
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants.

ON BILL, ETC.
FINAL DECREE

This matter being opened to the court by Wolber and Gilhooly, solicitors for and of counsel with the complainant, and in the presence of Arthur T. Vanderbilt, Esq., solicitor for and of counsel with all of the defendants, and the court having examined the pleadings filed in the above entitled cause and having considered the testimony and the exhibits offered by all of the above named parties; and an order having been entered in the above entitled matter on the Fourth day of December, 1928, referring the above entitled matter to Charles F. Lynch, Esq., one of the Special Masters of this court, to take testimony produced by the complainant and the defendant in substantiation of the matters set forh in he pleadings and to report to this court what decree should

herein be made; and the said Master having filed his report herein under date of May 29, 1930 from which it appears that a mistake was made by the Umpire and one of the appraisers in determining the amount of loss sustained by the complainant as a result of the fire as set forth in the bill of complaint and that the award made by the Umpire and the appraiser selected by the defendants' company be changed to the end that the amount of fixed charges lost by the complainant be changed from Nineteen thousand four hundred and eighteen dollars ($19,418.00) to Thirty thousand five hundred sixty-three dollars and twenty cents ($30,563.220), all of which is more particularly set forth in the report of the said Special Master; and an order nisi having been entered to confirm the Master's report and the complainant and the defendants having filed certain exceptions to said Master's report, all of which more particularly appear by reference to the exceptions now on file in this court, and the court having considered said exceptions and the argument of counsel thereon and having considered the testimony and exhibits and having also considered the report of the Special Master and being of the opinion that the exceptions to the findings of the Special Master should be dismissed;

It is thereupon on this 25th day of February, 1931,

ORDERED, ADJUDGED and DECREED that the exceptions filed by the complainant and the defendants to the report of the Special Master as aforesaid be and the same are hereby dismissed, and that the said Special Master's report be and the same is hereby in all things ratified and confirmed, according to the true tenor and meaning thereof.

IT IS FURTHER ORDERED, ADJUDGED and DECREED that the award heretofore made in favor of the complainant and against the defendants' company be and the same is hereby reformed to the end that the same shall provide that the complainant be allowed loss of net profits of Three hundred and one dollars and forty-five cents ((\$301.45) per day for two hundred (200) days, or Sixty thousand two hundred and ninety dollars (\$60,-290.00), and that the complainant be allowed as loss of fixed charges the sum of Thirty thousand five hundred sixty three dollars and twenty cents \$30,563.20), and that the Umpire's award be and the same is hereby modified and reformed as aforesaid and that the same stand on file as of the date the same was filed by the Umpire but as hereby modified and reformed.

IT IS FURTHER ORDERED, ADJUDGED and DECREED that the counter claim of the defendants be and the same is hereby dismissed.

IT IS FURTHER ORDERED, ADJUDGED and DECREED that CHARLES F. LYNCH, Special Master as aforesaid be and he is hereby allowed the sum of One thousand dollars (\$1,000) for his services rendered in this cause, to be paid by the defendants.

IT IS FURTHER ORDERED, ADJUDGED and DECREED that the solicitors of the complainant be allowed a counsel fee of Twenty five hundred dollars (\$2500), together with costs to be taxed by the Clerk of this court, and that in taxing said costs the Clerk allow the further sum of Six hundred twenty-seven dollars (\$627.00) to the complainant, being the amount paid by

the complainant for the testimony taken before the Special Master.

Respectfully Advised,

ALONZO CHURCH,
V. C.

E. R. WALKER,
Chancellor.

IN CHANCERY OF NEW JERSEY
66/365

Between
IGOE BROTHERS, INC., a corporation,
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants.

ON BILL, &c.

Defendants, National Ben Franklin Fire Insurance Company of Pittsburgh, Pa.; Phoenix Assurance Company Ltd., of London; Hartford Fire Insurance Company; The Continental Insurance Company; St. Paul Fire and Marine Insurance Company; Rhode Island Insurance Company; National Fire Insurance Company of Hartford; Great American Insurance Company, New York; Hudson Insurance Company of New York; American Central Insurance Company and National Union Fire Insurance Company of Pittsburgh, Pa.; and United States Fire Insurance Company of New York, hereby appeal from the final decree made February 25, 1931, in the above entitled cause by the Chancellor on the advice of Vice Chancellor Alonzo Church, and from the whole

and every part thereof, to the Court of Errors and Appeals in the last resort in all causes.
Dated March 5, 1931.

ARTHUR T. VANDERBILT,
Solicitor for Defendants.

I conceive there is good cause for appeal in the above entitled cause.

ARTHUR T. VANDERBILT,
Of Counsel with Defendants.

NEW JERSEY COURT OF ERRORS AND APPEALS

Between
IGOE BROTHERS, INC., a corporation,
Complainant-Respondent,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants-Appellants.

PETITION

TO THE HONORABLE THE COURT OF ERRORS AND APPEALS IN THE LAST RESORT IN ALL CAUSES:

The petition of National Ben Franklin Fire Insurance Company of Pittsburgh, Pa.; Phoenix Assurance Company, Ltd., of London; Hartford Fire Insurance Company; United States Fire Insurance Company of New York; The Continental Insurance Company; St. Paul Fire and Marine Insurance Company; Rhode Island Insurance Company; National Fire Insurance Company of Hartford; Great American Insurance Company, New York; Hudson Insurance Company of New York; American Central Insurance Company and National Union

Fire Insurance Company of Pittsburgh, Pa.; the appellants in the above entitled cause, respectfully shows that:

Petitioners have been themselves aggrieved by final decree made in the Court of Chancery by his Honor, Edwin Robert Walker, Chancellor of the State of New Jersey, on the advice of Vice Chancellor Church, dated February 25, 1931, in a certain cause in said Court of Chancery wherein Igoe Brothers, Inc., a corporation, is complainant and your petitioners are defendants, in these respects, to wit:

That said decree Orders and Adjudges that the exceptions filed by defendants-appellants to the report of the Special Master be dismissed; that said decree Orders and Adjudges that said Special Master's report be in all things ratified and confirmed; that said decree Orders and Adjudges that the award in favor of complainant-respondent and against defendants-appellants be reformed to the end that the same shall provide that the complainant-respondent be allowed loss of net profits of $301.45 per day for two hundred days, or $60,290, and that complainant-respondent be allowed as loss for fixed charges the sum of $30,563.20; that said decree Orders and Adjudges that said award be modified and reformed as aforesaid and stand on file as of the date the same was filed by the umpire, but as modified and reformed by said decree; that said decree Orders that the counterclaim of defendants-appellants be dismissed; that said decree Orders and Adjudges that the fees of the Special Master and the costs of complainant, including a counsel fee, be paid by defendants-appellants.

And petitioners appeal from said decree of the Chan-

cellor, which decrees as aforesaid, upon the ground that the same is erroneous in the following respects:

1. The lower Court erred in dismissing the exceptions to the report of the Special Master filed by defendants-appellants.

2. The lower Court erred in decreeing that the report of the Special Master be in all things ratified and confirmed.

3. The lower Court erred in decreeing that the award of the umpire and appraiser be reformed.

4. The lower Court erred in decreeing that said award be reformed so as to allow complainant a loss of fixed charges in the sum of $30,563.20.

5. The lower Court erred in decreeing that the counterclaim of defendants-appellants be dismissed.

6. The lower Court erred in decreeing that defendents-appellants pay to the complainants the costs of this suit to be taxed, including a counsel fee of $2500, and in directing that the fees of the Special Master be paid by defendants-appellants.

7. The lower Court erred in not finding that the bill of complaint should be dismissed with costs.

ARTHUR T. VANDERBILT,
Solicitor for and of Counsel
with Defendants-Appellants.

IN CHANCERY OF NEW JERSEY
66/365

Between
IGOE BROTHERS, INC., a corporation,
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants.

ON BILL, &c.
NOTICE OF APPEAL FILED ON BEHALF OF COMPLAINANT

The complainant, Igoe Brothers, Inc., hereby appeals from the Final Decree made February 25, 1931, in the above entitled cause by the Chancellor on the advice of Vice Chancellor Church, and from that part of the decree which adjudged that the complainant was entitled to the sum of Thirty thousand five hundred sixty three dollars and twenty cents ($30,563.20) as loss of fixed charges and not the sum of Thirty-eight thousand eight hundred thirty six dollars ($38,836.00) to the Court of Errors and Appeals in the last resort in all causes.
Dated: May 11 1931.

WOLBER & GILHOOLY,
Solicitors for Complainant.

I conceive there is good cause for the appeal in the above entitled cause.

EDWARD J. GILHOOLY,
Of Counsel with Complainant.

IN CHANCERY OF NEW JERSEY
66/365

Between
IGOE BROTHERS, INC., a corporation,
Complainant,
and
NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.,
Defendants.

ON BILL, &C.
PETITION ON APPEAL BY COMPLAINANT

TO THE HONORABLE THE COURT OF ERRORS AND APPEALS IN THE LAST RESORT IN ALL CAUSES:

The petition of Igoe Brothers, Inc., complainant, respectfully shows that:

Petitioners have been aggrieved by the Final Decree made in the Court of Chancery, by his Honor, Edwin Robert Walker, Chancellor of the State of New Jersey, on the advice of Vice Chancellor Church, dated February 25, 1931, in a certain cause in said Court of Chancery wherein Igoe Brothers, Inc., a corporation, is complainant and National Ben Franklin Fire Insurance Company

of Pittsburgh, Pa., and others, are defendants, in this respect, to wit: That said decree orders and adjudges among other things that the exceptions filed by complainant to the report of the Special Master be dismissed; that said decree orders and adjudges that said Special Master's report be in all things ratified and confirmed; that said decree orders and adjudges that the award in favor of the complainant be reformed to the end that the same shall provide that the complainant be allowed as loss of fixed charges the sum of Thirty thousand five hundred sixty three dollars and twenty cents ($30,563.20). And petitioner appeals from said decree of the Chancellor, upon the ground that the same is erroneous in the following respects:

1. The lower court erred in dismissing the exceptions to the report of the Special Master filed by the complainant.

2. The lower court erred in decreeing that the said award be reformed so as to allow the complainant a loss of fixed charges in the sum of Thirty thousand five hundred sixty three dollars and twenty cents ($30,563.20), instead of the sum of Thirty-eight thousand eight hundred and thirty six dollars ($38,836.00), the amount to which the complainant contended it was entitled.

WOLBER & GILHOOLY,
Solicitors for and of Counsel
with Complainant-Appellant.

IN CHANCERY OF NEW JERSEY

Between IGOE BROTHERS, INC., a corporation, and NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als.	ON BILL, ETC. TESTIMONY

May 16, 1929. 10.00 a. m.

BEFORE:

HON. CHARLES F. LYNCH, Special Master.

APPEARANCES:

EDWARD J. GILHOOLY, Esq., for complainant.

ARTHUR T. VANDERBILT, for defendant.

MR. GILHOOLY:—I desire to offer the original insurance policies. There are twelve in number. Shall I read them off?

THE SPECIAL MASTER:—No. We will mark them as exhibits.

(Received and marked Exhibits C-1 to C-12, inclusive.)

MR. GILHOOLY:—I also desire to offer in evidence original copy of the arbitration agreement.

MR. VANDERBILT:—No objection.

(Agreement referred to marked Exhibit C-13.)

MR. GILHOOLY:—I find that I haven't a type-written copy of the Umpire's findings.

THE SPECIAL MASTER:—My findings?

MR. GILHOOLY:—Yes, the award of the Umpire.

THE SPECIAL MASTER:—The award of Charles F. Lynch, Umpire.

MR. GILHOOLY:—The award of Charles F. Lynch, Umpire. I will submit a copy.

(Received in evidence and marked Exhibit C-14.)

(John Gerald Phelan was sworn.)

MR. GILHOOLY:—I might state at this stage the matters on which we feel that we have agreements. The bill of complaint in this case is filed to reform the award of the Umpire and appraiser who has joined with the Umpire in making this award. Our principal complaint is that 200 days were allowed by the Umpire as the time within which the profit-making facilities of the company would be restored. The average daily profit has been found to be $301.45 per day. The average daily overhead expenses has been found to be $194,18, making

a total of $495.63. While it is true in our bill of complaint we have asked that a reformation be made in the amount of the daily profit, we are disposed at this time, without expressly waiving it, to pass by the point without any further consideration right now, and confine our effort—

THE SPECIAL MASTER:—You will pass by that point?

MR. GILHOOLY:—Pass by it, yes. I do not want to expressly waive it now, but I think probably we will waive that feature, and confine our efforts to establishing that an error was made in allowing an average daily profit of $301.45 for 200 days, and limiting the period of time wherein we were allowed our daily overhead expense of $194.18 to only 100 days, on this ground: that the policy provides that the insured shall be entitled to the actual loss sustained for such period of time as there has been total or partial suspension. It was necessary, in arriving at an award, to fix the period of time when there was total suspension and the time when there was only partial suspension, if any. The only finding which there has been, as a fact, is to the effect that it would have taken 200 days to restore the profit-making facilities of the company. On that basis, we should have been allowed at least 200 times $495.63, and not 200 times $301.45, and 100 times $194.18, on the ground that there could not be any differentiation, unless there had been an actual finding that there was total suspension for a certain period of time and only partial suspension for the balance, and my purpose now is to introduce into the record, the testimony which we have to show what we feel to be the period of total suspension.

THE SPECIAL MASTER:—That will increase that item how much, about?

MR. GILHOOLY:—It will be a little over $20,000. You can multiply it very readily.

THE SPECIAL MASTER:—No, just approximately. That is near enough.

MR. GILHOOLY:—And I should like to read that portion of the policy to which I have particular reference.

THE SPECIAL MASTER:—The policies are identical in form, are they not?

MR. GILHOOLY:—Yes, the policies are identical in form.

THE MASTER:—As to the provision. They are different only as to amounts, names of companies and so forth?

MR. GILHOOLY:—"This company shall be liable under this policy for the actual loss sustained, consisting of the net profits on the business thereby prevented, such fixed charges and expenses pertaining thereto as must necessarily obtain, during a total or partial suspension of business, and such expenses as are necessarily incurred for the purpose of reducing the loss."

"Total suspension:—The per diem liability under this policy during the time of total suspension of business of all the properties described herein shall be limited to the actual loss sustained, not exceeding one three-hundredths of the amount of this policy for each business day

of such suspension, due consideration being given to the business experience before the fire and the probable experience thereafter."

The policy further provides with respect to partial suspension as follows:

"The per diem liability under this policy during the time of partial suspension shall be limited to the actual loss sustained, not exceeding that portion of the per diem liability that would have been occurred by total suspension of business, the actual per diem loss sustained during the time of such partial suspension bears to the per diem loss which would have been sustained by total suspension of business for the same time, of all the properties described herein, due consideration being given to the experience of the business before the fire and probable experience thereafter."

In other words, in brief, this is our point: The actual loss sustained; for partial suspension—rather, total suspension and partial suspension, there has to be a finding as to the actual loss sustained.

Mr. Vanderbilt, I also desire to offer in evidence at this time, a copy of the preliminary report of the Umpire under date of September 26, 1927. I assume that is an exact copy, but that will subject to its being an exact copy.

MR. VANDERBILT:—No objection.

(Preliminary report of Umpire marked Exhibit C-15.)

MR. GILHOOLY:—I will call Mr. Phelan.

JOHN GERALD PHELAN, called as a witness on behalf of the complainant, having been duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILHOOLY:

Q. Mr. Phelan, what is your occupation? A. Engineer in charge of building construction, associated with Fletcher-Thompson, Incorporated.

Q. What was your occupation in the years of 1925 and 1926? A. The same.

Q. And how long have you been so engaged? A. In this particular responsibility for about four years.

Q. What has been your experience in the building business? A. I have been in the building business for about 17 years. I started work on actual construction work as a clerk of works, then timekeeper, working into the engineering field as supervisor of outside construction, up to the time when I took charge of the building construction work in the office and outside.

Q. Can you tell us about how long a period of time you have been engaged in the supervision and superintendence of the erection of buildings? A. Approximately ten years.

Q. Well, during that time, what is the character of the buildings, the erection of which you superintended? A. Largely industrial buildings.

Q. Were you engaged by Igoe Brothers in 1925? A. I was—

Q. I haven't finished my question. A. Excuse me.

Q. —to make an estimate of the time within which you would require to restore the buildings which they had erected prior to their fire? A. Yes, sir.

Q. How did you obtain the information as to the character of the buildings in existence prior to the fire? A. From personal observation of the ruins, and from data given us by the owner contained in an appraisal and a schedule of properties prepared by a concern whose name is in that report,—I do not recall the names—the concern who prepared the report of damages for the insurance companies and from the plant engineer of the plant as to the former construction of the bulidings and their occupancy.

Q. And that engineer to whom you refer, is that Mr. Woodward? A. Mr. Woodward.

Q. Thereafter, did you proceed to collect data upon which you made your estimate as to the probably time you would take to restore the buildings? A. We did.

Q. And was this work done under your supervision? A. It was, in association with our organization members.

Q. But was this in your direct charge? A. Yes, sir.

Q. And it was under your direct supervision? A. Yes.

Q. And you passed upon the data? A. Yes.

Q. Yourself? A. Yes, sir.

Q. Now, I show you a report bearing date of April 1, 1926, and ask you if that is the report you finally submitted? A. It is, a copy of it.

MR. GILHOOLY:—I desire to offer this report, but I would like to submit the other one when it comes. It is exactly the same.

MR. VANDERBILT:—Just to clear my mind up Mr. Gilhooly, do I understand that the 200 day item, the period of 200 days, is or is not objected to?

MR. GILHOOLY:—That will be in a measure dependent upon the result of the Master's findings with regard to total and partial suspension. If it was the Umpire's findings that 200 days was the total suspension and there still is the period of partial suspension, then that 200 days period may have to go by the board as not being properly arrived at, but if the 200 days was meant to be the total suspension of all properties, then it is, of course, our contention that we should be allowed 200 times the actual loss, or 200 times $495.63.

MR. VANDERBILT:—Am I wrong in saying that under the bill of complaint all you are asking for is the expense on the 100 additional days? Isn't this matter of 200 days an item that is not incorporated in the bill of complaint?

MR. GILHOOLY:—No. In the amended bill of complaint we cite further that the award was erroneuos in that there was no period of partial suspension fixed, and no period of total suspension fixed.

MR. VANDERBILT:—Well, as I understand the amendment to the bill of complaint, the objection there raised is to the period of 100 days, for the expenses. Am I wrong on that?

MR. GILHOOLY:—No, you are not wrong on that.

MR. VANDERBILT:—What I am trying to get at is whether I have to direct my cross examination to the 200 day or to the 100 day period, that is really what I am trying to get at.

MR. GILHOOLY:—Why, it is my opinion that the

two are interlocked, that there is no possible question in this case about the absorption of fixed charges; it is a question of finding the period of total and period partial suspension. My present purpose is to show that under no circumstances could we have commenced any operation whatever in less than 200 days.

THE SPECIAL MASTER:—There would be total suspension of at least 200 days.

MR. GILHOOLY:—There would be a total suspension of at least 200 days.

THE MASTER:—And then a partial suspension after that.

MR. GILHOOLY:—Not necessarily after the 200 days.

THE SPECIAL MASTER:—No, but after at least 200 days.

MR. GILHOOLY:—After at least 200 days, there would be a partial suspension. I might add, according to the preliminary report of the Umpire submitted to both appraisers, there was a figure of 200 days mentioned in the report, and the appraisers were asked to compile their figures based upon that period of time, without any expression therein contained as to partial or total suspension, or absorption of fixed charges. Naturally, we assume 200 days was to be allowed; that is 200 times $495.63.

MR. VANDERBILT:—Well, the gist of our contention, to put it in a single sentence is that there is no

period of partial suspension because, after the fire, a temporary wire mill was used, which absorbed all the orders which came to the complainant Igoe Brothers, and therefore, there was not from that standpoint, any period of partial suspension at all, and, furthermore, that the original mill was never rebuilt. That being so, it is impossible to speak of partial suspension. That is the gist of our side of the case on that point.

THE SPECIAL MASTER:—All right. Are you prepared to cross-examine?

MR. GILHOOLY:—I just want to offer the report, and I want to get into the record certain facts in connection with the report.

MR. VANDERBILT:—We object to the admission of Mr. Phelan's report on the ground that it deals entirely with the question of how much it would take to completely replace the plant, and as we understand it, the issue is not that, but one of how long it was before the facilities of Igoe Brothers were such that they could carry on their business and fill all their orders, and absorb the fixed charges, which is not at all a construction question, but a question of manufacturing and conduct of their business, and accounting, and has nothing to do with this issue of how long it would take to rebuild the plant, the plant never being rebuilt and the business of Igoe Brothers in this particular respect being carried on a temporary mill which they utilize for that purpose.

THE SPECIAL MASTER:—All right. The objection is noted. Mark it as an exhibit.

(Received in evidence and marked Exhibit C-16.)

Q. Mr. Phelan, appended to this report is a chart, and I would kindly ask you to explain that chart, if you will what it means? A. The chart is laid out, starting with the day after the fire, and various periods of time are allotted for the different operations necessary for the reconstruction and re-equipment of the plant. Do you want me to review all of these points?

Q. Just take a sufficient number so that the Master can properly understand the chart. A. To begin with, a period of time was allowed for the gathering of data as to the material destroyed, and the adjustment of the fire insurance claim.

Q. Now, when you speak of the adjustment of the fire insurance claim, do you mean the adjustment of the fire loss solely, unconnected with use and occupation? A. Yes, sir.

Q. Now, may I ask you, have you any period of time on that chart to cover that time it would take to make the adjustment with the companies involved? A. No. Regarding this loss?

Q. The length of time it would take to adjust the fire loss? A. Yes.

Q. Have you included that in your chart? A. Yes, that is included here.

Q. And how long a period is that? A. The adjustment period is a period of three weeks after the survey loss; for the owner compiling a claim we have allowed a period of about ten weeks.

MR. VANDERBILT:—Ten weeks for gathering the claim together.

THE WITNESS:—Yes.

Q. Not the claim under the policies in this particular suit? A. No, sir.

Q. But under the fire policy? A. Yes.

MR. VANDERBILT:—Let us call it the building claim. I think that makes it clear.

Q. Building claim. You allowed how long a period of time for that? A. Ten weeks.

Q. Ten. In that ten weeks—A. Yes, sir.

Q. —was there anything that would have to be done during that particular ten weeks regarding the restoration of the buildings which were there before the fire? A. Yes, sir. We allowed during that period, the adjustment of the preliminary work that would be necessary before actual reconstruction could be started, such as the selection of engineers, the engineering survey. That is the time allowed for the taking of actual measurements in the field to match up new construction with the part that was left and the determining of the element of damage and just what part of the standing walls would have to be removed, and the general survey of conditions following the selection of the engineers. Those two periods occupied a period of six weeks. However—that is indicated by these lines here—the actual preparation of the plans and specifications could be started before that whole survey was completed, so we show that after the engineer had been on the job making the survey for a week, that the preparation of plans and specifications in the office would be commenced, and that that preparation of plans would take six weeks, plans and specifications, and the preparing of them for competitive bidding. After their preparation we have allowed a period of six weeks for obtaining of bids, investigation of suitable contractors and awarding of contracts. All of that work oc-

cupies the same period of time as is occupied by the owner's investigation of loss, and the presentment of their claim, and the adjustment of their claim with the fire insurance companies.

Q. Well, in view of the fact that all of these things —were all these things, in your opinion, necessary with respect to the rebuilding of the structures? A. Absolutely.

Q. Well, then, in your opinion, would you say that it was material or immaterial as to the length of time it took to ajust the fire loss, so far as the time—A. As it works out, it really is immaterial, because of the work of selecting engineers, preparing plans and specifications, and obtaining bids, would all be necessary for the practical reconstruction of the plant.

Q. Would you say then, that there would be no loss of time in reconstruction by reason of any possible adjustment of fire loss? A. No, I can't see that there would. During that period, I might call attention to the fact that there was also in progress in this city a strike of the carpenter trade, which would have prevented any work, any actual work, for about five weeks.

Q. How do you know there was that strike? Do you know that of your own personal knowledge? A. We were at the time supervising the construction of building work here in Newark that was absolutely shut down for that period, because of the lack of carpenters.

Q. Have you got a Newark office? A. Yes, sir.

Q. And you were familiar with labor conditions in Newark at that time? A. Yes, sir.

Q. Of your own personal knowledge? A. Yes, sir. Do you want me to explain the chart beyond that point?

Q. I think you probably could get along quicker, if

you would explain your own chart without my asking you questions. It is not very lengthy, I understand. A. From the time the contract was let, we have allowed sufficient time for the contractor to get his equipment on the job, and build up his gang of workmen, and have started—assumed that the construction work would follow from the south end of the plant to the north, rebuilding the parts of the buildings in order as they would be necessary for production. We have allowed on the chart —or, first, we figured the quantity of material that would be required for the reconstruction, the number of bricks and the number of board feet of lumber, the number of square feet of roofing, flooring, and so forth, and have computed that back to men-days, and then have allowed to each building and to each part of the building, the number of men which we thought could practically work in those points, and in that way arrived at the elapsed time, taking into consideration the fact that holidays and weather conditions would delay operations, and worked through the whole plant from building to building, allotting the men who finished on first building to the construction of the next, and so forth, through the entire reconstruction of the plant. We have shown all tradesmen,—the work of all trades, rather, overlapping one another, where it was possible to do so. For instance, we have had the equipment of the buildings, such as electricity, heat and plumbing, all going on while other parts of the building were in progress, and have started the installation of machinery after the roof was on, so that it would be safe, for the men to work below but before the building was actually completed in its entirety. We have worked through all the buildings in that way, and the time consumed is indicated on the chart, as extended, to April 30th of 1926?

THE MASTER:—A total period of how long?

Q. What is the total period according to the chart? A. 386 days.

Q. When you speak of 386 days, to what do you refer? What kind of days, calendar days, working days, or what? A. Calendar days, work days, 320.

Q. 320 actual working days? A. Yes.

Q. Now, in what appears in one column, there are a number of figures, and there appear under the column, under date of April, large capital figures. What do they refer to? A. They refer only to the particular buildings that are described by the chart, and the horizontal ruling extended from that letter.

Q. Now, on the blueprint, which is appended to your report, there are a number of buildings marked from A to, as I see it—A. Yes, sir.

Q. —S. A. These letters refer to the buildings indicated on that.

Q. On the blueprint? A. On that print of the plant layout.

Q. And in building S what was manufactured do you know? What was that devoted to? A. Building S was the drawing of wire, the cleaning of it and the baking process. The particular process I am not as familiar with as—

Q. I do not want you to testify on that. Do I understand you to say, in figuring the length of time within which these buildings could be reconstructed, you allotted the men on various buildings, on different buildings? A. Yes, sir.

Q. In your opinion, would it have expedited matters to have concentrated on each building as the building construction went on? A. No, I don't think so. The

more expeditious way was to build the whole plant as a unit, working all of the men that could practically be worked on the one building and another, as they tied in. It is not possible to work more than a fixed number on a certain project.

Q. Why is that, Mr. Phelan? A. For instance, building S was largely of brick pier construction, and it is not practical to try with piers of those sizes to work more than one man on a pier, nor is it possible or practical to work on the construction of all the piers of the building at one time. A certain amount of time must be used for scaffolding and staging, and also for the mortar to set before the brickwork can be carried up. So that we have taken all those things into consideration in allotting a certain number of men to certain parts of the work.

Q. May I ask, in arriving at your estimate and conclusions do you allot the maximum number of men to this work that you could under all the circumstances? A. Yes, we did.

Q. And you split those men up in such a way that they could do their work most effectively? A. Yes, sir.

Q. And expeditiously? A. Yes, sir.

Q. Can you tell us when, in your opinion, building S all factors being considered, might reasonably have been completed and ready for the installation of equipment? A. We thought—we showed building S as completed on November 15th, but—

Q. How many days is that, working days? A. 153—I beg your pardon—193.

Q. 193. And that is without any equipment at all; is that right? A. That was the completion of the building, but we had started the installation of equipment

about three weeks before that date, so that there was some equipment being installed while the final details of the buildings were being completed.

Q. And that was about two years before? A. Yes, sir.

Q. And how long did it take, how long would it have probably taken to install the equipment to go into that building?

MR. VANDERBILT:—I object to that unless it is shown that Mr. Phelan is qualified on that as well as construction work.

MR. GILHOOLY:—Well, I will limit my question to the chart, and ask permission to follow it up with a man who is an equipment expert.

THE SPECIAL MASTER:—All right.

MR. GILHOOLY:—I think that we might save time, if we get that into the record, what the chart shows.

Q. Will you tell us what the chart shows when the machinery and equipment would probably have been installed?

MR. VANDERBILT:—It being understood that is not based on any knowledge of Mr. Phelan, but of some other witness as to the equipment.

MR. GILHOOLY:—Yes.

THE SPECIAL MASTER:—Yes.

THE WITNESS:—January 4th, at the expiration of 223 working days.

Q. You speak of working days, as days when the work would be in progress? A. Yes, sir.

Q. Excluding Saturday afternoons and Sundays? A. Yes, sir.

Q. Did you make any allowance for inclement weather in that calculation? A. That is the number of days, lost manufacturing days.

Q. When you speak of lost manufacturing days, you mean working days? A. Every day exclusive of Sun-
10 days and holidays.

Q. But didn't you take into consideration inclement weather during that period? A. It is taken into consideration in arriving at the time required for reconstruction, but the number of days I am giving you are the lost manufacturing days.

Q. That would be coincident with lost building days, too, would it not? A. Yes.

Q. That is how many days? A. 223. Beyond that point we have allowed a period of approximately
20 three weeks for machine adjustment before actual production could have been started.

Q. And that would make a total, according to the chart of how many days? A. 241 days.

MR. VANDERBILT:—I take it that Mr. Phelan is not an expert on that part, machinery.

Mr. GILHOOLY:—I will cover that.

30 Q. Building S according to that chart would be the first one that would have been erected? A. No. During the construction and equipping of Building S, the boiler plant and engine room would have been rebuilt and re-equipped. The engine room would be ready to

deliver power to the machines about two weeks prior to the final completion of building S, in readiness for production.

Q. How about building D? When does your chart show that would have been fully completed and equipment installed? A. On February 15th, after approximately 253 days, 253 lost manufacturing days.

Q. Building E. A. Building E. Building E I just gave you. Was it D that you asked for?

Q. D I asked you, I think, to give me D. A. Then I will correct that to 258 days for building D.

Q. E? A. 297 days.

Q. Now, how much time was allotted for adjustment of machinery and equipment according to that chart? A. In what building?

Q. Building E. A. Three weeks, to the end of 320 lost days.

Q. Could that building have been completed while building S was being erected? A. Building E was being reconstructed during the time that building S was. It was not started at the same time, because there was some —building S was the logical one to start on from a practical standpoint of reconstruction, and also was necessary before the other operation could have been—manufacturing operation could have been resumed.

Q. Mr. Phelan in arriving at your estimate, have you taken into consideration holidays? A. Yes, sir.

Q. Have you taken into consideration days upon which no outside work could be done? A. Yes, sir.

Q. You did take that into consideration? A. Yes, sir.

MR. GILHOOLY:—I think that is all.

I may ask just one more question.

Q. In arriving at this computation, did you use in your calculation a full or half day on Saturday? A. A half day.

Q. A half day on Saturday? A. Yes, sir.

Q. Then when you speak of lost manufacturing days, you do not mean lost manufacturing days to Igoe, you mean lost building days? A. No, I mean lost manufacturing days, because we have enumerated the days. For instance, that it rained and prevented outside work. We have still included that as lost manufacturing days.

Q. But did you take into consideration, in figuring the lost manufacturing days, that the plant of Igoe Brothers was run a full on Saturday and not a half day? A. Yes, we had Igoe Brothers using a six day week, exclusive of holidays.

Q. So that was all taken into consideration when these lines on the chart were made as indicating the period when certain operations would have been completed? A. Yes, sir.

Q. Now, with reference to the strike you mentioned in the early part of your testimony, what was the nature of that strike? A. I don't recall the cause, but the effect —

Q. What transpired? A. The effect was that the carpenters would not work from May 1st until June 5th.

Q. Did that affect any other trades, do you know? A. It would affect such work as concrete work or the completion of any brick work. For instance all of the sashes or windows in this building were practically all of them of wood. Those would necessarily have to be installed by union carpenters or union bricklayers would not build the brick around them.

Q. Now, may I ask, were any of the buildings of Igoe Brothers of wood construction? A. One of the buildings was frame construction.

Q. That was building what? A. That was building I, and all of them, other buildings, had wood roofs, wood trusses and wood floors, excepting the building P, which had concrete floors.

MR. GILHOOLY:—You may cross examine, Mr. Vanderbilt.

CROSS EXAMINATION BY MR. VANDERBILT:

Q. Did you have anything to do with the preparation of the figures for Igoe Brothers in connection with the building loss? A. No, sir.

Q. You were called on this question of use and occupancy for the first time on what date, Mr. Phelan? A. I can't tell you the date.

Q. Well, approximately? A. I should think it was about in May, 1925.

MR. GILHOOLY:—Have you got the work sheets? That might refresh your recollection.

Q. I notice that the chart is dated March 31, 1926. Does that give you any clue as to when you undertook this work? A. It was much later than that. It was during the winter months, and it must have been in the early part of 1926.

Q. It was in the early winter months, then, you say, of 1926? A. Yes, sir, that is correct. I could verify that by that office records.

Q. I just want the approximate date. Now I understood you to say that you allowed what period for the adjustment of the fire claim as against the physical buildings? A. The whole period of survey of loss and adjustment consumed 97 days.

Q. 97 days. That is 16 weeks, 16-1/6 weeks, to be exact, on the six days basis? A. That is correct.

Q. These buildings were practically totally destroyed, were they not? A. Yes, sir.

Q. And were not rebuilt, were they? A. Not at the time of this report. I can't say as to that at this time.

Q. So far as you know, they have never been rebuilt? A. That is correct. Now, I must qualify that. There was some small amount of rebuilding going on at that time when we were completing our report.

Q. I mean the group of buildings, as a whole, was not rebuilt? A. No, sir.

Q. Or any substantial portion of them, so far as you know? A. Not to my knowledge.

Q. And that being so, don't you think, Mr. Phelan, that 16 weeks or pretty near four months, is an excessive length of time to allow for adjustment of the loss? A. The amount of tangled machinery and shafting and building wreckage—it is our opinion, that it would take a great length of time to sort out the damaged parts, and list them intelligently, which operation would have to be gone into practically twice, one by the owner, and once by the insurance company, and then a period of adjusting the differences of opinion of both.

Q. Well, now, let us take the building end of it first, as distinguished from the contents; you don't think that it would take 13 weeks to adjust that, do you? A. Adjust the building?

Q. Yes, bearing in mind that the insured is entitled to his money sixty days after the filing of proofs? A. Of course, the filing of claims and adjustment on just the buildings would not have consumed as much time as that.

Q. Now, what would be a reasonable consumption of time on the filing of papers and claims and the adjustment of claims on the buildings alone, as distinguished from the machinery and contents? A. I have never given much thought to a division of the two items, but I should say that the building claim alone might be adjusted in ten weeks.

Q. Well, if an owner were planning to rebuild his buildings, and he wanted to get his insurance money to do that, it would not take him ten weeks to assemble the data as to his loss on the buildings of this type, would it? A. I believe it would to take an accurate survey of the loss and probable cost of reconstruction. It would be necessary, unless he had a very uptodate appraisal on hand of just what the building value was and the replacement cost and the—

Q. Assuming that he merely had his old plans and specifications, which were used at the time the buildings were constructed, and the physical layout of the land, showing where the buildings had been, and the owner's offices and superintendents' and foremen's, could tell of what the buildings were made, and what their condition was just prior to the fire, couldn't you, as an engineer, tell what the cost of those buildings would be within a period of five days? A. No, sir.

Q. You could not? A. No, sir.

Q. And what, approximately, would be the total cost new, excluding depreciation, of this group of buildings? A. I have no knowledge of that.

Q. Well, you must have a general knowledge of it, when you have gone through the details of computing how much it would take to restore them, and so forth? A. We did not set any price or cost in regard to this building at all. We merely computed the quantity and

the amount of work that his men would do in a day, and we did not compute any cost on this building at all.

Q. True,—you were not making this computation in a vacuum. You were familiar with what construction costs were at this time, were you not? A. Yes, sir.

Q. You must have a general idea of what it would cost to build these buildings brand new, excluding the doubtful element of depreciation, as to whether it is $50,000 or half a million or five million?

MR. GILHOOLY:—I just wonder if this is proper cross examination, because I merely asked the witness the length of time it would take to reconstruct and not the cost.

MR. VANDEDBILT:—Mr. Master, what I am driving at is to try to get a statement from the witness as to how long it would take the engineers or group of engineers that were working on this problem to compute what would be the building loss, because that is a very relevant point on this claim of 16 weeks for the adjustment of that.

THE SPECIAL MASTER:—I will permit the question.

MR. VANDERBILT:—Will you repeat the question?

(The question was read by the Reporter.)

THE WITNESS:—Well, I think, with as broad a range as that, I would say it would be nearer half a million than either of the other figures, but I am not in a position to say now what the cost would be, because I have never given any consideration to the cost.

Q. Now, all of the buildings are what we know—using a general term—as straight mill construction, aren't they? A. Yes, sir.

Q. I mean there was nothing unusual or involved about them? A. No, I would not say so.

Q. What kind of roofs were there on these buildings? A. Wood trusses, mostly, and wood plank.

Q. And side walls and foundations of brick? A. Foundations of stone, concrete, walls of brick, and wood and steel sash, wood doors.

Q. Now, if your concern were called in to bid on that kind of job, how long would it take you to bid on it? A. About three weeks.

Q. And if it were a public job, you would move even a little faster than that, wouldn't you? A. It is possible to get bids probably in two weeks. We generally allow about two weeks for medium sized jobs, and three weeks, where we are trying to get a good price, and give them a chance—give the sub-contractors a chance to shop around, as it is said, to get good prices.

Q. Well, there would not be any great amount of sub-contractors on this type of work, would there? A. Oh, yes, the roofing work, the mill work, the steel sash, wood sash, material prices, some wrecking.

Q. And you would call this a medium sized job—I mean, that was your phrase—would you call this a medium sized job? A. No, I would call it more than a medium sized job.

Q. More than a medium-sized job? A. An industrial work—a large job.

Q. You could get your bid in within a couple of weeks, couldn't you? A. With all the information available?

Q. Yes, that is what I mean. A. Yes, sir.

Q. Now, if you could get the bid in within two weeks, there would be no necessity, so far as the building alone is concerned, of allowing a period of 16 weeks for the adjustment, would there? A. We worked out the matter of adjustment entirely independent of the required time for planning and estimating. It was our judgment that it would take the period of time allotted.

Q. Well, if you would take only two weeks with the information available, which apparently was available, the way in which these buildings had formerly been built, to give an estimate of the building, what was the other fourteen weeks consumed on—16 weeks being the period you allowed for adjustment? A. I allowed a period of three weeks for compiling the amount of the loss, the extent of the loss—I allowed a period of ten weeks for the compiling of the loss, the necessary accounting, and the obtaining of replacement prices, and all the work necessary. That includes, of course, machinery and the transmission of equipment.

Q. About machinery, you know nothing at first hand, I understand. Your line is construction. A. No, only by observation.

Q. I am trying to account for, so far as the work you know about is concerned, why you allowed more than two to three weeks instead—why you did not allow two or three weeks instead of sixteen weeks? A. The information was not available for the prompt estimating of the work. It was necessary to go to the building, to go through the building, make careful examination of the damaged walls, ascertain the extent of the damage and how much of the standing buildings would have to be removed in order to build substantially on top of the remaining parts.

Q. Well, these buildings were all substantially de-

stroyed, weren't they? A. Yes, substantially so; but there were parts that could be reused, like foundations, some foundations were left in place, and some could not be used.

Q. Beyond foundations, there was nothing that could be used, was there? A. A very small amount of walls.

Q. And there was even parts of the fuondations that could not be used? A. That is correct.

Q. So, you practically started from the ground up, at least, to figure what the cost of these buildings would be? A. That conclusion was arrived at after examination. The first appearance or examination of the buildings might indicate that much of the standing walls could be re-used. Upon careful examination—

Q. If you represented the owner, you would advise against that every time, as a wise contractor? A. Against what?

Q. Using the standing walls after a fire. A. Well, it would not be good practice from an engineering standpoint, of course, to use them.

Q. Absolutely. So you would disregard the standing walls right off the reel? A. As a matter of fact, we did not. We went over them very carefully and measured up the amount of standing walls, whether they were badly cracked, or had been thrown out of plumb, and level, and whether they could be used. That particular item would consume considerable time.

Q. Well, how long would it take to survey the standing walls to see how much it would take to— A. How long a time would it take?

Q. Yes. A. I think it consumed about a week on the job to go over them carefully.

Q. How many men worked on this task? A. I had myself and two others, I think, with me, measuring up

and considering the extent of damage of the walls, and whether or not the loads they were called upon to bear would warrant their removal or whether or not they could be safely re-used.

Q. You knew, all the time you were doing that, that Igoe Brothers did not intend to rebuild, did you not? A. No.

Q. You did not know that? A. No, sir.

Q. You were there and started about eight months after the fire, and you did not know that? A. No, sir. I knew there was some question as to it, but I had no intimate knowledge of what their plans were. We were only called in to let them know how much it would take to rebuild their buildings as it had formerly been built.

Q. Mr. Phelan, don't you know, that very often on this type of mill construction, adjustments are made on losses ranging from $100,000 up to one million and a half to two million dollars, where plans and specifications are available within a week? A. I never heard of such adjustments being made in as short time as that on any—

Q. Now, aside from the time you took checking up walls which you say took you about a week, what other time did you spend in getting the data for settlement and adjustment of the fire claim? Can you give us an idea of how long this period of adjustment should be? A. Because of the lack of information, we measured up all of that building.

Q. In other words, you got the outside and inside dimensions of these buildings? A. Yes, sir.

Q. That was a part of the week's work that you were telling about of yourself and these men? A. No, we were working there two to three weeks.

Q. Just getting the outside and inside dimensions of these buildings? A. Yes, sir.

Q. And how many of you were there working? A. Two or three—it is a long while ago. I don't recall just the number.

Q. Now, how long— A. We measured it up accurately. Just the outside and inside dimensions means a good deal with this particular kind of plant where they were all irregular shaped buildings, and no two buildings alike; spacing of brick piers and the size of brick piers was different.

Q. That is an ordinary survey, or engineering job, isn't it? I mean, there is nothing of great difficulty about it? A. No, it is just a matter of spending the time to get it and record it.

Q. Now, is it his work of checking up the inside and outside dimensions during this period when you were checking up the walls, or do those two overlap? A. Those two would overlap to some extent.

Q. That was about a week you were telling us you spent on it? A. Yes.

Q. Well, after you got done, I suppose it took a little while to tabulate your results, didn't it? A. Yes, sir.

Q. How long did that take? A. About a week.

Q. And that accounts for two weeks. How do you account for the remainder? A. No, we did not have all the field data at the end of one week.

Q. You did not have all the field data at the end of one week? A. No. We were in the plant two or three weeks obtaining the field data.

Q. Well, even allowing that three weeks plus the one week in the office is four weeks. What is the necessity of allowing the other twelve weeks for this period of adjustment of loss? A. The particular operation

we went through there, was the making of—getting the field data, making a preliminary plan for the building so the new quantities could be readily taken off.

Q. In other words, you had to do a great deal more work than a man would ordinarily have to do than a man who was simply trying to ascertain what the extent of loss would be? A. We did. If it was a matter of just obtaining the loss, we could do more approximating than we did. We figured the actual quantities from actual measurements to be sure to obtain accurate results.

Q. In other words, if it were merely settling the physical loss to the buildings, the ordinary practice would be more of approximation than the trying to adjust the differences? A. Yes, I think so.

Q. Well, now, I still can't account for that other twelve or thirteen weeks in this period that you allowed for the adjustment of the building claim. Can you tell us where the rest of it was consumed, or would have been consumed, in actual practice, if they had gone forward without reconstruction of the buildings? A. The period, of course, I have got, refers back again to the amount of equipment which would be much more difficult a task to estimate than building.

Q. That, of course, you don't know about first hand, is that right? A. No.

Q. And will be testified to by someone else. So far as the building end is concerned, three or four weeks would have completed the period of adjustment, wouldn't it? A. No, sir.

Q. You did not account for the rest of it? A. We got to the point where we had the quantities available at the end of four weeks.

Q. Yes. A. Yes. My judgment, or my statement, previously, was that it would take two weeks to three

weeks—I said three weeks, and modified it to two weeks, to estimate the cost of the buildings.

Q. I thought that you told me it could have been done in a week, before? A. No, I told you that we were around the plant about a week inspecting the walls and making our decision as to whether or not they would be removed in the rebuilding, and we were taking measurements and getting field data for about three weeks.

Q. Those two periods, you said, overlapped, so that is still three weeks. A. Yes, sir, and compiling the office data for about a week.

Q. That is four weeks. A. Then we were ready to make an estimate.

Q. Well, isn't that what you do when you compile your office data? A. No, it was just a matter of getting down on paper the sizes and the types of the buildings. The matter of estimating is an entirely separate operation.

Q. Weren't there any plans and specifications available on any of these buildings? A. There was some meagre information in the shape of plans that had been made by an appraisal company, I believe who do not give any accurate dimensions or sizes of improvements. All of those things were worked out from the measurements taken in the field. We did not make our figures from that entirely. Our figures were a combination of the field data and such information as was contained on the plans which the owner had.

Q. Which were incorporated in this previous appraisal you referred to of some appraisal company? A. The appraisal to some extent, and from plans the owners had made themselves.

Q. Now, how many of these buildings, do you recall, did Igoe Brothers have plans and specifications of? A.

The only plans available, the only real plans available were of building S.

Q. That was the biggest one? A. That was the newest one. And the other buildings had partial plans of different parts of them. I don't recall just which other buildings were drawn up.

Q. Now, we have covered about four weeks of this allotment of sixteen, on the buildings; and what was the rest—how was the rest of it consumed, or is it all tied up in the machinery adjustment? A. We never—my statement was that we consumed about four weeks obtaining the data before it would be possible to compile an intelligent estimate.

Q. All right. How long would it take to compile an intelligent estimate? A. Two to three weeks.

Q. Two to three weeks? A. Yes, sir.

Q. These were all rectangular buildings, weren't they? A. Yes, sir.

Q. There was nothing complicated about any of them? They were not like office buildings, court houses, office buildings—the plainest sort of construction you could imagine, weren't they? What about them was it that would take you two to three weeks to compile your figures? A. The obtaining of sub-contractors' bids always takes about a week; to have the contractors—all of these sub-contractors or general contractors do not drop everything they are doing to give you an estimate on one particular job; it has to take its course with other work in progress. To get the sub-bids on the sashes and millwork, wood sashes and wood doors, estimate the number of bricks, obtain a price on the bricks, estimate the amount of lumber and obtain a price on the lumber—

Q. Well, if they were doing that on a public job, the general contractor would get his bid and his sub-bids for

them in the hands of the builder even in ten days, wouldn't he? A. Not on a large job. It is not my experience that they do, at any rate.

Q. Wouldn't he do it, if he wanted to get a large job in New Jersey? A. Possibly. I am not very familiar with public work. My work is confined largely to industrial work for private corporations.

Q. Even allowing the period you stated for getting the sub-bids in and compiling your bid, where do you consume the rest of the period of sixteen weeks? A. We are talking about two operations. The matter of just compiling the fire loss, aren't we?

Q. Yes. I am talking about the— A. Not preparations for rebuilding a new plant?

Q. No, the length of time there was consumed in the preparation of the building claim and adjustment of it, which, I think you said, was 97 days. A. Yes.

Q. 16-1/6 weeks? A. Well, after the building claim had been compiled, which would be, in my judgment, a minimum of seven weeks, then the period of adjustment—when that claim was prepared, I don't believe that the insurance company would accept it and pay the bill the next day. I think it would take a period of time to adjust that between them.

Q. Do you really think, Mr. Phelan, that any owner who really wanted his money, and his building had burned, would take seven weeks to prepare his claim? A. I think, if he wanted to prepare it accurately, it would consume that length of time, from the condition his plant was in.

Q. Now, all during this period that you have allowed for preparing and adjusting the claim, there would be no reason in the world why the owner could not be proceeding with his plans of rebuilding from the very day of the fire, is there? A. No, sir.

Q. Now, as I understood you to say, you allowed the ten weeks for getting, selecting engineers, and the engineers preparing their engineering survey; was that correct? A. No. The engineering survey and the selecting of engineers consumed the seven weeks.

Q. The seven weeks? A. Yes, sir.

Q. Now, why did it take that length of time in view of what you have just told us? A. I beg your pardon. The selection of engineers and the obtaining of the survey and the preparing of the plans and specifications consumed ten weeks.

Q. Now, why would it take that length of time in view of the testimony that you have just given us as to various times it took on these other operations? A. The obtaining of field data for the preparation of actual working plans, and the making of actual working plans is very much more lengthy an operation than just obtaining sufficient data to bid on.

Q. Well, so far as plans were available, all you had to do was to use them again; isn't that correct? A. No, sir.

Q. Why not? A. There were no plans available that could be used for construction purposes, not for—there were no plans there that had sufficient information on them to re-build from.

Q. Now, after the plans were obtained, how long would you say it would take to get in the bids? A. We show a period of six weeks for obtaining the bids and letting the contract.

Q. And is that a very long period when you take into consideration the fact that the bids were obtained on public work in ten days' time? A. Of course, included in that time is not only the obtaining of bids, but the investigation of the low bidder and the placing of the contract, all of which would consume some time.

Q. Well, how long would it take to investigate the low bidder, to see whether he was good or not? A. Well, how long would it take to investigate the low bidder? We assume three weeks for obtaining the bids. It is general knowledge that by giving contractors a greater length of time for bidding, better prices can be obtained. They have a chance to shop around, as it is termed, and get lower prices on materials, so that we allotted three weeks for obtaining bids in order to get the best prices, contract prices. It has been our experience also that after the first bids are in, that changes are required because of—many times because of excessive cost, possibly, of alterations.

Q. That would not be true where you were simply under directions to reproduce the same buildings, would it? A. Unless they found the cost of reproduction far beyond the original cost and had to cut corners to get their buildings rebuilt so they could be built within their appropriation.

Q. Well, that would not be true when the operation of the construction company was indemnified from their loss—you would not have that problem, would you? A. No, not if that condition existed.

Q. Now, isn't it a fact, Mr. Phelan, that bids are frequently obtained in competitive bidding when the building runs up to three or four or five millions of dollars in cost, like, for example, the Central Market in Newark, or the Hall of Records in Newark, on ten days to two weeks bids? A. I am not qualified to answer that question. I am not acquainted with public work. I don't know what the practice is on them. I do know that on buildings running into as much money as that, industrial buildings, we would allow—figure on allowing three weeks.

Q. Isn't it a fact when it is profitable work, that the engineer or architect will very often suggest to the owner who the best men are to submit the plans to? A. Yes, sir.

Q. And make sure right in the beginning they get in the hands of men whom the engineers or architects know as good contractors? A. Yes, sir.

Q. Now, will you turn to your chart again, and tell us whether or not the carpenters' strike which lasted from May 1st to June 5th, in any way interfered with construction work? A. No, sir.

Q. It is not an element to be brought into our consideration at all, then? A. It was only brought in to indicate that in my case regardless of the preparation of plans or other necessary work, that during that period no construction work could be carried on.

Q. Well, in that period, they certainly could have removed the debris and cleared the foundations, couldn't they, without the employment of carpenters? A. Yes, sir.

Q. And all of the preliminary work could have been gotten out of the way with respect to all the buildings? A. Yes, sir.

Q. So that they could have been ready to start work on moving up the buildings not later than June 5th? A. If no other preliminary work had been necessary, so far as the carpenter strike is concerned.

Q. So far as the carpenter strike is concerned? A. Yes, sir.

Q. As a matter of fact, considerable of the laying of foundations could have been done without any carpenter's aid, couldn't it? A. Very little of it. The foundations that were destroyed were concrete. Concrete can only be placed in wooden forms made by carpenters, so

that the concrete work was practically at a standstill throughout the carpenter strike.

Q. Well, are those forms which are used on this type of foundation forms which are built specially, or are they stock forms taken from job to job? A. All built special.

Q. All built special. Isn't it a fact that the largest industrial construction contractors take their forms from job to job? For example, Turner Construction Company. A. Very little of it.

Q. Well, aren't there these packing concrete forms which they all use— A. There are metal forms, if that is what you refer to.

Q. Yes. A. But they are not used on foundation work very generally. In fact I don't know—

Q. Aren't there wooden forms that they likewise take from job to job? A. Very little. There are certain parts of the form lumber which is reused and taken from job to job, the main support members of the forms, timbers of sizes 4 inches square, or something of that sort, but the actual form work which is normally made of lumber less than an inch thick does not have much salvage value at the end of one job, so it is generally scrapped at the end of the particular work. The forms would all have to be erected, at any rate, and that erection would have to be done by union carpenters.

Q. How long did you allow for getting the equipment on the job? A. A period of two weeks.

Q. Why is it necessary to allow that length of time? A. For moving the equipment, staging, and all sorts of wheels, belts and small tools, gathering them together and putting them on the job.

Q. Wouldn't three or four days be enough time to for all that? A. Possibly, if the contractor had a

stock of that material, and had no other job to go on. If you found a contractor who had just had his equipment ready and waiting to go onto the job.

Q. Now, if you were around this job, as a practical matter, and had foundations to dig, couldn't you get a steam shovel there in about 24 hours? A. Possibly.

Q. And while they were underway and doing their work, couldn't all the small tools and equipment be brought up in the meantime? A. The equipment could, but there was no real work on this job for a steam shovel or anything of that sort. There wasn't anything to—

Q. Now, why was it that in the construction of the buildings as shown on this chart, they were not all put up at the same time?

MR. GILHOOLY—May I hear that question, please? I was wondering if you were referring to any particular thing.

MR. VANDERBILT—No, I mean his construction work shows they are run on schedule, building S being started—

MR. GILHOOLY—You mean, the buildings were not all put up at one time—

MR. VANDERBILT—Yes, I mean on this chart.

THE WITNESS—Because it was not—it would not be practical to try and work at all parts of the site at once. It would be impossible to store the necessary material on the site, to get them to the mechanics working at all different points, at once.

Q. You started, as I recall your statement, from south and worked north? A. Yes.

Q. Why not start at both ends and work to he middle? A. Because of the limited yard space. If we tried to do that, the north end where the driveways are would be blocked—blocked at the south end.

Q. There is ample storage space in the center when you are working from both ends? A. It would be impossible to get to it, because you would block in the means of egress or ingress.

Q. So, you could start only one building at a time? A. We started one building, but worked several at a time, as soon as suitable gangs of men could be obtained. Buildings B, C, D and S were all in progress at the same time.

Q. What do you mean by suitable gangs of men obtained, Mr. Phelan? A. That it would not be possible to—or, at least, practical, to assume that a contractor could start on the job with a full and complete gang of men enough to start all of the work at once.

Q. What was the number of men, the maximum number of men that you contemplated working on this job, as shown by your chart? A. I think the maximum number ran up to about 200.

Q. And what was the lowest number at one time? A. At the start of the job, the lowest number we had was about twenty, at the start.

Q. I notice in your report, you use the expression several times, As soon as such and such a type of men were available—mill wrights, whatever that may be. What do you mean by that phrase "available"? A. As soon as they had completed their work in other parts of the plant, or in the beginning of the job, for instance, as soon as we were able to hire the necessary men.

Q. Well, now, were your calculations made on the basis that there is a limited number of men, and that you could not get the men you desired and that they were not available? A. They were based on the number of men that we felt would be practical to put to work on this particular operation, and in some cases, affected by the supply of men, particularly with regard to the number of millwrights.

Q. Was there a limited supply of millwrights? A. Millwrights are not as readily obtainable as other tradesmen.

Q. What I mean is, is there a shortage of them in this area? A. I think—I don't believe—

Q. At that time? A. I think that all of the millwrights were worked that we felt could be obtained.

Q. In other words, you did not take into consideration any shortage of them; you used all that could possibly be put to work on this job, in your calculation? A. Yes, I should say so.

Q. Isn't it a fact that this type of construction is the speediest type of construction a contractor is called upon to put up? A. No, I don't think so.

Q. And what can you think of that is more speedy? A. Well, concrete buildings will probably go up faster than brick buildings.

Q. Concrete buildings will go up faster. Well, isn't concrete foundation, straight brick walls, and wood trussed roofs, just about as simple construction as one can get? A. Yes, I should think so.

Q. As I understand it, in counting your days, you counted six full days a week; Had Igoe Brothers worked five and one half days a week, or as the labor unions work, with allowance for holidays and Sundays? A. Yes, sir.

Q. Now, which? A. In calculating the elapsed time—let me just give you an example: If we had, say 100 days' work to do, that could be done by ten men who would take ten days, starting on Monday, providing that the weather was proper, and that there were no holidays, we would accomplished five and one-half days' work during that week, and it would take four and one-half days of the next week to finish. At that time, we would charge the full six days the first week, as lost days, and four and one-half days of the next week as lost days, as lost manufacturing days. If there had been rainy days or holidays, you see a rainy day or a holiday, they could not work either—if I had two rainy days or three rainy days in that ten day period, it would have extended the lost manufacturing days to thirteen or fourteen to accomplish the ten days' work on the job.

Q. Now, what number of rainy days, not work days but rainy days did you calculate in this operation? A. We took the number of stormy days, days when it rained during the construction period, or days when the temperature may have been too low to work, from the weather reports of the United States Weather Bureau covering the weather conditions in this vicinity over that period.

Q. Of course, you don't know, Mr. Phelan, of your own knowledge, whether these really were lost manufacturing days or not? You are using that term in the abstract way without any knowledge as to whether they were lost manufacturing days or not? A. Yes, they are only the days that would usually be manufacturing days, whether or not they were lost to this owner, I can't say.

Q. You did not take into consideration at all the fact that there was a temporary wire mill being operated during the greater portion of this time? A. No, sir.

Q. So, what you really mean, then, is lost construction days— A. No.

Q. So far as the complainant is concerned? In other words, if a week went by they lost six construction days, because they work six full days a week? A. Well, what we mean is that during the number of weeks that they lost six days regardless of the weather conditions.

Q. Regardless of the weather conditions, correct. Now, referring to your chart, when was the first foundation done? A. That is, the foundation work?

Q. Yes. A. In building S, on August 17th, at the expiration of about 106 days.

Q. Now, referring to your chart, what was the last day for finishing the construction of the building? A. All of the building?

Q. Yes. A. On January 31, 1926, at the expiration of 247 days.

Q. What is the number of days between the digging of the first foundation and the completing of the last construction work on the building? A. It is about 136 days.

MR. GILHOOLY—What was that?

THE WITNESS—Did I say 106 days?

Q. In other words, exclusive of preparation for bids and adjustment, these buildings could have been constructed in every respect in 137 days?

MR. GILHOOLY—I make it 141, if the figures given us are correct.

THE WITNESS—Did I say 106? I should have said 109. On the 109th lost day the foundation was start-

ed, and we show that the building was completed—all of the buildings were completed on the 252nd day.

Q. And what date was that 252nd day?

THE MASTER—That is 141—

Q. What date was that? A. That was February 6th.

MR. GILHOOLY—It is a little more. 109 from 252.

THE SPECIAL MASTER—143.

Q. Aren't you taking into consideration in that, the cleaning up of the yard? A. Yes, I am.

Q. I am asking you about the building? A. 246 was on the building.

Q. 246 less 109 would give 137.

THE SPECIAL MASTER—137.

A. Yes, that is correct.

Q. In other words, the building could have been started and finished within 137 days of actual construction? A. Yes, sir.

MR. VANDERBILT—That is all.

REDIRECT EXAMINATION

By MR. GILHOOLY:

Q. Mr. Phelan, for the purpose of clearing my mind as well as somebody else's of the same opinion, this period which you allowed for the fire adjustment, that overlapped a period which you allowed for other purposes, didn't it? A. Yes, sir.

Q. And during this entire period of 97 days did you or did you not, plan to be doing something else? A. During the period of adjustment of claims of the fire, an adjustment of the claims, we planned that the owner would select the engineers, and the engineer would take the necessary field data, and prepare the plans and specifications, and obtain bids and let the contract.

Q. And all that—I suppose, remove the debris? A. Some of it.

Q. That would all be going on while this so-called fire adjustment would be made; is that it? A. Yes, sir.

Q. So, in your opinion, would it play any material part in your calculation, as to how long it took to make this fire adjustment? Is my question clear? A. I think that the period of obtaining bids and letting contracts was covered somewhat by that.

Q. You mean the time in which you would expect to obtain bids was somewhat covered by— A. Yes, I believe that the period of obtaining bids and letting could have been shortened to some extent.

Q. About to what extent would you say? A. To about two weeks.

Q. Now, how long a time did you calculate that it would take to remove the debris? A. Three weeks, re-

moving that part of the debris that was actually on the ground, but there was additional debris that would have to be removed after the contracts were let, such as the removal of walls that were standing and that work, we assumed, would start immediately upon the award of the contracts and would extend—could have been cleared up more quickly than we show, in five weeks, but there was no point in doing it. We allowed two weeks to clear up the site sufficiently so that the brick work and new construction could start.

Q. Well, after that the remaining debris— A. The remaining debris would be removed as necessary to permit the reconstruction of the buildings, as we got to them.

Q. There would be no lost motion by such operation? A. Not after the first two weeks.

Q. You spoke about measuring up this property. Was it possible to make inside measurements unless you did remove some part of the debris? A. Not all of the measurements. I do not know just the condition of the site immediately after the fire, but I would assume that it would be impossible to get all of the information immediately after the fire until some debris had been removed; it would not be possible to locate the original footings in building S, for instance. That was a heavy wood floor construction, on concrete piers. When we first called to the site, the debris from the building had been entirely removed and the piers were all apparent, but before the debris had been removed, it might not have been possible, I do not think, to obtain all of that data. I do not think that it would have been possible to go on immediately.

Q. Mr. Phelan, can you tell us whether or not the estimates which you have made as to the length of time

it would take for each of these operations is, in your opinion, a fair estimate of such time? A. It is.

Q. And did you, in arriving at that estimate, fix the maximum time or the minimum time within which this work should reasonably have been done? A. The minimum length of time in which we felt that various operations could be completed.

Q. And, I suppose, if you met with any unexpected obstacles that period would, of course, be increased? A. Yes, the only obstacles that we considered were those of weather, and that was a known condition.

Q. Do I understand that there was a considerable or inconsiderable amount of carpenter work on this job? A. Considerable.

Q. And in any event, during the carpenters' strike, no work could have been done on these wooden buildings, is that right—during that period? A. No, and very little could have been performed on the brick part of the building, because most of them had woodwork—woodwork was involved, so that masonry work could not have gone on until the carpenters were there to work in conjunction with them.

Q. And, as I understood you to say on your cross examination, the concrete work which was necessary on this building was special work that could not be done according to any particular form? A. Not special work in that sense. It was ordinary concrete, but special forms are made for practically all concrete work. In some large operations, where there is a large amount of concrete work involved, metal forms are used, but on work of this type, it is very rare, if ever, that metal forms are used.

Q. And it would be impractical? A. I have never known—

Q. Mr. Phelan, is it practical for wooden forms to be used from one time to another? A. Not the whole

—they are saved in part, but the actual lumber that comes in contact with the concrete is thin, comparatively thin, and so you would scrap all the forms after the concrete is poured. There is heavy wear on them, and they do not last long enough, and it is not practical to try and re-use them.

Q. Well, in your opinion, would new forms have to be prepared for this particular work on this job? A. Yes, sir.

Q. The rainy days you spoke about, Mr. Phelan, in making your calculations, you did not take into consideration the rainy days affecting any interior work, did you? A. Not if the roof was on the building—we took no further consideration of weather conditions.

Q. Mr. Phelan, did you receive any information which is embodied in this report from Mr. Hamilton? A. Yes, sir.

Q. And he is here in court this morning? A. Yes, sir.

Q. And the information which he has given to you have inserted on this chart; is that right? A. It is included in the chart and in our report, the matter of mechanical installation and equipment, all of which work is under his charge in their organization.

MR. GILHOOLY—That is all.

RECROSS EXAMINATION

By MR. VANDERBILT:

Q. Mr. Phelan, you were asked about obstacles. You did take into consideration all the obstacles that might occur, didn't you? A. All of the known obstacles.

Q. Well, what unknown ones might there have been, because you knew the period over which this work would have been done, and you took into consideration all of them you could think of, using your hindsight? A. No; the job was not built. The only thing that we could foresee or look back on was the weather reports. There are many obstacles that might be incurred in building work. The staging might collapse, the cement that is purchased might be inert, and not set, so it might be necessary to tear down and rebuild the walls. A hurricane or heavy wind might come up and blow down the staging or the walls partly built. All those things do happen, and it has been my experience in planning progress schedules that very few of them are able to be accomplished in the time which you think you will, because of these unforeseen obstacles, such as this that arise.

Q. I notice on your chart that you commenced removing all the debris on April 23rd, and stop on May 3rd —2nd, is that right? A. Yes, sir.

Q. And then, for a period of about three months, the debris is left alone until August 3rd, and the removal continued from there on until September 15th? A. Yes, sir.

Q. Why is it that the debris was left there from May 2nd until August 1st? A. The debris involved or referred to in the April period is that of tangled machines and wreckage of that sort. That is loose debris on the

ground, and it could be just wheeled out of the building. The debris referred to in the second period is work that would have been, naturally, included in the work of a general contractor, and is therefore not started until the contract is let. That includes the removal of damaged walls, and that sort of removal that is not done by ordinary workmen, but is rather done by wreckers who make a business of taking down partially destroyed buildings, or taking down buildings that are to be destroyed.

Q. There is no reason, then, why that work that was started on August 2nd or 3rd, could not have been commenced on May 3rd, is there? A. Only that the period of insurance adjustment might have prevented it.

Q. Well, at such later date in May or early in June, if the insurance period of adjustment would have permitted? A. That could have been done under separate contract.

Q. And if that had been done, that would have considerably—would have resulted in speeding up the work of reconstruction, would it not? A. Only at the start. The period that is taken for the removal of walls and not for removal of debris after the contract was let is shown as two weeks, but during that period we have assumed that the succesful contractor would be ordering material and getting equipment onto the job, so that even if all the debris were cleared up, there would still be a gap in there between the letting of the contract and the starting of the actual work, during which time the contractor would be getting his material and equipment on the job preparatory to starting the actual contract.

Q. That would not take him two weeks, would it? A. I think it would, to obtain the delivery on various parts of his woodwork, particularly.

Q. This is the type of job, is it not, that contractors very often agree to do within a fixed period of days? A. Yes.

Q. With a bonus for every additional day they get it done ahead of time? A. Yes, sir.

MR. VANDERBILT—That is all.

MR. GILHOOLY—That is all.

(Recess.)

AFTERNOON SESSION

EDWARD W. HAMILTON, called as a witness of the complainant, having been duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. GILHOOLY:

Q. Mr. Hamilton, you are connected with Fletcher-Thompson, are you not? A. Yes, sir.

Q. In what capacity? A. Consulting capacity, engineer.

Q. And were you such in 1925 and 1926? A. Yes, sir.

Q. What has been your experience as an engineer—

are you familiar with the Igoe Brothers plant? A. Yes, sir.

Q. What has been your experience as an engineer? A. I have had 27 years of engineering experience since leaving school.

Q. And you graduated from what school? A. Yale.

Q. What school? A. Yale University, Engineering Department.

Q. What degree did you get? A. Ph. D.

Q. What is it? A. Doctor of Philosophy.

Q. After you graduated from Yale, what has been your technical experience? A. I have been a practicing engineer in several plants before coming with the Fletcher-Thompson Company, and have been employed as consultant on numerous branches of manufacturing since that time, about 12 years.

Q. Have you had experience in manufacturing plants similar to Igoe Brothers? A. Not entirely in nail making, but in wire drawing, yes.

Q. What has been your experience with that? A. With the Waterbury Company of Brooklyn, makers of wire rope. All of the heavy machinery is identical with that used by Mr. Igoe.

Q. That pertains to the wire drawing part of Igoe Brothers' business? A. Yes. Then in the header end of the work, I was employed in Waterbury in a plant now owned by the Stafford Co., where they did a large quantity of header business.

Q. What do you mean by header? A. Pins and headed material used in the jewelry trade, and such as that, rivets, and so forth. So I am familiar with the machinery for making nails and tools.

Q. Are you familiar with the machinery and equipment in plants similar to Igoe Brothers? A. Yes, sir.

Q. And you had had that experience prior to 1925 in such companies? A. Yes, sir.

Q. Did you assist Mr. Phelan in the preparation of the report which has been marked in evidence? A. Yes, sir.

Q. And what particular part of that report did you supervise? A. The estimate of the time required to install the manufacturing equipment from the time it was received, until it was in manufacturing order, pro-
10 duction order.

Q. When you say in production order, you mean— A. Producing salable material.

Q. Now, from what sources did you obtain your information as to the equipment which was in the Igoe Brothers plant prior to the fire? A. From the Igoe Brothers men, Mr. Woodward and his associates.

Q. And did you reply on anything else? A. Only these drawings such as were prepared from data we got from these men.

20 Q. And did your own particular experience play any part in your making of this estimate as to the time of replacement? A. Yes, sir.

Q. And have you set forth accurately on that chart your opinion as to the time it would take to replace this material? A. Yes, sir.

Q. And equipment? A. Yes, sir.

Q. Now, will you refer to that chart and tell us when you would start for the first time installing any equipment? Give us the date here. A. The first date
30 here indicated for the start of the equipment is October 24th.

Q. 1925? A. I asume that this is all in 1925. That, I do not know.

MR. VANDERBILT—Yes.

THE WITNESS—Yes, 1925.

Q. And covers '25 and '26. A. Yes.

Q. And, where would that equipment have been installed? A. That was indicated as going into buildings B and C, the power plant.

Q. And does that chart express your opinion as to the time it would take to install the equipment in the power plant? A. Yes.

MR. VANDERBILT—It looks like it was Building S on here.

THE WITNESS—I beg your pardon. Building S is a few days before B and C. That is heavy wire drawing, in the S building.

Q. To what purpose was the S building put? A. I guess that is the date. I gave you the 24th.

Q. For what purpose is the S building used? A. That is where the heavy breaking down, so-called, and heavy drafts are taken, and cleaning and baking.

Q. And is it your opinion that it would have been possible to commence installations in building S prior to that date? A. No, I think we allowed the fullest practical amount considering the construction of the building.

Q. And at what point in the construction of the building S, did you start installing the equipment and machinery? A. As soon as the roof is tight. We always figure, as soon as the machinery can be kept dry, we start installing, provided the floors are laid. The roof, and the floors must be laid, but the roof is last; the floors are usually down.

Q. That covers building S. How about B and C? A. B and C is the power plant, and that started a few

days after we started in on building S.

Q. And how long did it take to install the equipment in the power plant, building B and C? A. It is shown here as about ten weeks.

Q. Now, going to building D, when is the first date upon which equipment could be installed, and how long did it take to instal the equipment? A. November 14th was the date, and we figured to complete that on March 11th or 12th—March 15th.

Q. Now, what was the character of the equipment and machinery in building D? A. Building D was the nail making, as I recall—no, that is the intermediate drawing, of the small blocks, that is, as contrasted with the heavy blocks in building S.

Q. Now, go to building I. What was done in build- I? A. Building I is the annealing building. There is an intermediate treatment of the wire between the drawing. It has to be annealed. The drawing process hardens it and it is necessary to anneal it before it can be further drawn without breaking.

Q. And it would take from what time to what time, in your opinion to instal the equipment in that building? A. That is a specially constructed furnace and we allowed the time of ten weeks and a half.

Q. Between what peirods; from what period to what period? A. That was from November 8th to January 12th— no, I am wrong on that. These dates are a little bit faint here. January 16th.

Q. What kind of machinery was in building E? A. Building E was the header, nail machinery, as it is called. Cold headers and nail machines.

Q. And when, in your opinion, could you start installing the equipment in that building? A. For building E we show the equipment starting in January, the

3rd of January, and continued the full period, because that is very special machinery and special tooling.

Q. When you speak of the full period, what number of days from the time of commencement of the entire building operation? A. Up to 320 days.

Q. And when you speak of 320 days, do you refer to 320 lost manufacturing days? A. That is the lower figure, and I assume it is that—manufacturing days, yes.

Q. Now, how about the machinery and equipment in building F? A. Building F is coating machinery, which would not be required until there had been actual production of nails—the equipment.

Q. When you speak of coating, what do you mean by coating? A. The nail is cement coated so that it will hold, especially in nailing up cases. They are used largely in packing.

Q. And when would such equipment, in your opinion—when could such equipment, in your opinion, have been installed? A. We show that going in the middle of February, and taking four and one-half weeks. There was not a considerable amount of equipment in there, and it was not necessary, I felt, to do that until at that time. We needed a number of millwrights—we had to use.

Q. I notice, according to the chart, that building S should have been completed about the middle of December, and there is nothing shown on this chart that equipment was to be installed until February? A. Yes.

Q. What, in your opinion, could that represent? A. The reason for that was that the limited number of millwrights available were busy on the other part of the equipment, and this equipment would not be in demand until that time, and then the necessary number were reallocated to that work.

Q. But, in the meantime, would you say that all the men whose services could reasonably have been used were actually working on the installation of equipment? A. Yes, sir.

Q. Now, building H; what was in building H? A. Building H was a warehouse—warehousing area.

Q. And what would be the character of the equipment in that? A. There would be nothing there but building equipment. The second floor had a certain amount of wire drawing equipment on it, the finer wire.

Q. And when would that equipment be installed? A. That is shown as starting at the same time as building F, the middle of February, and requiring six weeks.

Q. Now, building P. A. Building P was the galvanizing plant. That is one finishing of a limited amount of their production which would not be required until the mills were actually producing orders for that type of mill, and that was left until there were men available to take care of it.

Q. That was, that operation would take from when to when? A. That took from March 15th to April 10th.

Q. Now, in making your estimate of the time it would take to equip and adjust this equipment and machinery, did you consider solely the time that you would take to so instal it, from the time it was delivered to the job, or did you take into consideration the time it would take to manufacture it? A. We took the time this machinery was delivered on the job.

Q. Was it fully manufactured? A. Ready to be installed, not necessarily tooled. In fact, this machinery is rarely tooled unless ordered as such.

Q. Now, was this machinery machinery which could be readily purchased in the open market? A. No, sir.

Q. Or was it special machinery? A. Special machinery, particularly on the wire drawing end. There are stock machines in the header end of it, ordinary machine shop equipment, but the heavy wire drawing and intermediate wire drawing machinery is all special construction, made to order.

Q. Now, according to your chart, it seems that you would start installation of this machinery toward the latter part of October. Is it your opinion that this machinery could have been ordered prior to that date and made ready for installation at that time? A. Yes, sir.

Q. So that you are considering that the machinery would be ready and on the job, and have only calculated the actual time necessary to instal it and adjust it; is that correct? A. Instal, tool it up and adjust it, yes, sir, into production order.

Q. What do you mean by tooling-up? A. All of this type of machinery requires special tools that the manufacturer of the machine does not make. They have to be made generally by the owner, or bought in the market. The diamond dies, for instance, have to be bought in the market, but even they have to be sized by the manufacturer himself. In other words, the tooling-up operation is putting the machine in production order after they are received from the manufacturer. Sometimes it takes a considerable period of time to work that out.

Q. And in making your calculations can you tell us whether you used the minimum length of time or the maximum length of time in which this could be installed, the tooling done, and so on? A. We figured here just the same as they did on the building, to use the largest practicable number of men that could be obtained. There is a limit to the number of men that you can put on a job

to advance; the work you are doing would be at a certain rate with a certain number of men.

Q. Then, in allotting the time, you would take the maximum or minimum? A. Took the minmum to keep the whole gang moving along as well as possible, and moving in sequence as the buildings were ready.

Q. Can you tell us whether or not in your opinion, your estimate of the time to install this equipment, tool it and adjust it, is a reasonable time? A. Yes, sir.

Q. Will you please tell us, then, Mr. Hamilton, what, in your opinion, was the minimum time, or shortest possible time, within which the buildings could have been completed and the equipment installed, and the factory operated in its entirety—the number of days? A. I would say it was just what we laid out here after studied conferences; that is, 320 days.

Q. 320 days are 320 manufacturing days? A. Yes.

MR. VANDERBILT—I object to that, unless it is shown that Mr. Hamilton is also a building expert.

MR. GILHOOLY—I will reframe the question.

Q. Mr. Hamilton, assuming that the construction of the building had proceeded with all due speed, can you tell us what, in your opinion, based on the chart which was made in part under your supervision, would be the minimum time within which the plant could be put in full operation?

MR. VANDERBILT—I make the same objection to that, because it is based on evidence which this particular witness is not an expert on. I think the chart speaks

for itself in the computation, but I do not want to be bound by Mr. Hamilton's testimony on a point on which he is not admittedly an expert.

MR. GILHOOLY—I think that I have testimony to the effect that all these buildings were erected with all convenient speed, and I am asking him—

THE SPECIAL MASTER—Assuming that?

MR. GILHOOLY—Assuming that.

THE SPECIAL MASTER—I will allow it. Note Mr. Vanderbilt's objection.

Q. Will you please answer the question? A. I assume the time as shown and computed in our office, in conference with the building engineer, is the 320 days shown on the chart.

Q. It appears that the longest period of time within which the machinery and equipment would be installed was the building E. That is quite apparent from the chart? A. Yes, that is right.

Q. From your knowledge of jobs of this character, based on your own personal experience, could this plant have been operated until the completion of building E, in your opinion? A. You would have had no finished product, no salable finished product until the machinery in building E was in operation.

MR. GILHOOLY—That is all.

You may cross-examine.

CROSS EXAMINATION

By MR. VANDERBILT:

Q. Did you see the temporary wire mill that was erected right near the buildings that were destroyed by the fire? A. No, sir.

Q. Were you out at this plant? A. Yes, sir.

Q. You did not see any temporary wire mill? A. No, sir.

Q. Right on the property? A. I have no recollection of any temporary wire mill, no, sir.

Q. That was producing wire within a week after the fire? A. I have no knowledge of that mill.

Q. You have no knowledge of that mill at all? A. No, sir.

Q. Now, Building P is noted on the diagram attached to Exhibit 16, with these words, "Holmes and Rice, rented." What does that mean? A. I was considering the part that was retained by the Igoe Company as a galvanizing plant, on the right-hand end there, partitioned off.

Q. Your figures are confined merely to that right-hand block that is partitioned off? A. Yes, sir. That is where the galvanizing equipment was.

Q. Can you tell us whether or not the building figures were confined to that portion of the building or not? A. That I could not say.

Q. Mr. Phelan would be the man that would testify to that? A. Yes, I would refer that to Mr. Phelan.

Q. Now, this work of setting up the machinery was done by what class of men? A. It would be done by so-called millwrights.

Q. Millwrights. And what was the largest number of millwrights that you contemplated working on this job? A. I believe that is stated here in the report. It was 24.

Q. Why the figure 24? A. Well, in developing the sequence of installation operations—

Q. Yes. With these several buildings here—

THE SPECIAL MASTER—Wait. Have you finished?

MR. VANDERBILT—I beg your pardon.

THE WITNESS—No.

A. In considering the sequences of possible installation operations, we figured that the maximum that could be employed at any time on the operations under way at that time would be 24.

Q. And weren't these millwrights employed also on the building construction? A. No—carpenters when we do building work.

Q. Don't the millwrights have anything to do with the construction of the building? A. No, sir. All the woodwork they handle in the nature of stringers and such, is called millwright work, rather than carpenter work.

Q. Why, when these various buildings were roofed in, couldn't the work of installing machinery be done at once? A. As I stated before, there is a limited number of men that can be used to advantage on any one given operation. There is only so much material to be handled and installed, lined up, and put in order to operate, and a certain number of men can be used to advantage on that amount of equipment.

Q. Now, will you give us the process by which you arrived at the figure of 24, as the maximum number of millwrights that could be economically and profitably employed? A. We arrived at that by estimating the number of men operating at one time on the several buildings. We allotted so many men to each operation, each building, the operation in each building, and took the sum total when the maximum number were working.

Q. Well, if an owner whose buildings had burned was confronted with the practical problem of replacing his buildings and machinery in the minimum amount of time, would he confine himself to 24 men or would he employ as large a number in excess of that as he could, to get this machinery set up as rapidly as possible? A. There would be no advantage in any such procedure, as outlined by this chart, due to the fact that the buildings were not ready for the millwrights to proceed to work in.

Q. Well, for example, on a considerable number of these installations, particularly in F, H and P, and A, there is a very considerable gap between the finishing of the construction and the commencement of the installation, is there not? A. Yes, sir. There would be no particular advantage in having those gaps filled, for the reason that the machinery installed after the gaps was not usable until the work in the other buildings had been done

Q. Then, I ask the next question of why it was, if the installation of machinery in building E takes so long, that the work of constructing building E was delayed until among the last of the buildings to be finished? Wouldn't it have been better construction practice to have seen that the building E was constructed at an earlier date, and I urge that especially inasmuch as building E adjoins building S, which was the first one to be started? A. Yes, sir. The reason for that is that the equipment

operating in building E depends on the product from building S. Until such is completed, nothing can be done in building E, even if the equipment is all there and waiting.

Q. That may all be, but that does not explain the reason why the commencement of the construction of building E was delayed. If you knew in advance that the work of installing the machinery in that building was going to occupy such a great length of time— A. The construction program I would refer back to Mr. Phelan's statement as to the reason for the procedure there.

Q. He explained that it proceeded from one side and advanced from that side? A. Yes, I believe that would be the reason.

Q. And S seems to be a straight line, a continuation of building E and it progressed from the south, the southerly building being building S, immediately into building E? A. Well, on the back of that, building D intervenes, the two story building, which is the second stage of the operation in their business.

Q. Isn't it a fact that buildings S, D and E, could all be constructed at one time? A. Well, that I would not consider as my field of questioning. I would rather refer that to Mr. Phelan.

Q. Well, if they could have been constructed at the same time, it would have been a great advantage in getting an early completion of the plant for the purposes of operation, wouldn't it, because you would have been enabled to set up your machinery in building E at a much earlier date? A. Well, that is a matter of checking it out on the diagram as to just when the time of completion of E took place.

Q. Well, I am asking you to make that check-up.

A. Apparently building E was completed at the end of January, and the equipment has started four weeks previous to that.

Q. Yes, sir. Now, if the building of E had started—which did start on September, say, the 13th—had, in fact, been started back when they started S, about the middle of August, the final completion of the machinery setting up would have been advanced just, approximately, one month earlier? A. That is a matter of building progress, which I would again refer to Mr. Phelan.

Q. I say 'If"—I don't ask you to pass on the question as to whether it could have been. But if it had been done, that would have been the result? A. There is a possibility that there would be some gain in that particular building.

Q. And the same would apply, I suppose, to building D? A. That depends on the total elapsed time of the installation of the D machinery, which is of the heavier type. There is a possibility there, if the building was completed earlier.

Q. Yes, I am asking you the question with that premises. A. I am not qualified as to the building completion time.

Q. Now, referring to— A. I would further qualify that as to whether the number of men available and usable could have been worked to advantage.

Q. Yes. A. On those operations.

Q. Now, what is the general nature of the machinery in building E? A. That is the nail making machinery. They are largely headers.

Q. Well, how big are they? A. So-called headers or nail machines.

Q. How big are they? A. They are of various sizes, according to the size of the product they make.

Q. Ranging from what to what? A. Well, the smaller machines might be two by four, and the larger ones four by six, or something like that.

MR. GILHOOLY—You mean feet?

THE WITNESS—In floor area. Or even six by eight, on the very heavy type.

Q. Weren't most of them, as a matter of fact, two by four? A. No, I would say not.

Q. Well, what proportion were they two by four and four by eight? A. Well, of course, I did not see this machinery before the plant burned down, and all I have is just this meagre outline record to judge from here. I think that some other witness would be better qualified to answer that question than myself.

Q. You must have had that information in estimating the length of time that it would take to finish— A. We had the actual number of machines laid out here.

Q. (continuing) To finish up the building operation and those machines. What I am trying to drive at is, they are not tremendously heavy machines that are hard to set up? A. The nail machinery is not so hard to set up as it is to tool up and get into production order. That is quite another operation. It takes a considerably longer time than it does to actually set up the machines—the tooling-up.

Q. Is there any reason why the tooling-up could not have commenced earlier? A. Not until the machines were set and arranged for driving by power.

Q. Well, where were these machines bought from? A. I don't know whose purchases they were. Some of them, I assume were built by the Igoe Company.

Q. Well, aren't you—do I understand your testimony to be that the manufacturers of these machines send out as finished product machines which do not operate efficiently and which have to be reconstructed? A. No, sir.

Q. Well, what is there about it? A. They have to be tooled out for the particular product they are bought to make.

Q. Well, what is there about that operation which takes the very considerable length of time indicated on this chart, a period from January 1st to the end of April? A. Yes, sir, that is not an exorbitant time for that class of machinery.

Q. That is a period of four months. What is there about it that takes that great length of time? A. That is tooling their own special dies, and so forth, that have to be made, according to the production to be produced.

Q. Well, those dies are made in machine shops around the City of Newark? A. It needs a tool maker.

Q. Yes, and machine shops around the city of Newark— A. Thet owner tools them in accordance with the nails they are producing.

Q. Which tools could all be made by a tool maker of Igoe or by shops around the City of Newark? A. They are made by their own men.

Q. Is there any reason why they should not have started to do that the day after the fire, instead of waiting until the building was completed? A. Certainly there was.

Q. Why? A. Depending on what machinery they had to fit; the tools have to be fit directly to the machines they are used in. That is not possible until the machines are on the ground.

Q. Aren't they standard tools? A. What?

Q. Aren't they standard tools? A. They are standard within a certain range, but when you come to fitting them up accurately for production, you have to have the actual machines to fit to.

Q. How long would it take to order and get these machines in? A. That I would not pass on, because we assume that the machines are in, in this estimate.

MR. VANDERBILT—That is all.

REDIRECT EXAMINATION

By MR. GILHOOLY:

Q. As I understand it, in answer to a question put to you by Mr. Vanderbilt, you said that you predicated your estimate of time upon the machines being put in the plant and ready to set up; is that correct? A. Yes, sir, machines and parts of machines that would have to be assembled, such as drawing. The materials are received knocked down, so-called, and have to be assembled.

Q. You said that some of this machinery is standard equipment? A. Some of it. I refer, when I say that, particularly to the machine shop equipment.

Q. Now, when you refer to machine shop equipment, what do you mean by that? A. Lathes, shapers, drills, presses, and anything that is used in ordinary standard machine shop work.

Q. That does not pertain to the equipment necessary to turn out nails and wire, that machine shop equipment? A. Only the tools that go into the nail making machines.

Q. That would be the Igoe Machine shop for the

purpose of making tools, you say, for the machines? A. Yes.

Q. The machines, I understand, are a more or less standard product, or they are prepared under special order? A. Yes.

Q. And when they come, there is a further operation necessary in order to put them in workable shape; is that right? A. Yes, sir, that is what I call tooling.

Q. That is necessary in every shop of that kind? A. Yes, sir.

Q. With regard to installing equipment? A. Yes, because the products are so varied. The machine is tooled specially for the product it makes.

Q. And those kinds of tools cannot be made in the market generally, can they? A. No, sir, they are all fit directly to the machine on the ground, and fitted to make the product the manufacturer makes.

Q. And the manufacturer himself has to do that work; is that correct? A. Yes, sir; for example, they dictate the design.

Q. And that you took into consideration in forming your estimate? A. Yes.

Q. And that consideration was based, was it not, upon your experience in this business? A. Yes, sir.

Q. Now, Mr. Vanderbilt said that if buildings E and D had been started a month before they actually were would that have had any effect upon the time when all of the equipment would have been installed and adjusted in building E, and I believe you said that there might be a possible gain. Do you want to explain that answer? A. The only gain that I could explain would be due to a change in the schedule of buildings; providing the building was ready for the installing of machinery before the time shown on the chart, I see no reason why the

machinery installment start could not have been moved along in proportion.

Q. Well, could you have used the millwrights to fair advantage, even if the building operation had been hurried to the extent of one month? A. If we could have gotten enough millwrights.

Q. Then it would depend on the quantity of millwrights? A. Yes.

Q. Rather than the placing of the— A. Of the particular type—that type of millwright required for that machinery some of which was of the older school, is not prevalent today,—In fact, you have to hunt them up,—because of the modern methods of building machines with the drive and such units built into the machine, and so forth. This plant was built by the old school with shaft and belt and engine drive, and required the old school millwright to instal.

Q. Are those millwrights required on that type of machinery? A. They are.

Q. And are they generally available as the present day millwright? A. No, sir; they are rare birds in plain English.

Q. Could any millwright do this work? A. No, not certain parts of it, that would require a high grade man to do it right.

MR. GILHOOLY—That is all.

RECROSS EXAMINATION

By MR. VANDERBILT:

Q. Like getting old fashioned, honest carpenters, they are rare, too, aren't they? A. Yes.

Q. And an old fashioned mason, who would do an honest day's work is rare? A. That is right.

Q. That applies to anything in any trade, except engineers and lawyers. A. This is particularly on account of the heavy mills.

Q. What? A. Building S is the one that has the heavy mills, that require the old school millwright.

Q. What products were made in this plant? A. I don't know—is that my—

MR. GILHOOLY—You can answer if you know.

THE WITNESS—I know they made nails and bail ties and headed products of various kinds.

Q. Can you tell us in some detail what the products of this plant was that you told us would take such a length of time to instal the machinery in? A. Straightening wire and—well, their principal output was nails of all kinds.

Q. What kind of nails? A. Roofing nails, for one thing, case nails, coated nails.

Q. Now, is this product of this plant something which was made by patented machinery? A. No, I would not say patented.

Q. Specialized machinery? A. Specialized machinery, yes, sir.

Q. Isn't it machinery that anybody else could go out and buy and start in manufacturing nails? A. They could, if they had experience to manufacture the nails, if they had the machinery.

Q. Yes. But, I mean, the nail manufacturing machinery is procurable in the open market? A. Some of it. The tools are not.

Q. And when you speak of the tools, you mean merely the work of setting up dies, and so forth, such as is done in one or two hundred machine shops around Newark, don't you? A. If they make a specialty of special tools. I could not say how many there are around Newark, but if they are what is called special tool shops.

Q. Yes. A. They might be competent to send men into this plant and fit those tools. I do not know whether there would be any saving in that, however, in time.

Q. Do you know how many men were in the Igoe Brothers tool shop? A. No, I do not.

Q. Did you calculate that in reaching your result here? A. No. We assumed that they would put on all the men they could use to tool up the machinery after it was available, for manufacturing.

MR. VANDERBILT—That is all.

(Witness excused.)

GEORGE WOODWARD, called as a witness in behalf of the complainant, having been duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. GILHOOLY:

Q. Mr. Woodward, you are employed by Igoe Brothers? A. I am.

Q. And have been for how long? A. 25 years.

Q. And during this period of 25 years, what has been your occupation with the company? A. Master mechanic.

Q. And were you master mechanic for Igoe Brothers in 1925? A. I was.

Q. And you recall the fire of course; A. I do.

Q. Were you familiar with the buildings there and the contents prior to the fire? A. I was.

Q. Did you have any part in the installation of machinery and equipment? A. I did.

Q. And what part did you have in the installation and the equipment? A. I drew up the plans and made the layout for the whole plant.

Q. That was before the fire? A. Yes, sir.

Q. Were you familiar, in all its details, with the machinery and equipment which was in this plant prior to the fire? A. I was.

Q. Now, will you please tell the Master just what was in the various buildings, starting with Building S and coming right cross? A. In building S we had the first operation, which was the cleaning, cranes and tubs for cleaning, the baker for baking wire and the wire drawing benches, for drawing the wire in building S.

In building D we had wire drawing machinery for drawing wire from the rods on down.

Q. What was the character of that machinery, Mr.

Woodward, wire drawing machinery? A. Well, ours was frames, as we called them, eight, nine and ten block frames, and they were built as a unit. We would use one hole for breaking, and two or three holes for finishing—breaking down—and that is the way it went on, and it proceeded from one part of the plant to the other, and then on through until it came into the nail making department. Any wire that was finished off for market wire, of course, did not need to go into the nail mill.

Q. When you speak about wire finished for the market, what do you mean by that? A. Well, wire drawn to sizes that we sell for market wire.

Q. In other words, the business of the company was not only the production of wire nails, was it? A. Oh, no.

Q. And what were the products, generally? A. Well, wire, nails and rivets, and such as that.

Q. Now, go on with your explanation of what was in the buildings. I think you had finished building D. A. Building D. In building E we had wire drawing, that is for drawing bright wire for what we term as liquor finished wire nails, and rivets, and straightening and cutting.

Q. Now, take building F. A. Well, in building F we did not have very much machinery in there.

Q. What did you use that building for? A. Well, part of it was for storage, and there was some little odd things in there, not very much. There was smaller straightening machines, and a machine for cutting sparkler wire. That was most of what was in F.

Q. How about building H? A. The first floor had the motor generator set, and on the second floor was the bail tie manufacturing. That was in the two lower buildings. There was an upper building. That building was about 80 by 78.

Q. Now, building G and building A? A. Building G was practically a store room.

Q. How about building A? A. Building A is the two warehouses.

Q. And building P. A. P was, part of it occupied by Holmes & Rice, and part of it as our tinning and galvanizing room.

Q. And the power house was where? A. B and C.

Q. B and C. A. C was the engine and B the boiler house. We had three boilers. They were tubular boilers, and in the engine room we had a Watts-Campbell engine, an electric engine, 25 horsepower, and other things.

Q. Mr. Hamilton testified that he received certain information as to the machinery and equipment in the plant before the fire from you? A. Some of it.

Q. Are you the Mr. Woodward? A. I am.

Q. And did you consult with him about what was in the plant? A. Somewhat, yes.

Q. You were familiar, were you not, with everything that was in there? A. Yes, I was pretty familiar.

Q. Did you assist with preparation of the blueprints that are part of the report of Fletcher-Thompson? A. No, I had nothing to do with the blueprints.

Q. Did you supply information from which they were made? A. I gave them some information, yes, sir; when they struck something they did not understand, they asked me and I gave it to them.

Q. Can you tell us whether the information you gave to them, upon which they based their calculations was accurate? A. To the best of my knowledge.

Q. As to what was in the plant before the fire? A. To the best of my knowledge absolutely.

Q. When you say to the best of your knowledge, do

you mean to the best of your remembrance? A. Remembrance, absolutely.

Q. Can you tell us whether or not you gave them information about machinery which was not, in fact, in the building? A. No, I don't think I did that.

Q. Could you say that was not given? A. Oh, yes. I absolutely would not do that, no.

Q. Now, you are familiar with the operation of the company's business, are you not? A. Well, only in a mechanical way.

Q. In a mechanical way. A. Yes, I don't bother with the other.

Q. Does that plant work as a unit or can any particular building be used for the production of any particular item? A. Well, practically, I would say, as a unit, because the product of one building would have to go on through to the finish, unless it was from building S used as lock washer wire.

Q. Was that a substantial part of your business? A. No, not a very big part; a very small tonnage.

Q. So that you would say the plant worked as a unit? A. Yes.

Q. And it would require the completion of the entire plant before you could run? A. Yes, sir. I would say yes, without any hesitation.

Q. Now, these machines that were in use by the company, were they standard machines or special machines? A. Well, they may have been standard in a way, some of them were imported here from Germany. Some of them were made in this country.

Q. And when mention is made of tooling up the machines, that, as I understand it, is to make the machines adaptable to your particular work; is that right? A. Yes.

Q. And was or was not that done right in your own plant? A. Right in our own plant.

Q. Can you tell us whether or not it is more practicable to have the tooling up done in your own plant, rather than having it done outside? A. It certainly is.

Q. Why? A. Because most of our work is special work.

Q. When you say most of your work, you mean most of the work of finishing products? A. Nails, rivets, making wire and its products, rivets and nails; nails and rivets are mostly all special, and you get an order for a kind of nail or rivet they want, and then you make your tools for that purpose. Our tools are not made ahead, unless it is just some few that we have that are common, and that is very few.

Q. Then, at the time of the fire, you were all tooled up, of course? A. Certainly.

Q. To handle your then existing orders? A. Yes, sir.

Q. And your orders ran along very general lines, did they not? A. I think so, fairly general.

Q. I mean, over a period of time you would produce practically— A. Yes, but new ones come in all the time.

Q. But, generally speaking, however, the orders you had on hand were orders that you had been receiving some time back? A. We had received them before, yes.

Q. And being in such production, it was necessary for you to make any other tools to take care of new orders—that was a specialty? A. Yes.

Q. In addition to those you had already received. Were these tools all destroyed by the fire? A. Yes.

Q. You have to start right in anew? A. Get new steel and make new tools.

Q. After the fire, did you examine around to find out if there were blueprints— A. They were destroyed when the plant burned.

Q. —of machines, designs, and so on? A. They were all destroyed.

Q. Were there any of those machines which you had constructed yourself in the fire? A. They were all in the fire.

Q. And were the blueprints and designs destroyed? A. They were destroyed.

Q. You, however, were familiar with their character, were you not? A. I was.

Q. And could you, as a result of your knowledge of what was there prior to the fire give information to Mr. Hamilton as to the contents of the building? A. I could. I designed a good many of them and built them.

Q. And those you did not design were machines that could not be bought in the open market? A. In the open market.

Q. And you were familiar with the buildings as to their sizes? A. I was.

Q. (continuing) Character and description of the buildings? A. I was. I overseen the building of it.

Q. What? A. I overseen the building of it, laid it out.

Q. You laid out the plans, too? A. I did.

Q. Well, then, you were there when the original plant— A. Yes.

Q. —was started? A. Yes, I was there when the first pile was driven.

Q. Then, you have been with the company ever since its start as a manufacturing concern? A. In Newark.

Q. I am speaking of the Newark plant. A. Yes.

Q. And you supervised the erection of the buildings? A. I did.

Q. And would you say, from the supervision that you had of these buildings that you were thoroughly familiar with the character— A. I should have been.

Q. —character, size and description? A. Yes, I should have been.

Q. And was all that taken into consideration in the information you gave to Fletcher-Thompson? A. It was.

Q. And that was used by them in their computation? A. I suppose they used it. I gave it to them as near as I knew.

Q. This blueprint that you now see before you, does that accurately represent the sizes of the buildings? A. Yes.

Q. You have examined it for that purpose? A. Yes.

Q. And in your opinion, they are representative of the sizes of the buildings? A. Sizes of the buildings?

Q. (continuing) Which were in existence before the fire? A. Yes.

MR. GILHOOLY—Cross-examine.

CROSS EXAMINATION

By MR. VANDERBILT:

Q. How old was this machinery that was installed in the plant, Mr. Woodward? A. What machinery do you refer to?

Q. To the machinery which you said some of it was imported and some of it was made by you, in answer to one of Mr. Gilhooly's questions? A. It was new machinery; we moved some of it over from the Brooklyn

plant; when we quit manufacturing nails in Brooklyn, we moved it to Newark.

Q. Well, what I am trying to get at—you said that some of it was imported from Germany? A. That was new.

Q. Yes. A. Absolutely new.

Q. Well, is that machinery that could not be obtained around here? A. No, it is not manufactured here.

Q. What kind of machinery was that? A. It is what we call a blow machine, a special machine.

MR. GILHOOLY: B-l-o-w-e-d machine?

THE WITNESS: Yes. We use two tickory timbers that are tapered, and they come down this way, (indicating), and the header machine is driven back by a cam; after that is driven back, it compresses, and when it lets go over the end of the cam the header comes down and forges the head of the nail.

Q. In what buildings were those machines? A. They were in E.

Q. They were in building E? A. Yes, sir.

Q. Were they small two by four or four by eight machines? A. I don't know that there was any two by fours at all; they were large, and would weigh from one thousand pounds up to ten thousand pounds.

Q. And some of these machines, you say, you had built yourself? A. Yes, sir.

Q. Which machines were they? The straightening and cutting wire machines, and the coiling of barbed wire.

Q. And how old were they? A. Well, I don't know just when we bought them. I don't remember when, but it was since we started the plant here.

Q. What I am trying to get at is not so much the age, but as to whether or not they were patented machines or anything like that? A. No, they were not patented machines.

Q. Did your concern make barbed wire in this plant? A. We coiled it from the bundles, from the 100 pound coils we put it in 50, 75 and 100 foot coils for the market, and that was the machine I designed.

Q. And that is called fence wire? A. It was ordinary fence barbed wire, yes.

Q. And that fence wire was a very small percentage of the total business, was it not? A. Why, yes, very, very small.

Q. In fact, it could almost be described as an insignificant portion of the entire business? A. Well, I would not say that, no.

Q. Your primary business was nail making business, wasn't it? A. Yes, nails and rivets and straightening and cutting wire.

Q. And can the machinery for making nails and rivets be purchased in the United States? A. Some, yes.

Q. Can't it all be purchased? A. Well, if you want to use certain types of machines.

Q. Can't you buy machinery in the United States to manufacture everything that was made in the plant? A. Not satisfactorily. The German machine is the most satisfactory machine for our work. That is why we got them.

Q. For which particular part of it? A. For the special nails.

Q. But there are a lot of American machines which are used in the manufacture of similar products? A.

Yes, sir, very, very good; better than some of the foreign ones.

Q. You referred to all of the products of the plant as being special work. Does that mean that it was on special order? A. Special orders.

Q. Then, what were the warehouses A, F, H and G, used for, Mr. Woodward? A. For storing of nails that we buy.

Q. And that was the sole use of them, to store the nails which were bought by Igoe Brothers? A. Yes— well, not the sole use, because we stored some other stuff in there, but principally.

Q. 90 per cent of it was for the storage of nails bought by Igoe Brothers? A. Yes.

Q. You referred to a plant in Brooklyn. What plant is that, Mr. Woodward? A. That is where Igoe Brothers started.

Q. And have they still got that plant over there? A. They have a plant in Brooklyn.

Q. After the fire, wasn't the jobbing business that was carried on in buildings A, F, G and H, these warehouses, transferred to the Brooklyn plant? A. No; Newark has its own warehouses for the jobbing.

Q. What did they do with the orders which came in for nails on the jobbing plant—jobbing business? A. I know nothing about how that was handled.

Q. I see. Well, do you know whether or not the orders that came in for nails were filled from some other plant by Igoe Brothers? A. I could not tell you about that.

Q. Now, after the plant burned, wasn't a temporary wire mill established? A. Yes.

Q. Where was it located? A. In building J, as

we know it. I do not know whether you have it there or not.

Q. How far is that from the other group of buildings? A. It is southwest of the other buildings.

Q. And how far away from them? A. Oh, possibly one hundred yards.

Q. And was that building there at the time of the fire? A. It was.

Q. And the temporary plant was set up in that building J? A. In that building.

Q. How soon after the fire was that in running condition? A. Well, I could not tell you that. There was quite a little work done in that building before—it was used as a kind of storeroom. We had a soap stone department in there, and then we stored a lot of obsolete machinery in there. We had to take that out and put in floors and skylights in the building, and some other work like that.

Q. As near as you can tell us, how soon after the fire was that building equipped as a temporary wire mill? A. Well, it would be only approximate. I could not—

Q. Well, just— A. Well, ten months, say, or maybe more. I would not—

Q. Ten months before it was set up as a wire mill? A. Yes, before we did any wire work, as I remember. I am only—I haven't any record of that at all.

Q. Don't your production records show what you did after the fire? A. I have nothing to do with the production records.

Q. You have not? A. No.

Q. Do you know whether or not wire nails were made in this building "J" after the fire? A. No—well, hold on. Yes, there was a few made there. I think

that we had a couple of machines, a couple of little machines set up in there.

Q. And how soon after the fire were they set up in there? A. I could not say. I don't recall.

Q. Who would know that? A. Well, Mr. Igoe could probably tell you nearer than I could.

MR. VANDERBILT:—That is all.

REDIRECT EXAMINATION BY MR. GILHOOLY

Q. Mr. Woodward, there were certain photographs appended to this report. Can you tell me by whom they were made? A. I made quite a number of them.

Q. Will you examine those photographs, and tell us whether or not they accurately represent the condition which existed right after the fire, except the one in the center, which is supposed to be before the fire? A. Yes, sir. I did not have that one, that one and that and that. I don't recall that one. There are some of these views that I did not take.

Q. But you made a set, though, didn't you, after the fire? A. Yes, sir.

Q. Do they accurately represent the condition, as you recall, after the fire? A. They do, absolutely.

Q. The center picture on the first page represents the plant before the fire? A. Before the fire.

Q. Is that accurate—does that accurately, in your opinion, represent the condition before the fire? A. It does.

Q. That contains building S? A. No, it does not contain building S.

Q. Where is building S? A. Building S extends back here, 225 feet by 90 feet, right back south.

Q. And as you look at that photograph, south is to your right; is that correct? A. South is there; west is to my right.

MR. GILHOOLY:—That is all.

(Witness excused.)

MR. GILHOOLY:—Judge, do you think that you would like to see the model that we prepared?

THE SPECIAL MASTER:—Have you got it?

MR. GILHOOLY:—I can have it up here in a short time. It would take half an hour at the very longest to have it here and set it up. It might be helpful.

THE SPECIAL MASTER:—You have to set it up after you get it here?

MR. GILHOOLY:—It would not take long, because it is in parts.

THE SPECIAL MASTER:—If you want to.

MR. GILHOOLY:—I would like to. It would only take a few minutes when we get it here.

PETER IGOE, called as a witness on behalf of the complainant, being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILHOOLY:

Q. Mr. Igoe, you are President of Igoe Brothers? A. Not president, Treasurer.

Q. Treasurer. And you have been connected with the company— A. Ever since it started.

Q. And that is how long? A. 34 years in September.

Q. And were you familiar with the buildings of the company in Newark, and their contents, prior to the fire in 1925? A. Yes, sir.

Q. And no doubt you recall the fire? A. Yes, sir.

Q. Can you tell us for the record the extent of this fire? A. Well, the Fire Chief said it was the largest that had occurred—the second largest, if not the largest fire in Newark for thirty years.

Q. With reference to your plant, was any part of it left? A. Only a frame building on the opposite side of the track was left.

Q. There was testimony brought out on cross-examination about the time which was allotted to the adjustment of the fire loss to the building and machinery. Can you tell us, as a matter of fact, how long a period of time it was before the adjustment was finally made?

MR. VANDERBILT:—I object to that as immaterial.

MR. GILHOOLY:—In the first place, if the Master please, that may seem to be immaterial, but I propose to show that some of these companies who are on this

particular loss were actually on the fire loss, and I certainly think they are chargeable by way of estoppel if they have prolonged the period of adjustment. The policies themselves provide that the assured has 60 days to file proofs, and the company has 30 days thereafter to make an inspection, and nothing can be disturbed on the site, until after it was made. If there is any question as to the time of adjustment, I think that makes all that matter material. As a matter of fact, I think, due to the chart and due to the overlapping, that does not make any material difference.

THE SPECIAL MASTER:—I will let you put in the evidence. The objection will be noted. A settlement was made in the latter part of October, 1925, on the fire loss.

Q. And the fire was in April? A. Yes.

Q. And during that time was the site in practically the same condition? A. Yes.

Q. And were conferences had from time to time? A. Yes.

Q. With the insurance adjuster? A. Yes.

Q. And was it necessary to permit the site to remain in the same condition for any length of time after the fire? A. We felt so.

Q. Was there any expression from the companies involved? A. Not that I know of.

Q. But the adjustment had not been made until October? A. No, not until October.

Q. Mr. Igoe, have any of the buildings, or has there been any rebuilding since the fire, or replacement of the former structures? A. Yes, we have probably got over one-third of the buildings replaced.

Q. And they are up at the present time? A. Yes, sir. They were, within less than one year after the fire.

Q. And were you familiar, prior to the fire, with the operations of the Newark plant, in all its details, Mr. Igoe? A. I was. I was there every day.

Q. Can you tell us whether or not it was necessary to operate this entire plant as a unit, or whether certain buildings could be used for specific purposes, complete? A. The greater portion it was necessary to run as a unit.

Q. Can you amplify that statement, for the greater portion? A. Yes, bail ties, for instance, could have been run—we could have run along without that.

MR. VANDERBILT:—What building was that, Mr. Igoe?

THE WITNESS:—Building H.

Q. You say you could run without that. What are bail ties? A. Bail ties are wire forms used for bailing straw and hay, rags and paper.

Q. Well, was that a large part of the company's business? A. It was a fairly good part of the business, yes.

Q. When you say you could have run along without that building, what do you mean? A. I mean that we could have continued operating and probably absorbed our overhead.

Q. That operation was confined to building H? A. Building H, yes.

Q. Tell us what was manufactured in the different buildings and the operation that each thing went through? A. Well, building S, that is where we would have to start, the cleaning, the pickling tubs, steel crane, what

was known as the baker for drying the material, drying the wire, and there were wire drawings blocks. This is the S building, I am talking about.

Q. Yes. A. Wire drawing blocks. A room for setting up plates and making the tools for drawing the wire. We go into the next building—what was it—D was all wire drawing. "I" was the annealing room. E was wire drawing, nail making rivet making. I think, some straightening and cutting machines were in that room also. F was some straightening machines, and cement coating, and packing nails. H was bail ties, said before. P was Holmes & Rice.

Q. P? A. Part Holmes & Rice and part was ours, where we did our tinning and galvanizing. "A" was a warehouse. I don't think there was any manufacturing done there at all.

MR. VANDERBILT:—Which one was that?

THE WITNESS:—"A." I think we did have a nail packing machine in that building, an automatic nail packing machine. G was a warehouse. B and C was the engine room and boiler room. In one of these buildings was the machine shop, also, and the tool room, for making dies and tools for the nail machines and rivet header.

MR. VANDERBILT:—What building was that in, just to get the plant, Mr. Igoe? The tool room.

THE WITNESS:—I think that was E, wasn't it, George?

MR. WOODWARD:—Part as the shop.

THE WITNESS:—The machine shop was in building E.

MR. WOODWARD:—Yes, the southerly end of it.

Q. You manufactured wire nails, did you not? A. Yes, sir.

Q. And then, as I understand it, the nails were manufactured from wire that was produced by your company, also. In other words, you did not purchase wire in the open market? A. No.

Q. Could you tell us whether or not Igoe Brothers were specialists in the manufacture of wire? A. Yes, we considered we were.

Q. You were considered by the trade as specialists? A. By the trade, as specialists in wire.

Q. And would that not require special machinery for the production of such wire? A. Not so much special machinery as it would good mechanics to make it and superintend the making of it.

Q. That would, as a matter of fact, require certain special tools, would it not? A. Oh, yes, sir.

Q. And the tools were made in your own plant? A. Yes.

Q. And when you speak of excellent mechanics, that was just one part of the operation? A. Yes.

Q. Had you added to your equipment in building S in 1924? A. Yes.

MR. GILHOOLY:—I might say at this stage, Mr. Vanderbilt, I am anticipating part of your case, but if you have no objection—

MR. VANDERBILT:—I have no objection to your getting it in.

THE WITNESS:—I might add that all the machinery and equipment in that building was put in in '24.

MR. VANDERBILT:—That is building S?

THE WITNESS:—Building S.

Q. In what part of the year 1924? A. I think it was the last half of the year.

Q. 1924? A. Yes.

Q. And was that machinery coupled with the machinery that had theretofore been in full operation in 1925, before the fire? A. There was a portion of it installed, because we had two machines put in the day of the fire—just started operating them the day of the fire.

Q. Would that have had an effect on the output of your manufactured product? A. Yes.

Q. And what was the purpose of adding this additional machinery? A. To take care of additional business.

Q. Did you have additional business? A. We had it planned and waiting.

Q. I mean, from a production standpoint? A. Yes.

Q. Actually on order? A. Well, I won't say actually on order, because we never took contracts. We worked right along on running orders.

Q. At the time of the fire, were you running full capacity? A. We were running full capacity, yes, sir.

Q. Can you tell us whether or not this additional machinery, then, in fact, increased your output? A. It increased the output and lowered our cost.

Q. In what way did it lower the cost? A. Because we had put in machinery for labor saving at that time. One machine alone that used to require 60 to 80 cents, we were doing on 6 to 10 cents, with the machine we had.

Q. It was a saving of man power? A. Yes, sir.

Q. And incidental expense? A. And increased the tonnage, of course.

Q. It increased the tonnage, and at the same time it decreased the cost of production? A. Absolutely.

Q. Do I understand you correctly? A. Absolutely.

Q. Mr. Igoe, there has been some testimony about a temporary plant. Will you now describe to the Master this temporary plant that has been spoken of, where it was located, the building it was in, and so on? A. In building up our business here in Newark and New York, we had taken on a great many concerns that had never before been in the manufacturing business, making specialties of different kinds. I am safe in saying that a great many of them did not know where to buy the goods they were buying from us. They depended on us entirely for their supply. Just as soon as we had this fire, we were deluged with telephone calls of what we were going to do or how they were going to get material. Now, we started in to help them all we possibly could. We tried to buy a wire mill in Philadelphia. We also tried to buy one in Stroudsburg, Pennsylvania. We could not buy either of them. We tried to buy second hand machinery and we could not. We finally borrowed one wire block from a party in New York. That is what we started the temporary wire mill on.

Q. When did you start this temporary wire mill? A. The first wire was drawn on June 22, 1925.

Q. And the fire was in April, the 9th? A. April 9th.

Q. In order to satisfy these pressing requirements, did you do anything out of the ordinary in running that temporary mill? A. Yes, we ran night and day and that is something we had never done before. We ran 24 hours, 23 hours a day.

Q. Do you know what percentage of your normal production you were able to accomplish during the month of June? A. Well, there was only four or five days in June that we were running.

Q. I mean July. A. June and July—I can give it to you.

Q. Are you speaking now of both night and day operation? A. Both night and day operation. We drew 85 tons in June to July 9th.

Q. What was your normal production, do you know? A. About forty tons a day, 35 to 40 tons a day.

Q. 35 to 40 tons a day? A. But remember that 35 to 40 tons a day consisted of all kinds of wire. This consisted of only one kind of wire, the commonest kind we could get.

Q. Will you kindly proceed, Mr. Igoe? Have you got the figures for the period subsequent to July 9th? A. No.

Q. Now, did you add from time to time to the equipment in this temporary plant; as I understand you were able to borrow one machine? A. One machine. We dug around and got castings, and, you see, our carpenter shop was not destroyed. We had a little room, and there we gathered a lathe and shaper and put it in there, and built a couple of wire drawing blocks. After that we added to them about eight more.

Q. Can you tell us whether or not you gained or lost money by the operation of this temporary mill? A. We absolutely lost money. We did not make any money until 1928. That wire mill lost money every year to 1928, but we made so little, it is hardly worth counting. I might add that we put in one nail machine. Fortunately, we had ordered from Germany a nail machine, special machine that we were going to use for special work. That machine

came in about sixty days after the fire, and we installed that. That was the extent of our nail making capacity for several months. We bought another one afterwards over in Bayonne. Two machines were the extent of our nail making capacity in the new mill you speak about.

Q. You say you were able to produce only a common form of wire, which was not at all in accordance with what you had been producing. A. That is right.

Q. What was the kind of wire that you were able to make with the temporary affair? A. The machine we operated for making this wire we got from a manufacturer of suit case frames over in New York. He had bought a machine some time previous to make his own wire. We arranged for him to let us have the machine provided that we would give him all the wire that he wanted. That was one of the pricipal products of that mill for some little time.

Q. Mr. Igoe, can you tell us whether or not your plans and specifications for the buildings were destroyed in the fire? A. All of them.

Q. And your drawings for machines and so on? A. Patterns and drawings, blueprints and tracings and everything else was destroyed. We did not save a thing.

Q. They were kept in the Newark plant? A. Yes, sir.

Q. And that has been a complete loss? A. Yes, sir.

Q. You spoke about certain losses you had in this temporary mill. Were they minor or were they large? A. Large.

Q. During the year 1925? A. Large, very large.

Q. And you have had an accountant look over your records, have you not? A. Yes.

Q. Do you believe that those losses were attributable to the manufacturing of this— A. Yes, absolutely.

Q. You did continue with your jobbing business after that fire, did you not? A. Yes.

MR. GILHOOLY:—Of course, the jobbing has noth- to do with this hearing, as I understand it. You may cross-examine.

CROSS EXAMINATION BY MR. VANDERBILT:

Q. Mr. Igoe, you say that within a year you rebuilt about one-third of these buildings. Can you tell us by referring to the blueprint which buildings they were? A. Yes, sir. Start at the bottom. G, A, P, H, or one story only, that was a two story building before the fire, we only put up one story—F, and I think that is all. I think it is about 34 or 35 thousand square feet, and the total loss was about 80 to 90 thousand square feet.

Q. And do you know, Mr. Igoe, when that contracting work was started and when it was finished, as near as you can tell? A. Of course, we did not start it until after the fire loss was settled. I think we probably got finished late in March, I think it would be.

Q. The fire loss was settled late in October, and these buildings were finished late in March, as you recall it? A. It might be later than that. I can't tell exactly.

Q. Now, when you speak of the entire plant being run as a unit with the exception of the bail ties manufactured in building H, that did not, of course, include building A, G or F, which were used as warehouses, did it, Mr. Igoe? A. Well, we would have had to have some of those buildings for storage.

Q. For storage. But, I mean, there was not manufacturing carried on in those? A. Only the packing machine in building A.

Q. And that was in a separate room. A. That is in building A.

Q. That is in building A. And all of H was also used as a warehouse, wasn't it? A. H was used as—the lower part of H was used for storage.

Q. Yes. A. The upper part for manufacturing.

Q. The upstairs. A. And we bought material to run that plant and had to have some one room downstairs for storing that material for it.

Q. You say it was in 1924 that these additional machines were put in building S and that their installation resulted in not only increased capacity, but a lowering of costs due to the fact that they were labor saving machines? A. Yes, sir. That was the result of it.

Q. Referring back to the general situation which prevailed in 1924, referring now to paragraph 4 of the counter-claim, can you tell me whether these figures of net profit, as set for 1920 to 1924, are correct, Mr. Igoe? A. So far as I know, I think they were prepared by our accountant, and so far as we can tell, they are correct.

MR. VANDERBILT:—That is Exhibit B on your accountant's report, on the accountant's audit for the year 1924.

Q. Now, referring to the statement, Mr. Igoe that in 1924, you had installed these labor saving devices, especially in building S—

MR. GILHOOLY:—May I interrupt to ask a question? Are you speaking now of 1924 or the years—

MR. VANDERBILT:—1920 to 1924, inclusive.

Q. Would you say that the net profit of 1923 represented a normal or abnormal year in the business? A. It was a little above the normal. 1924 was below the normal and so was '22 and '21; all of those three years, each one, with the exception of 1923, were below normal.

Q. As a matter of fact, doesn't the year 1920 in the wire business, as well as in the other businesses, mark the end, practically, of the large profits and inflation that came from the war period? A. It did, but even in 1923, as I recall, there was a coal strike that affected business very much.

Q. Well, was there any similar adverse element working against business in 1921, '22 and '24? A. Absolutely. In 1921, we were having the aftermath after the war.

Q. What is that? A. In 1921, we were having the aftermath of the war, after the big year of 1920.

Q. That was true of 1922, in the wire business and most other businesses? A. Business was very poor.

Q. And 1924? A. That was below the normal year also.

Q. As I got it, Mr. Igoe, this temporary plant which you put up to meet the necessity of your customers, which you started June 22nd, 1925, consisted of this machine which you had ordered before the fire, but which came in after the fire, and also of the machinery you were able to put together in your carpenter shop which was not destroyed; in other words, it was a plant built up as best you could to meet the emergency? A. That is it exactly.

Q. And nothing was started in that, no production on that until June 22nd, 1925, and it was not until July

9th that you were able to produce up to 35 or 40 tons? A. 85 tons.

Q. You were able to produce 85 tons by July 9th? A. Yes.

Q. Now, I may be showing my complete ignorance, but does that mean a day, or the total output from June to July 9th? A. The total output.

Q. In other words, from June 22nd to July 9th, the total output was 85 tons only? A. Yes. If you will permit me to tell you about the temporary mill, that was a shed we had for storage, and we had been running little machinery in it. It did not have a floor or anything else, and we had to tear that all out and put in a floor, and had to make an addition to it. Of all the expense that we put in there, if we salvage ten per cent of what we put in, we will be lucky, when we have to throw it out.

Q. What was done with the jobbing business? Was it transferred to Brooklyn? A. No. We probably got some to help out, some special orders Friday and Saturday on which we could get quick shipments from mills in Allentown and Courtland, New York, and had some sheds to use to store that.

Q. Temporary storage? A. Yes.

Q. Have you got any figures, Mr. Igoe, showing any production in that temporary wire shed after July 9th? A. Yes, we have them right along for every month.

Q. Can you tell us about how it ran on an average?

MR. GILHOOLY:—I object to that as long as we are going to call the accountant, unless we have the man that compiled the records. I have him here and I will produce that testimony.

MR. VANDERBILT:—That is all.

REDIRECT EXAMINATION BY MR. GILHOOLY:

Q. In answer to a question asked by Mr. Vanderbilt pertaining to paragraph 4 of the counterclaim with respect to the profit between the years 1920 and 1924, inclusive, I call your attention to the profits stated in the counterclaim for the year 1924 as $57,134.16. That is, is it not, Mr. Igoe, before there was that adjustment of the profit pertaining to the items that had been charged to expense? A. I think it is. The accountant will probably be able to tell you that.

Q. As to that item— A. I am not sure.

Q. —you are not sure about it. Mr. Igoe, you made a reference to the operation in Building H, covering bail ties. Can you tell us for whom the bail ties were manufactured? A. For whom?

Q. Yes. Were they manufactured for any particular concern? A. Well, we operated for H. P. and H. F. Williamson, which we own.

Q. Was it or was it not the practice of Igoe Brothers to sell to that company at cost? A. The same price they could buy from the big mills in the West.

Q. That is, bale ties, of course, were made out of wire which had been drawn in building S, is that right? A. No, only a very small part of it. That was bought wire.

Q. That was bought wire. Then that was not manufactured wire, I take it, the bale ties? A. Manufactured by some plant, but not in our mill.

Q. It was not part of your manufacturing? A. No. The wire was not part of our manufacturing, but we made it into ties.

Q. What was that operation, making bale ties? A. Put the loop on it, and the hooks on it, and form it up. If you have ever seen bales of hay, you will know.

MR. VANDERBILT:—Round wire or flat?

THE WITNESS:—Round wire.

Q. That is not part of your manufacturing business, in the sense of manufacturing wire; you buy that wire for the most part? A. We were expecting to make that wire very shortly. It was wire that we could make and should make.

Q. But you were not manufacturing it before the fire? A. No, not that wire.

MR. GILHOOLY:—That is all.

MR. VANDERBILT:—That is all.

(Witness excused.)

CECIL NICHOLAS PRIAULX, called as a witness on behalf of the complainant, being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILHOOLY:

Q. Mr. Priaulx, you are connected with Porter & Ryan, are you not? A. Yes, I am.

Q. They are accountants that have submitted a report in connection with this adjustment? A. Yes.

Q. Did you make an audit of the books of the Igoe Brothers for the year 1925? A. We did.

Q. Can you tell us, as a result of your audit, whether or not any profit was made by the company for the year 1925? A. There was no profit. There was a loss.

Q. Can you tell us the amount of the loss? A. Yes, I can by referring to this. The loss from operation was $141,079.64.

Q. Can you tell us— A. I want to qualify that. Of the manufacturing and jobbing department of Igoe Brothers.

Q. And you have given us the figure of $141— A. 079.64.

Q. Can you tell us whether or not there was any profit from the manufacturing and jobbing business between January 1, 1925, and April 9th, 1925, the date of the fire? A. I can.

Q. What was that profit? A. $31,642.64.

Q. Does that include, the $31,000— A. $31,-642.64.

Q. Does that include both manufacturing and jobbing? A. It does.

Q. In order to determine the net loss of the year— can you determine, therefore, the net total loss for the year, for the period of the year subsequent to April 9, 1925? A. Yes. The loss for that period would be the loss for the year plus the profit for the period from January 1st to April 9th.

Q. Will you kindly give us the exact amount of loss from April 9, 1925, to January 1, 1926? A. $172,-722.28.

Q. I understand that includes both manufacturing and jobbing? A. It does.

MR. GILHOOLY:—You may cross-examine.

CROSS EXAMINATION BY MR. VANDERBILT:

Q. Is it necessary to have an inventory as of April 9, 1925, in order to establish the profits from January 1st up to April 9th? A. Yes.

Q. Did you have such inventory as of April 9th? A. No. Those figures which I have given you are those which were submitted by us and also by the accountant for the insurance companies, which were based upon the profits for 1924.

Q. In other words, it is a percentage calculation? A. It is.

Q. Rather than an accurate— A. It is.

Q. —statement of the inventory? A. Yes, sir.

MR. VANDERBILT:—That is all.

REDIRECT EXAMINATION BY MR. GILHOOLY:

Q. Does that figure of profit up to April 9, 1925,— was that the figure that was agreed upon by you and the accountant for the company? A. It was.

Q. At that time? A. Substantially. There may be a slight difference between us.

Q. It was substantially the profit during that period. But the loss which you have actually shown for the total period of the year, that is based upon the insured's books? A. And upon the inventory.

Q. An audit of the books, and upon the inventory? A. Yes.

Q. So, there is no question in your mind but what the loss for the entire year was $141,000 and some odd dollars? A. There is no question.

Q. And if there is any variance at all, it might come in that figure of $31,000, representing the profit for the period before the fire? A. Yes.

RECROSS EXAMINATION BY MR. VANDERBILT:

Q. Just one other question. You say that you agreed with the accountant for the insurance companies on this figure of profit up to April 9th? A. I believe their report shows substantially the same amount. I have a copy of it, if you wish to refer to it.

Q. I mean, there wasn't any formal agreement on that? A. No, no, except that was the report submitted by them.

Q. Simply taken from what they said in their report? A. Yes.

BY MR. GILHOOLY:

Q. But their figures were taken from the company's books? A. They were built up the same as my report. They were based upon the profit for the prior year, or based on the costs.

Q. You would have the same result, starting from the same basis and on the same operation? A. Yes.

BY MR. VANDERBILT:

Q. But you did have a record of the total number of sales? A. Yes, sir.

Q. And in order to determine the profit, you figured the percentage of profit, on the prior year, the percentage

of profit, is that it? A. Yes, sir, we determined the cost of sales for the prior year.

Q. The data was accurate as to the amount of sales? A. The data was accurate as to the amount of sales. The data is accurate with respect to the cost of sales for the jobbing department. It is only arbitrary with respect to the cost of sales of the manufacturing department, and that is based on the cost for 1924.

Q. Otherwise, everything is based on actual calculation from the company's books? A. Yes.

MR. VANDERBILT:—That is all.

(Witness excused.)

ERNEST GLASSER, called as a witness on behalf of the complainant, being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILHOOLY:

Q. Mr. Glasser, were you connected with Igoe Brothers in 1925? A. Yes, sir.

Q. Are you still connected with that company? A. Yes, sir.

Q. In what capacity? A. Office manager and chief accountant.

Q. Were you office manager and chief accountant in 1925 at the time of this fire? A. Yes.

Q. And had been how long prior to the fire? A. Two weeks.

Q. You are still with the company? A. Yes, sir.

Q. Mr. Glasser, did you make any compilation of the average production of the manufacturing department prior to the fire, average daily production? A. I did.

Q. Can you tell us what your average daily production was prior to the time of the fire? A. 35 tons.

Q. 35 tons? A. That is for the year 1924.

Q. That is for the year 1924? A. Yes.

Q. And did you carry that into the year 1925, for the period between the first of the year to the time of the fire? A. I did not.

Q. You did for the year 1924, and that was 35 tons per day? A. Yes, approximately 35 tons per day.

Q. Have you got any record of your average production per day after the fire? A. I did have the production records as per the accountant's report here, and mailed them back to Newark. Now, whether they are still available or not, I do not know.

Q. Can you refer to the accountant's report and tell us whether or not this is the information which you compiled? Answer yes or no. A. Yes.

Q. I do not want you to testify to something that you cannot say of your own knowledge. A. Yes.

Q. Now, has that been reduced to tonnage on this report, or is that— A. This is tonnage.

Q. That is tonnage or pounds? A. Pounds.

Q. But, it is carried, isn't it, not in tons but in pounds? A. In pounds.

Q. Now, will you kindly refer to this report—this was made by you? A. No, sir.

Q. I mean, the figures were compiled by you, were they not? A. No, sir, they were compiled together. I got the production reports from the company in Newark. We never carried them, as I work in the main office in

Brooklyn, I took them over to the accountant of Porter & Ryan, and we compiled the figures.

Q. Can you say whether they accurately represent the production after the fire? A. Well, they accurately represent the production so far as the production sheets were made. Now, as to the actual production in the plant itself. I can't say. Some clerk may have slipped up on it, but so far as the sheets we have, those are actual figures.

Were those production records kept in the ordinary course of business? A. Well, I would not want to answer that. I did not work in the factory at Newark. They were not part of our general books.

Q. But, you did get them from the plant in Newark in response to a call from you? A. Yes, sir.

Q. Will you please tell us the number of pounds that were produced every day, commencing, or during the months following the fire, for the balance of that year? A. During the day?

Q. The total I am after. A. During June, 1925, 44,750 pounds.

Q. May I interrupt there? Should that be divided by 2000 in order to get tons? A. Short tons, 2,000 pounds.

July 25th,	172,500	pounds
August 25th,	190,441	"
September,	225,750	"
October,	230,135	"
November,	296,300	"
December,	306,070	"

Q. Take January, 1926. A. January, 1926, 270,555 pounds.

Q. February, 1926? A. 272,550 pounds.

Q. March? A. 350,855 pounds.

Q. Then April, 1926? A. To April 9th, which was based on 8/25 of April total production was 129,536 pounds.

Q. Now, Mr. Glasser, will you please tell us the amount of production at night during the same period that you have testified as to the production during the day? A. June, 1925, eight days only 43,650 pounds.

July,	139,000	"
August,	68,250	"
September,	117,000	"
October,	138,150	"
November,	149,800	"
December,	151,500	"
January, 1926	165,990	"
February,	185,740	"
March,	215,070	"

To April 9th, 8/25 of the April production, 56,714.

MR. GILHOOLY:—You may cross-examine.

CROSS EXAMINATION BY MR. VANDERBILT:

Q. Have you got the average production per day from January 1, 1925 up to April 9, 1925? A. No, sir.

Q. Is that available? A. I would have to ask Mr. Joseph Igoe. I mailed them back to him, these reports. He had some use for them in the Newark plant.

MR. VANDERBILT:—Are they available?

MR. GILHOOLY:—I do not know. I will ask a few questions about it.

REDIRECT EXAMINATION

By MR. GILHOOLY;

Q. I notice on the bottom of Exhibit I—I think you have it before you—there is a reference to normal production for the 83 day period from January 1, 1925, to April 9, 1925. Did you have any part in the compiling of that data? A. Yes, I must have.

Q. Do you know whether or not you can get that? A. Those records would also be in Newark, if they are still available.

By MR. VANDERBILT:

Q. Well, are those figures correct? You can tell that, can't you? A. They were correct.

Q. They would give you the tonnage produced per day during that period of what? A. Approximately 31 tons.

Q. Can you tell us, Mr. Glasser, what was the first day after the fire that the production reached seven tons per day? A. Not by this record, per day. You could strike an average by dividing the total poundage here by the tons and then dividing by 25. That would be just approximate.

Q. That would be within a month? A. That would be some time within a month.

Q. All right. Could you give us which month that would be? A. Do you mean the day work and night work together or—

Q. Combined. A. Combined. Some time in March, 1926.

Q. What about September, 1925—what would be the average tonnage produced in that month? A. Well,

there would be an average tonnage there of 201 tons—25 days in a month—that is not seven, is it?

Q. Isn't it? 25 into 201 goes eight? A. Yes.

Q. Let us go back a little further then. A. You could not go back any further than September, 1925 for that seven tons.

Q. That is in September, 1925? A. Yes, sir.

Q. What tonnage per day was necessary for you to absorb your overhead?

10

MR. GILHOOLY:—I object unless the witness made the computation.

MR. VANDERBILT:—He is the chief accountant and office manager.

THE WITNESS:—I am unable. In those records we never kept any cost on manufacturing. I am unable to state.

20

Q. You can't state? A. No, sir.

Q. You could figure that? A. No, sir, not from the records on hand.

Q. Do you know whether the accountant who was just on the stand could figure that? A. I don't know. You might ask him.

(Witness excused.)

30 (At this point a model of the Igoe Brothers plant, showing the buildings before the fire and the remains after the fire was explained to the Master.)

MR. GILHOOLY:—I rest, Judge, with one exception: I want to introduce the evidence we have of the com-

panies on the fire loss. I do not know how material it would be. We will be able to get together on that.

THE SPECIAL MASTER:—You can stipulate as to that.

(At this point an adjournment was taken to Monday, June 3rd, 1929, at ten o'clock A. M.)

June 3, 1929. 10.00 a. m.

BEFORE:

HON. CHARLES F. LYNCH, Special Master.

(Same appearances.)

MR. GILHOOLY:—Mr. Vanderbilt, there is one portion of the testimony, I think, as I read the minutes over, that seems to me might cause some doubt and confusion. I would like to call Mr. Igoe to have him explain with reference to the building that was used for the manufacture of bale ties.

PETER IGOE, recalled, testified further as follows:

DIRECT EXAMINATION BY MR. GILHOOLY:

Q. When you gave your testimony the other day, Mr. Igoe, you gave certain testimony concerning building H and the manufacture of bale ties in that building.

This question was asked you: "Well, was that a large part of the company's business?" And your answer was: "It was a fairly good part of the business, yes."

"When you say you could have run along without that building, what do you mean? A. I mean that we could have continued operating and probably absorbed our overhead."

Now, I asked you—will you amplify that statement and tell us what was meant when you gave that answer? A. Well, the bale ties business was a very small part of our business. We did not manufacture but about five or ten per cent of the wire that was used in the manufacture of bale ties. That wire was all furnished us by H. P. & H. F. Robinson Company, for whom we made the ties.

Q. When you stated that you could have continued operating and probably absorbed your overhead, just what was meant by that? A. I mean that if we had the balance of the factory in operation, we could have absorbed our overhead regardless of the bale ties running at all.

Q. In other words, you could not have absorbed your overhead operating with regard to bale ties alone? A. No, not at all.

Q. And you meant they would play an inappreciable part in the business? A. Have very little bearing on the total manufacturing.

MR. GILLHOOLY:—That is all.

CROSS EXAMINATION BY MR. VANDERBILT:

Q. As I gathered it, Mr. Igoe, what you wanted us to understand was that this really was a small part of the business? A. Yes, sir.

Q. And that it had no appreciable effect upon the main business? A. Yes, sir.

Q. And this statement that you could have continued operating and probably absorbed your overhead means that that would have no effect on the business operating in absorbing your overhead? A. That is, the running of the bale tie department—

Q. Would not have that effect? A. No.

Q. And with the rest of the factory re-established and operating, you could have continued and could have absorbed your overhead, even if the bale tie business was not resumed? A. That is what I mean.

MR. VANDERBILT:—In other words, what you want, Mr. Gilhooly, is to eliminate that statement as to the bale ties, isn't it?

MR. GILHOOLY:—Yes. As it appears now, it appears that if they went into the manufacture of bale ties, they could have absorbed their overhead.

MR. VANDERBILT:—I don't think we differ on that.

(Witness excused.)

BENJAMIN F. ROBINSON, called as a witness on behalf of the defendant, having been duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. VANDERBILT:

Q. Mr. Robinson, what is your business? A. Building contractor and appraiser.

Q. How long have you been in that business? A. About 35 years.

Q. Are you familiar with the Igoe Brothers plant in Newark? A. Yes, Sir.

Q. Did you act for the insurance companies who had policies on the buildings in Newark, in estimating with respect to the building loss? A. Yes, sir.

Q. In the course of your making that estimate, did you have occasion to measure up the buildings and find out how they were constructed and so forth? A. I did. I made a complete plan of the buildings.

Q. When did you have anything to do with this loss first? A. I received notification from Mr. Russell at my office on April 13th. Mr. Russell was one of the adjusters.

Q. What did you do then? A. I went down to make an estimate for him and presented it to him.

Q. And when did you get that done? A. My estimate was complete and in to him on April 22nd, with the scale drawing of the building.

Q. Will you tell us, Mr. Robinson, how long it would take to restore the fire loss?

MR. GILHOOLY:—Just a minute. I object to that; so far as the witness has testified, he says that he

has examined the ruins and he made an estimate as to the loss. There is no testimony that he has ever seen the buildings before the fire or has any knowledge of the character of the buildings, the size, the type, and so on. So I don't think that he could testify as to how long it would take to restore something that he had never seen before the fire.

Q. Were you familiar with those buildings before the fire? A. I was.

Q. Will you describe then to the Special Master the nature of the building or buildings, whichever it was, before the fire? A. The building—it was a group or section of buildings in which they manufactured nails and wire and so forth. Most of the buildings were of one story construction with light truss roof and flooring, and in one section, in the center—one of the sections—there was two stories, but the majority of the plant was one story, averaging from the floor up to the truss, as I remember it—I have it in my plan—but as I remember it, about 12 feet high.

Q. Have you got your plan here? A. Yes, sir, I can get them. (Witness produces plan). Up to the under side of the truss line was 14 feet, and in the two story building was 24 feet, to the under side of the roof line. Most of the buildings were one story. You see, I have got a section through each particular building. Here is P and Q. They had double section roofs over this way. This is section R, S, through here somewhere. A-B. We will take A-B, that comes through here. A and B, that is that section in here, and E-F is here. B-C-D is through here (indicating). Each one was given their own height in that way. This is a drawing photostated down from an actual scale drawing which I made at the time of the fire, and was sent to the insurance companies at that time.

Q. In other words, this paper you are now referring to is a reduced photograph of the large scale drawing which you prepared at the time, with these smaller drawings around the outside, representing cross-sections of the various parts of the buildings or various buildings; is that correct? A. Yes.

Q. And were these measurements taken to scale? A. Yes, sir. I could not bring the scale drawing with me, because it is a very large drawing, and it would have been longer than this table.

Q. What was the construction of these buildings? Of what were they built? A. Mostly brick with slag roof and truss roof.

MR. VANDERBILT:—I offer this photostat in evidence.

MR. GILHOOLY:—May I cross-examine?

MR. VANDERBILT:—Yes.

CROSS EXAMINATION BY MR. GILHOOLY:

Q. You say this is an accurate representation of the buildings as they existed before the fire? A. Yes.

Q. How soon, how shortly prior to the fire did you make an examination of these buildings?

MR. VANDERBILT:—He did not testify that he made an examination of them before the fire.

MR. GILHOOLY:—Yes. He said that he saw them before.

THE WITNESS:—Yes, I saw the buildings several times, because I had an operation going, and we used to buy nails from Mr. Igoe. Mr. Igoe had had fires before, and I had been down to the plant on the previous fires—nothing as large as this. They had fires there. Furthermore, in order to get these exact sizes, there was enough evidence— I have photographs in my possession showing the position of these trusses as they were there. Therefore, I could get the exact sizes there.

Q. Did you take the sizes from the photographs? A. No, from actual measurement of the buildings.

Q. There were several of these buildings that were burned to a point where you could not take measurements as to the height; isn't that a fact? A. I don't think there was any that I could not get the height of.

Q. Isn't it a fact that some of the buildings were almost down to the ground and there was nothing but the pillars left, isn't that a fact? A. I think there was enough there for me to get the measurements. I have these somewhere.

Q. You are positive that every building had sufficient evidence left so that you could get the height and area? A. If there was not, some of Mr. Igoe's men told me the exact height. Of course, I made some inquiry, but most of the buildings—I think 90 per cent of the buildings were so that I could get the heights.

Q. Now, I show you what appears on one of the plaintiff's exhibits, showing a photograph of the scene of the fire, and I ask you if you can tell me, on that building, how you could estimate the height of that building? A. This building would be this building here (indicating), down here. These walls were standing.

Q. The building you call building R? A. Yes. They called the building S, I think.

Q. Your R is the equivalent building to S? A. Some of those walls are standing along here yet (indicating).

Q. And they are up to their entire height? A. Yes, sir—it showed where the truss was sitting on them. That is all we wanted.

Q. You said that you made actual measurements of the buildings? A. I did.

Q. What do you show on your plan to correspond to what we call building I? A. L.

Q. That is your building L? A. Yes.

Q. I show you a picture purporting to be the ruins of building L, and ask you if you can point out there any walls that could give the height of that particular building? A. Not from this side, but from this side (indicating), we could. This picture may not have been taken where it would give the truss height of that, but there was evidence of the places where the truss was resting at that time, to give you the height. For instance, here is C, H—

Q. What was the construction of that building? A. This was frame. This shows this height here in that building was 16 feet.

Q. That was a frame building, wasn't it? A. Partly frame.

Q. It was all frame, wasn't it? A. I would call it all frame, yes, sir.

Q. And that was totally destroyed by the fire? A. Yes. That we evidently got from—

Q. Can you tell me this: Whether you got that from examination of the ruins or whether— A. We got that from an examination of the ruins in this way,

because we could see on this wall where the truss went in. It was here and here, you notice (illustrating).

MR. GILHOOLY:—I have no further objection.

(Plan received in evidence and marked Exhibit D-1.)

DIRECT EXAMINATION (resumed)

By MR. VANDERBILT:

Q. Now, Mr. Robinson, will you tell us, in your judgment, how long it would take to repair the fire loss as to the construction of the building or buildings, with reasonably complete detail of the progress? A. Well, the way I prepared this statement of mine, I show about three months.

Q. Tell us how you arrived at that time. A. The fire happened on April 9th. The fire occurred April 9th, and from April 9th to April 16th, one week in which the assured would be allowed for time to elapse between the date of the fire and the beginning of operations.

Q. What does that mean? What is that for? A. Well, that would be time to get over the shock or blow. You can't start right in. You would not know exactly what you wanted to do. You would have to get your wits together to find out just how to proceed.

Q. Well, you are going to build the same buildings, so you would not have to figure on a new type of building. A. Then from April 16th to April 26th, a period of ten days in which to prepare plans. I wish to say that I prepared by plans and estimate both in the period between April 13th and the 22nd, and my plans, I think, are accurate enough to work from.

Q. That is, assuming, of course, that there were no existing plans of the building or buildings? A. Yes.

Q. All right, proceed. A. That is up to April 16th. From April 16th to April 26th, a period of ten days, to prepare plans. Now, at the beginning of April 16th to April 30th, a period might be consumed—that is the same date, you notice, that the plans are being prepared—a period to commence to remove the debris. You can begin removing the debris while the plans are being prepared.

Q. And how long to remove the debris? A. Up to the 30th, which is two weeks. I feel that I have been very liberal on that.

Q. In other words, the preparing of the plans and the removing of the debris can go forward together? A. Yes. They could have all that done before April 30th in my opinion.

Q. What next? A. From the 26th of April—that is the time they received the plans—to the 9th of May, a period of two weeks, for receiving estimates and letting contracts.

Q. All right. A. From the 9th of May to the 20th of May, a period of 12 days, to prepare the foundation work, and get ready to start the brick masons. It is not necessary, however, to wait until the foundations were completed, because there were many parts of this building that the upper portions were burned off, and just the top roof brickwork had to be prepared to receive the roof, so that could be going on while the other larger operations could be going on. The brick masons could start in on the sidewalls at the same time the others were preparing the foundations and piers; for instance, they could start on these upper walls.

Q. And how long after the foundation work was in, would it take to get the buildings up and finished? A.

Two days later, which would be, say, May 11th—we will take into consideration building S, which is the largest operation, which is approximately 382 feet long, the east wall, 91 feet long, the south wall and approximately 390 feet on the west wall, making a total distance of approximately 864 feet. With the masons averaging on there from 800 to 1000 brick a day—which, in my opinion, is very low, because the building is a very low building and no ladders and climbing to get the brick, and so forth, no dangerous scaffolds to work from—I would say that this should be completed by the 1st of June, if there was no interference with rainy days and other unforeseen obstacles.

Q. That would be with how many masons working? A. On that particular building, there is about 175,587 brick, leaving out the openings, and that would give, with an average of 800 to 1000 brick a day, that would be 175 man days, or about 18 days or three weeks for ten men.

Q. In other words, you would have ten men working on that job? A. No—on that particular building, yes.

Q. On Building S? A. While that was going on, Mr. Vanderbilt and your Honor, these other operations of all the additional sections could be going on at the same time. This is the biggest operation, building S.

Q. All right. A. Now, I have allowed in that about one week for rainy days or other unforeseen obstacles.

MR. GILHOOLY:—What period did you stop at?

THE WITNESS:—June 1st.

MR. GILHOOLY:—Three weeks, was it?

THE WITNESS:—Yes. I allowed one week extra, or a quarter of this time, in addition, making a total of five weeks, or the 8th of June, to complete the building work on building S. At that time, all the other brick work should be practically completed.

A. (continuing): Now, I go on to say, of course, there was other mason work, such as concrete floors to lay and tile coping, and so forth. This, of course, could be done while the carpentry work was being done and completed practically at the same time as the carpentry work was completed.

Q. How much allowance did you make for that type of masonry? A. Well, it would take about a week or ten days. I haven't made any comment on that because of the fact, as I said before, it would be done while the carpenters were putting the floors, roofs and so forth. The carpenters could begin work at the same time the masons started their brick work.

MR. GILHOOLY:—Will you fix that date when the masons start the brick work?

THE WITNESS:—May 11th. My idea, the way I would construct that—the carpenters would start to work as soon as the masons started to lay brick. In this case, there was very much roof, and then there was also some frame buildings to be completed. That could be going on at the same time the masons were laying brick. Furthermore, there were some 25 trusses to frame, and these could all be framed while the brick masons were laying brick. I have allowed for the building of the trusses 25 days and five days for the elapse of time because of rainy weather, which would bring it up to June 11th.

Q. That means how many men working on those trusses in that period of time, Mr. Robinson? A. Well, two men would easily average one truss a day which would make 50 man days for the trusses. Consequently, if two men worked on the 25 trusses, they would build the 25 trusses in 25 days. Then I allowed 30 days on account of bad weather. That is for the trusses. Now, as to the other carpentry, it could be commenced on this building by putting in the floor beams and girders at the same time the trusses were being framed, and they need also not wait for the sidewalls to be completed, because if you notice in the photograph, there are a number of piers and the center sections and beams could all be put on while the masons were at work, and they could be following along and doing that at the same time also that the mason work was being done, and also at the same time the carpenters were framing for the trusses, which would be on the 11th of May. The carpenter could start that same day. There is 108,000 square feet of timber in that building S. I am using that as a minimum, that one man can easily lay 1000 feet a day, or ten men could complete this in ten days. Therefore, they would be ahead of the masons, if they worked that number of carpenters. So by June 20th, that carpentry work on the framing on the timbers could be completed.

Now, the laying of the floors, the building of the monitors, the covering of the roof, and so forth, could be completed in one month more, and at that same time, the whitewashing, and interior painting could be done, the glazing of the windows could be done. I estimate that this all could be done and completed by July 20th. I might also say at this time, Mr. Gilhooly, that Mr. Russell asked me at the time of the fire what I thought would be—

MR. GILHOOLY:—I object to what Mr. Russell said to you. It may be very interesting to you, but—

THE MASTER:—I sustain the objection. You could not be asked that.

Q. So, the total length of time, as you give it, in which these buildings could be reasonably reconstructed would be three months and eleven days, making due allowance for bad weather? A. Yes, sir. From April 9th to July 20th. That would be the time I would think I would want, and if I took longer, I would think that I was using up too much time. In other words, I think that should be enough for that sort of building.

Q. Is there anything unusual about the type of construction of the plant? A. There is nothing at all unusual. It is a very, very simple type of construction.

Q. Approximately what was the amount of fire loss to the building, do you recall, Mr. Robinson? A. If I remember—I may not be right about this—

MR. GILHOOLY:—I don't think that we ought to have it.

MR. VANDERBILT:—I do not want it if you are not sure that you are right.

THE WITNESS:—I am not sure. It was not settled on my figures. There was some compromise.

Q. What was your figure of the estimate of the fire loss?

MR. GILHOOLY:—I object. That is not material here, what his estimate of the fire loss was.

MR. VANDERBILT:—His estimate is as good as the figures they settled at.

THE MASTER:—He said it was not settled on his figures.

THE WITNESS:—I am not sure. I think there was a compromise.

THE MASTER:—Perhaps you can agree.

THE WITNESS:—I think that is a matter that could be readily determined.

MR. VANDERBILT:—I have forgotten it. I did know what it was. Do you know what it was, Mr. Gilhooly?

MR. GILHOOLY:—I do not know.

THE WITNESS:—I can give you my figures,

THE MASTER:—You can stipulate it later, perhaps.

MR. VANDERBILT:—Let us get it.

THE WITNESS:—I know it was settled, not far from the figures I made.

Q. Assuming that the fire loss was settled at $229,279.67—and I will introduce proof of that later, Judge—as to the buildings, is there anything out of the way in a building or group of buildings of this type involving a loss to that extent, being restored and put back in

shape as buildings, within the period of three months or three and one-third months? A. This is an exceptionally good building to work on, on account of its different sections. There is no over-crowding, even on this large building S I have spoken to you about. You could work a great many more men than that, and it could be, if necessary, in my opinion, hurried. But I have tried to make a reasonable, honest calculation. I might say at this time that this was not made by anyone but myself. In other words, I have not consulted with other experts as to how the figures should be made up.

Q. Is the number of masons and carpenters and so forth, which you have mentioned on building S, and so forth, a reasonable number to employ on these various operations? A. Now I want to make that plain. I have tried to take it this way to make it plain; I have tried to show what were the conditions on building S.

Q. That building is the largest building? A. That is the largest building—What could be done on that building. While that particular section or building was going on, all the others could easily be worked on as separate units. This is all one unit, but they could be worked on all at the same time.

Q. The question I am asking you is whether the number of men that you assigned for the work on that building is a reasonable number to use in such construction? A. It is.

Q. Such as mason and carpenters? A. It is.

MR. VANDERBILT: Cross-examine.

CROSS EXAMINATION BY MR. GILHOOLY:

Q. I understand you to say this building, Mr. Robinson, is just one unit; is that right? A. Well, I would call it one unit with separate sections. It is all really tied together, one unit. I would call is unit.

Q. And you might call it just one great big large building? A. I would.

Q. Different material and construction of different parts? A. Yes.

Q. Is that what I understand? A. Pardon me. There are one or two little sections that do not amount to much. The main unit is practically one building.

Q. This chart that you have been reading from, did you prepare that at the time you prepared this detailed—what you might refer to as a plan, Exhibit D-1? A. No. These were notes I made this morning from my detailed estimate.

Q. Now, at the time you made your detailed estimate, you had no idea of determining, at that time, how long it would take you to rebuild, did you? A. Except as I was going to tell you before, Mr. Russell asked me to give him an idea of how long it would take to reconstruct it.

Q. But you just gave him a general idea at that time, didn't you? A. Yes, sir. I wrote him a letter indicating my idea of the time of construction, not going into it in detail as I have this morning.

Q. At that time, you did not take up the building step by step or draw up a schedule of time within which this building could be reconstructed, at that time, did you? A. No.

MR. VANDERBILT:—I object to that as immaterial, whether he did at the time or later.

MR. GILHOOLY:—I think it is material.

THE MASTER:—He says he did not.

Q. You say that you have made up these notes just this morning; is that right? A. From this—well, I wrote this this morning. I have been working on it since, I think it was Friday, when Mr. Vanderbilt spoke to me about it first.

Q. You made your calculation since Friday, is that correct? A. Yes.

Q. And in making this calculation, you relied on your memory, did you not, of what the situation was? A. No. I had been down there three different times since Friday.

Q. You were down at the plant since Friday? A. Yes.

Q. And the photographs you spoke of as having been taken of the ruins, were taken by you or one of your representatives since Friday, weren't they? A. One of Mr. Vanderbilt's representatives.

Q. And they are the photographs to which you refer which you had to make up this sketch or plan? A. I have not seen those photographs.

Q. Then you did not rely on the photographs when you made up Exhibit D-1? A. No, I had photographs of my own.

Q. You said on direct examination that you had photographs, and you used these photographs? A. I did.

Q. (continuing) In making up this chart. Do you want to correct that statement? A. No. I want to

make it plain to you. At the time of the fire I took photographs of this building, and I have them here—at that time. That is the way I made it up—and at the time this was made up, I went down there with my assistant and measured up these plans, made my note of the height of the walls with him, and I will guarantee right now that those plans are 95 per cent correct. Those measurements on there, I think, you will find very accurate.

Q. Now, Mr. Robinson, did you actually measure this up yourself? A. I did.

Q. Did you make all your measurements? A. I did. I went over and made my first measurements with a young man in my office. Then we went down there —sent him back to make corrections where they did not come out.

Q. I asked you if you did— A. I was personally down there and made these, and I went to the plant myself on the first drawing, to make this drawing. Then I figured it up in the office.

Q. Did you observe closely the foundation that was under the buildings? Did you observe the foundations? A. Underneath the walls?

Q. Yes. A. No, I did not dig underneath the walls.

Q. There was a lot of debris, wasn't there? A. In some places.

Q. And you could not see what kind of foundation there was to these buildings, could you, where the debris was still remaining? A. I could see what was outside, I did not see underneath the debris, no.

Q. You don't know how many pillars there were in the foundation? A. Yes, I had all the pillars, oh, yes.

Q. Where did you get those? A. I got a count of those. Listen, the way that is done—you see where

these trusses go across (illustrating,) you see these pillars; we know if there was one missing, you could not jump a space; there was one in there, and we put it in.

Q. And you could calculate all of those pillars? A. Yes; all that were damaged.

Q. Have you got that in your detailed estimate? A. Yes.

Q. Can you tell us from a detailed extent just how many pillars support the foundation of building S? A. No, I can't, because I figured that in cubic yardage.

Q. You did not take into consideration all the pillars in the foundation of that building? A. I took all the pillars in that building that were damaged and made an allowance and gave an estimate for the damaged pillars.

Q. Mr. Robinson, as I understand it, you would have the carpenters working in conjunction with the masons? A. Always do, sir.

Q. And everything you have testified to is predicated upon the carpenters working in conjunction with the masons, isn't it? A. Yes, sir, that is the right way to do business.

Q. And if there was any condition existing which prevented the carpenters working with the masons, that would add, of course, to the time of your estimate for the reconstruction of the building, wouldn't it? A. If there was, but I do not know of anything occurring at that time to prevent—to cause any great delay.

Q. Do you know of your own personal knowledge whether or not there was a strike among the carpenters from May 1st until June 5th? A. There was.

Q. You know that as a fact, don't you? A. Yes.

Q. And you would have, according to your direct examination, the carpenters start on May 11th? A. Yes.

Q. They could not start if there was a strike? A. Our men did not stop for the strike.

Q. There was a carpenters' strike? A. Yes. We made an agreement with the carpenters' union that if the bosses gave their men more money, we would pay them from the time of the increase, and they worked.

Q. Do I understand you to say that the carpenters did not go out on May 1st? A. Ours did not.

Q. Who do you mean? A. Our employes.

Q. Your employes. But there was a strike generally? A. There was a strike, yes.

Q. If any other contractor, other than you, he would have suffered by the strike? A. I don't think so, because he could have done what we did. Most of them did. They made arrangements, and there were only a few firms out at that time.

Q. As a matter of fact, there was a strike then? A. Yes. I will admit there was.

Q. What company have you reference to when you say "we"? A. B. F. Robinson. I am like Lindy, I have others with me.

Q. Now, if a contractor had gotten this job, and was not quite as fortunate as the Robinson Company, he would have been delayed by the strike, wouldn't he? A. A contractor can make himself unfortunate. He could have used a wheel barrow to cart his stuff to the job. I would have used automobile trucks. I built the Mount Washington Hotel, which cost $3,000,000, and I went from the day we started until the day it was finished.

Q. Did you do that during the war? A. No, sir, but we did—

Q. Please just answer the questions. Can you tell me how many feet of pipe there were in this entire building? A. I can't tell you now.

Q. Have you got that detail? A. I haven't it with me.

Q. Have you got it anywhere? A. I did have it.

Q. Did you measure up every foot of pipe? A. Not every foot.

Q. Then you can't tell us. A. Not exactly, no, because I don't think there is a contractor that figures every foot of pipe in a building; I have never found one yet.

Q. This building S, in that building there were a lot of piers, weren't there? A. Yes.

Q. And how many men would you say that you could keep working on building S? A. There would be no trouble in keeping 150 men working all together.

Q. Building S, I am talking about. A. I don't know whether I said before, but I could work 150 men on that building easily.

Q. Masons? A. I did not say masons; I said men.

Q. How many masons could you work on building S at the start of operation? A. I could easily work—at the start?

Q. Yes. A. I would start with ten and probably before I got through, put on 40. That is the way that looks (indicating): like a cemetery, so many piers.

Q. Now, there is a limit to the height, is there not, to which piers can be erected by one man, isn't there, per day? A. You mean—

Q. How can he go with a pier in a day? A. If he could build it fast enough, he could run it one hundred feet a day.

Q. Would you consider, as a builder, that, it would be safe construction to erect a pier 100 feet high, if you could get enough men working on the pier in a day? A. It would be safe construction?

Q. Yes. A. Yes.

Q. Isn't it a fact that you do not go up any higher than the height of a man's head in order to give the mortar a chance to set for safe construction? A. These piers are not over four or five feet high, at the most.

Q. They would have to go up the entire height of the building, would they not? A. No. They only go up to the floor height.

Q. How about the walls? Were they straight walls, pier construction? A. Pier construction and some straight.

Q. Mostly pier construction? A. Not most, no—some of them.

Q. You could not go higher than the height of a man's head on those piers? A. Why not?

Q. It is not safe, is it? A. Yes.

Q. Doesn't the mortar have to have a chance to set? A. No.

Q. How high could he go? A. A reasonable height.

Q. What? A. Why, a man can go in a day—these walls could all be built in a day. The outside walls could easily be built in a day.

Q. You could run up as high as that in a day? A. Yes.

Q. And you could keep men working and material coming in to them, mortar? A. Yes, sir.

Q. Mortar coming and brick coming? A. Yes, sir, beautifully.

Q. Have you got any data on the electrical equipment? A. I haven't any data with me, because this was four years ago. I had even trouble finding this. I hadn't any idea that I was coming back here to testify against my good friend Mr. Igoe.

Q. That is all right. That is very nice, but it is not answering my question. You did not give us any testimony in your direct examination, as to how long it would take to do all the wiring and put in the electrical equipment. Can you tell us that? A. I haven't figured that exactly, no. It would take—

Q. You don't know. You have not taken it into consideration? A. I could put the wiring in in two weeks.

Q. The entire building? A. Yes, sir.

Q. How about the plumbing? A. I could put all the plumbing in there in two weeks.

Q. The entire building? A. Yes, sir, there was not very much plumbing above the walls.

Q. Do you know how many motors went in there to wire, in that building? A. I do not know about the motors.

Q. You could not tell whether it would take two weeks or two months? A. I am not talking about power wiring, but only about the building wiring that goes with the building, contract wiring.

Q. When you are wiring a building, you have to wire it up so they can use motors in the building, don't you? A. Not in making this estimate, we did not include the motor wiring.

Q. I am talking about an engineer or architect making a plan and specifications; he would put in his plans and specifications provisions for wiring sufficient to carry current to the motors, wouldn't he? A. I would think that went under equipment, myself.

Q. You know, as a builder, provision is made, when a building is constructed to cover that? A. It is not what they generally figure on, no, sir.

Q. Do I understand that when the equipment was going to be placed in there, all the additional wiring

would be put in and exposed? Is that what I am to understand? A. That is taken up with the engineer under power and equipment.

Q. I am talking about a capable— A. The same as the engines and boilers, I did not figure that in this.

Q. Will you answer this question, please, Mr. Robinson: Didn't you say that a capable architect would make provision for the proper wiring in order to carry the proper juice to the motors when he prepared his plans and specifications—wouldn't he? A. I don't know that it was necessary in this case, and I don't think I would.

Q. You don't know what motors were there, do you? A. No, I do not. I was not interested.

Q. You are not in a position to tell us. A. No, not about the motors.

Q. Did you have all your work done between April 13th and April 22nd, so far as your appraisal of this fire loss was concerned? A. I did.

Q. Complete? A. Every bit.

Q. Didn't you have to go back after that for additional data? A. No, sir, I think I was back with the adjusters at the meeting, but not for additional data.

Q. Did you work on the adjustment of the personal property loss, such as motors and equipment? A. No, I do not know anything about it.

Q. You do not know how many thousand tons of wire and steel there was in that debris, do you? A. No, sir, I do not.

Q. If you do not know, Mr. Robinson, how many thousand tons or how much tonnage there was of that debris how can you tell us how long it would take to remove it; guess at it? A. No. I had an estimate.

Q. Your own estimate? A. No, sir. I had an

estimate from a contractor when I made this, as to how long it would take him to remove the debris.

Q. Have you got any of your work sheets? A. No, I haven't my work sheets with me. I did not know that we were going into that; I thought it was entirely on use and occupancy. This is all I have (indicating).

Q. You have not given in there about how long it would take to remove the debris? A. No, I did not figure on that.

Q. Have you got a record so that you can tell us what walls were worthless and what part could be used? A. We would tear down some of them, where we thought there was any damage and where there was not, we gave the owner the benefit of the doubt.

Q. But you did find, did you not, that a good part, a good number of square feet of these walls, would have to be taken down because it was unsafe to build on top? A. Yes, sir. We have allowed that.

Q. Was that taken into consideration by you? A. That was taken into consideration by me, yes, in making these figures.

Q. And you figure that you could remove all the debris between April 12th and the 30th? A. Yes, sir. I had an estimate from a man in Irvington named Nabor.

Q. In figuring the time it would take to remove the debris, would you start to do that on the 13th when the fire occurred on April 9th? A. Yes. I think I told you that. I don't remember just what date it was. April 9th—April 16th, one week—then I say from April 16th to April 26th—no, beginning April 16th to April 30th, a period of two weeks in which to remove the debris.

Q. In other words, to remove everything down there, is that your estimate? A. Everything that pertains to the building damage, yes.

Q. How about the other damage, damage to the machinery? A. The fire damage, I should have said; everything that was to go to the dump.

Q. In other words, you could have that site entirely clear in two weeks? A. For building operations.

Q. And nothing left at all? A. Yes. That is what I said.

Q. You consider that a reasonable time? A. Yes, sir.

Q. And is everything else that you have testified to as to building construction just as reasonable an estimate as you have given on that? In other words, you are just as liberal in everything else? A. I think I have tried to be liberal on all of it. You know, the dump is right there. You would not have to cart the stuff very far to clean up the plant.

Q. Do you know of your personal knowledge that you could dump that around there? A. I know that I can get $2.50 a yard for anything I can dump there.

Q. Is that yardage iron and steel, or just dirt? A. Anything that will make a fill.

Q. You could before 1925? A. I own some property on the meadows that I wish I could get filled. I am begging people, but I am not going to pay $2.50. That is what they want me to pay. I am not going to pay it.

Q. As a matter of fact, Igoe Brothers had to leave the site just as it was for a considerable time until the adjustment was made with the insurance companies; is that right? A. I don't know anything about that at all. The adjustment, I had nothing to do with. I simply furnished these figures.

Q. You did not take that into consideration in your figures? A. No, sir.

Q. All right. You might have to do that. A. I

have not taken that into consideration. These figures I am giving you is the time I consider a reasonable time to replace that building.

Q. You are predicating your estimate on the fact that you would have clear weather all during these three months, is that right? A. No, sir. I gave a week's time.

Q. You have allowed a week for inclement weather? A. Yes.

Q. But you do not know just what days were inclement weather, do you? A. No, I do not.

Q. And you allowed the assured one week to collect his thoughts, as it were, engage an architect, look over the site— A. Yes. I allowed a week for that.

Q. That is all. A. That is all, sir.

Q. How long do you say that complete plans and specifications could be prepared for this, in all detail? A. In all its detail, I think I said ten days, and I think I can do it and give you all the details—in fact, I know I can, in less time.

Q. It took you from the 13th, do I understand, until the 22nd? A. Yes.

Q. That is nine days? A. Yes, to make the plans and make a detailed estimate of some forty pages.

Q. This plan you prepared, does that carry out all the details? A. No.

Q. You have not given it in full detail, have you? A. Quite some detail. I can show you, I have the sizes, how many timbers and trusses—you would not want very much. You might want the details of the windows or something of that kind.

Q. There is nothing to indicate the type of construction and the number of square feet, is there? A. What do you mean, square feet? There is the type of

construction. It shows you here (indicating) 12 inch wall; here a pier, and the location, giving you the distance, the proper size of the timber in the trusses, the proper height of the trusses—we figured very carefully, I think. If that is not big enough—

Q. That is about the building, but it has nothing to do with plumbing work or heating work? A. It shows the location, I think, of the toilets.

Q. Not the size of the brick work—is there? A. I think it shows here 12 inch wall and 8 inch wall.

Q. Show me anything in there that shows the piers. A. I don't think there is anything that shows the piers; on my scale drawing it would show whether it was a 12 inch wall.

Q. I am asking you about the exhibits you have before you. There is nothing on there, is there? A. Yes, there is. It shows you the size of these piers here (indicating).

Q. I asked you about the walls. A. It shows the size of the timber.

Q. How about the width; it is not there? A. Yes, I think the width is there.

Q. What did you say? A. This is small. This has been photostated down so small. This was taken from a quarter scale. It has been photostated down.

Q. You can't see that view due to your poor eyesight, is that it? A. No, not entirely.

Q. Point it out to me. A. There is another plan. I can't see what it is.

Q. You can't tell. A. I will bring the other plans down. Where the walls are standing, you don't need the plans for the size of the walls. The walls are 12 inches.

Q. You say you do not need to show the width of the walls from the plans? A. You do with the Build-

ing Department, but it is not anything to put that on. That does not take any time.

Q. You have not got it there? A. Probably I haven't. But I think I have it some place.

Q. Let me ask you this: If you were the owner of the building, would you put out plans like that to have a contractor estimate on? A. Yes, sir. I could take this—I went down to the building and saw the building—I could build this exactly.

Q. Would he give you an estimate? A. Yes.

Q. And he could figure it for you? A. Yes. I have figured on many poorer plans than that, many of them, very much poorer.

Q. And you could not get a building permit on those plans? A. No, but my putting one more day's work on these plans, you could get your building permit, and I have made allowance for that. These plans did not take ten or eleven days, and it was the estimating that took the long time. I might also say that the architect's specifications—

Q. I guess you have answered the question. A. Pardon me. I just wanted to help you.

Q. You won't help me. Just answer the question. Do you know how many trusses in the building S? A. I think it was 25—25.

Q. Are you sure of that? A. No, I am not sure. I will count them.

Q. The plan speaks for itself, if they are on there? A. Yes.

Q. Do you know how many square feet of roofing there was in that building? A. Not exactly. I could easily figure it.

Q. Did you calculate it? A. Yes, I did. Sure. The plans are here. You could easily get that, too.

Q. Did you have any notation of that? A. Yes, I had all that in detail, and I sent that to the insurance companies.

Q. You made that calculation a way back in 1925? A. Yes.

Q. You did not use that in making up your present statement that you have testified to today? A. Yes.

Q. Did you get that from the insurance companies? A. No. I got that from this.

Q. Have you got it all in there? A. Yes, sir.

Q. Have you got everything in there from which you have testified to today? A. Yes, sir.

Q. The paper that you are referring now? A. Yes.

Q. Will you tell me how many square feet of roofing there were, as you calculated it? A. Everything?

Q. How many square feet of roofing there was in that? A. Over the whole building?

Q. Over the whole building S? A. All over building S?

Q. From those notes you have there. A. Yes, I will tell you. Do you know what I call building S ?

Q. You are referring to what was marked R. A. My R. I do not know where their S went to, but I went to here (indicating). There are 24,408 square feet in there.

Q. Mr. Robinson, did you ever see the report made by Fletcher-Thompson? A. I saw it but I did not read it.

Q. You did not read the photostatic copy Mr. Vanderbilt had? A. No. I started to read it. It was a good deal like a story.

Q. You did not read it? A. I read part of it.

Q. You did not read the balance of it? A. No, I did not read it.

Q. Do you know how many steel sash there were in building S, your building R? A. No. I have the number of square feet. I can give it to you.

Q. You do not know the number of steel sash? A. I can tell from the plan, but I figured it up in square feet.

Q. How much time did you allow for painting these buildings? A. The entire plant?

Q. The entire plant. You said nothing about that in your direct examination. A. No. I allowed —

Q. Have you got a record of it there? A. No, I have a memorandum somewhere.

Q. Unless you can show us the memorandum, I do not want the answer. A. I made a memorandum, but I can't show it to you offhand. There was no reason why there could not be 50 painters working on the job. There is plenty of room for them to work.

Q. Will you refer to what we term building C on your chart, Mr. Robinson? A. That is the little building in here (indicating), the boiler and engine room.

Q. Yes, sir. Can you tell us from the figures which you have made up how many thousand feet of timber was necessary for that floor? That is shown as Building N on your schedule, I believe? A. Yes, sir. There are —you mean, just the timber in the floor?

Q. Yes. A. The timber in the floor and girders—there are 2,570 feet in that little building.

Q. How about the plank? A. Plank flooring—the plank flooring is 2,304 square feet; two inch plank flooring, yellow pine. The rafters are two by ten, the plates are four by six, covered with slag roof.

Q. You did not see the roof. A. No, but that is what I was told was on there, and I figured that.

Q. How many days did you figure it would take to remove the damaged walls in that building? A. The damaged walls in that building?

Q. Yes. A. I figured that the walls there could be removed in three working days.

Q. Three working days? A. Yes; and put in shape for the masons.

Q. Did you figure on any engine foundations? A. No.

Q. Did you think that was necessary in the engine room? A. I did not have anything to do with the equipment in any way.

Q. Isn't there a lot of brickwork to do in there? A. Yes, but I did not consider that part of the building. I was told not to take that into consideration at the time I made my estimate.

Q. That, of course, would be necessary? You would have to do that. A. Under the head of equipment. In fact, I do not know the condition of the foundations; I did not look at it.

Q. You saw the boilers there; they were still there? A. The boilers were there, but I do not know whether they were good or bad.

Q. You saw the size of them? A. Yes, but I could not—

Q. You could judge the weight? A. I simply say I saw them.

Q. You have taken absolutely nothing into your calculation— A. I can't remember what was there; I can't recall—only the building; I have not figured on anything in the shape of equipment or content at all.

Q. That would add to the length of time so far as the equipment is concerned in your estimate? A. The

equipment would have to be taken care of by somebody familiar with it. I am not familiar with equipment. I do not know whose make of boiler it was.

Q. I am not asking you that, Mr. Robinson. You do know this: You would have to engage a mason contractor or some man in the concrete business to lay that foundation, wouldn't you, for the boilers and engines? A. If the foundation was bad.

Q. You saw it; it was bad? A. I could not say. I did not pay any attention to it. I did not look at anything except the buildings there. If I am around guessing—

Q. You have only the necessary details in your estimate regarding re-construction. The things that have to do with construction are what you looked at? A. Which was the entire building which was insured under the head of building.

Q. That is what you looked at; anything covered by insurance; anything else you did not pay attention to? A. That is all. I made this figure for the insurance company, and this plan for the insurance company, that is, the plan of the building; now, the foundation for machinery and machinery, I know nothing about.

Q. You know that is part of the building? A. No, I never consider it part of the building, and we never, as contractor, figure on that as part of the building.

Q. Do I understand that you are trying to convey this idea: You would construct your building and then get your equipment man and have him lay the foundation in that building? A. Many times an architect will draw plans for a building, and then have an engineer lay out the equipment and outfit. In this town 99 per cent of the buildings, factories, are put up that way; most people employ an architect.

Q. I think that you have answered the question, unless you want the rest of it, Mr. Vanderbilt. Mr. Robinson, when you were going over these ruins, didn't you, as a matter of fact, pass the comment that you thought it would take six months to reconstruct or possibly seven? A. I was going—

Q. Did you or did you not? A. No, sir.

Q. You never made such a statement? A. No, sir. I was going to tell you about that, but you stopped me.

Q. Go ahead. A. I was going to say that when Mr. Vanderbilt asked me about Mr. Russell—I wrote Mr. Russell in answer to a letter of his, that it would take less than six months to replace the buildings.

Q. Then you did say something about six months? A. I did not say anything about it, except in that regard. I wrote to Mr. Russell. That was everything.

Q. Do you have a copy of that letter? A. No. I should have, but this was four years ago, and my records I only keep for three years, as a rule.

Q. Mr. Robinson, as a practical matter, if you were a builder, or if you were an owner, wouldn't you conservatively say that it would take no less than six months to restore these buildings completely? A. No, I would not say it. I would say that it could be done, as I told Mr. Russell in less than six months. I don't think a man ought to be held up six months. I would not employ a contractor that would hold me back six months. Look at the lost time.

Q. It would take pretty near that? A. If I had to build, I would get a live man that would say that he could put that up in three or four months, sure. I built some buildings for Seymour down here—

Q. I am asking you only that one question. Mr. Robinson, can you tell us how long it has been since you

put up a factory building? A. Personally I have not handled a trowel in thirty years.

Q. I mean as contractor? A. As contractor, the last building I have had any interest in is a building we built in Bayonne, a factory— a factory we built down in Bayonne, which was completed three months ago.

Q. And you supervised it, I take it? A. I did not supervise it, no.

Q. I am talking about your actual supervision. A. I was down there and saw it. I did not supervise it. I do not supervise any buildings.

Q. Have you ever been there personally supervising the erection of a building? A. Yes, sir, but very little.

Q. What is your experience? That is what I would like to have. Are you a builder? A. Yes, I am a general building contractor I do not go around— I have a foreman and superintendent on the job.

Q. Did you ever do any superintending work? A. Yes.

Q. How long ago was that? A. About 25 years ago, when I was superintendent. I was taken into the business with my partner.

Q. And since that time you have relied on foremen to do the supervising? A. Foreman and superintendent, and I go around to see the thing. If a builder had to go around and do all the superintendence, I do not know how he would do any figuring or estimating or getting contracts. We fellows have to do everything to get a contract these, I want to tell you, they are hard to get.

Q. What experience, other than that as superintendent, have you had in the past twenty-five years? A. As superintendent? I think I am far above a superintendent. You can get a superintendent for less money

than you could get me. In the contracting business, I would not want anybody to run by business for me.

Q. In the last twenty-five years hasn't your time been taken up with adjusting fire loses? A. I do not make adjustments.

Q. You make appraisals? A. I make appraisals for insurance companies or for you. And I am appraising at the present time.

Q. You do a considerable amount of appraising? A. I do a lot of appraising, of very, very large buildings; that means that you must be very, very accurate, because you run across reports that are so ridiculous. People will tell you that a piece of plate glass one foot square, costs $20.

Q. And the insurance companies say that it is worth 20 cents. A. They are right. One foot square, that is all it is worth.

Q. I mean in a comparison of the two figures, that is about what it runs, isn't it? A. In a good many cases. I would like to give you some illustrations. Sherwin-Williams had an appraisal, and it would make you laugh—

Q. Never mind. This record costs money. A. That is the reason I did not read this Fletcher-thing, because it is ridiculous.

Q. Let us see. You say it is ridiculous. How much did you read? A. About three or four pages.

Q. About three or four pages? A. I got into it, and I said, 'There is nothing in that."

Q. Without reading the entire record, you prejudged it, is that it? A. Yes. I read some of the report, and I thought that was enough. I could not see— I would not do business in that way.

Q. Please answer the question. A. Pardon me.

Q. You have been in court before, and you know what it is. That is all.

REDIRECT EXAMINATION

By MR. VANDERBILT:

Q. Mr. Robinson, just one or two questions: How long would it take to reconstruct the boiler room and engine room called B and C on the Fletcher-Thompson report? I guess you know which ones I mean. A. I could put it up for you in two weeks.

Q. In making your estimate, did you take into consideration these buildings designated on the Fletcher-Thompson report as H, A and G, warehouses, and the northerly two-thirds of building P, which was rented? A. Yes.

Q. You considered the reconstruction of all of them? A. Yes. They had just gables to top out, and some roofs to put on.

Q. If those had been left out, would it have reduced the time? A. Not to speak of, because, as I said a while ago, while they were doing this, another crew would be doing that. I would not think it would make very much difference.

Q. Now, one word with reference to this strike: Was it possible during this so-called strike to obtain carpenters to work on a job like this? A. It was very easy, Mr. Vanderbilt. We were doing work through that strike and we had no trouble, because we had signed an agreement with them, that we would change the wages if the majority of the master builders conceded.

Q. Well, had other— A. Which they did, and we did.

Q. Had other master builders made the same arrangement with the union. A. Yes, they had.

Q. And obtained carpenters in the meantime? A. Yes, and most of them do in these days.

Q. Well, in that particular strike, had any considerable number of the other master builders beside yourself made such an agreement? A. As I remember, most of them had, based on arbitration, which is the way most—

Q. And it was possible to obtain carpenters during that period? A. Most strikes nowadays are fixed up in arbitration.

MR. VANDERBILT—That is all.

RECROSS EXAMINATION

By MR. GILHOOLY:

Q. Now, getting back to this building B and C, this engine room, I take it— is that the engine room, Mr. Robinson? A. I will tell you in a moment.

Q. It is marked B and C on our chart. I do not know what it is on yours. A. B and C, yes, sir, that is the engine room and boiler room.

Q. Can you tell us the dimensions? A. The boiler room was 36 by 43, and the engine room was 40— thirty by forty, I think it was— 36 by 40.

Q. 36 by 40? A. Yes, sir. And one wall— this building D forms a part of that wall, and this building forms a part of that wall (indicating).

Q. How long would it take to remove the debris in that building? A. Three days, I told you.

Q. Three days to take everything out? A. Yes.

Q. How long would it take you to construct the foundation? A. The foundation?

Q. Yes, for those buildings. A. Not over two days.

Q. Two days for a building 36 by 43 and 36 by 40? A. Yes, that is not such a big job. They were not so hard to put back properly.

Q. That is two days. How long would it take to put the foundation for the boilers? A. I had nothing to do with the foundation for the boilers.

Q. How can you tell us it takes two weeks to do this job? A. My dear boy, I am telling you what I could replace the buildings for. I have nothing to do with equipment, and that is what I call equipment.

Q. You told Mr. Vanderbilt that you could restore the buildings in two weeks? A. The buildings, not the equipment.

Q. You know that you have to put in the foundations? A. Somebody would have to do that. I did not put those foundations in. I left them for the equipment man.

Q. How long would it take you to put in the floors? A. The floors?

Q. Are you telling us what your recollection is of that time or guessing? A. I am guessing at it now, when you ask me that way.

Q. Were you guessing when you told Mr. Vanderbilt two weeks? A. I said three weeks.

Q. Do you want to correct it and make it three weeks? A. No, I will let it stand at two weeks. I said I could do it in two weeks, and I could.

Q. Was that a guess? A. No; a guarantee. I would take a bonus and forfeit contract to put it up in that time.

Q. How long would it take you to construct the roof on the building? A. Do you want me to guess?

Q. No, I do not want a guess, I want it definitely. A. I could figure it out for you if you give me a little time.

Q. Didn't you make those calculations before you came into court? A. No. I told you this building would take so much time. I made that calculation, and I said that while this three months' work was going on, these other conditions or divisions could be taken care of. That should not take a live man more than two weeks.

Q. You were making an estimate not based on any specific calculation? A. I made this estimate on a specific calculation.

Q. How long would it take you to put on the roof, if you had it estimated in your figures? Have you got it there?

(Witness refers to papers.)

Q. I am asking you if you have that in your memoranda? A. I have that here in this memoranda, but I have not figured it out in detail. I am going to give it to you in detail in a minute. The roof boards—do you mean the time it would take to put the roof boards on?

Q. I want what your record shows. A. The record shows that it would take one day to put on the roof boards.

Q. Your record shows one more day? A. Yes, sir.

Q. You are referring to your memoranda. Was this made by you? A. Yes, it was made by me.

Q. May I see it? A. I gave you a number of sheets there.

Q. I asked you what it is on your record, and you said your record showed that it would take one day to put that on? A. Yes.

Q. Can you point out anything here— A. This is the number of feet. It says there are 1300 feet in that building and 2,000 feet in the other building, that is 3300 feet, and that is just two days' work, or one days' work for two men.

Q. I asked you if your record showed, and you said it did. Can you point out on your record how many days? A. I did not make a record of that. I did not figure that way. I figured so many feet.

Q. You haven't a record of it? A. Not except as I read to you.

Q. Don't you know, as a matter of fact, before the flooring in this boiler room could be laid, a foundation for the boiler would have to be made and the floor rested on that? A. Yes.

Q. Do you know that? A. Yes, I do know that.

Q. You would have to wait until the equipment man put in the foundations? A. Yes, but the equipment man, I would not think, would take over one month to put in the equipment.

Q. In that one particular building? A. And after that, two days' time to put my floor in.

Q. You would—it would take about a month from your record for a man to be able to get established in the building? A. I do not know. I am just saying one month.

Q. It would take that time. A. You don't get me. I say two weeks to build that building straight ahead work. You have to go back and go back on all the

buildings; you have to go back to put the roof on, and something of that kind, in places.

Q. Does that record show how long? A. This record does not show anything except the stages, and the time and the material . That is all it shows?

Q. And that record was made up so that you could make an appraisal of the fire loss? A. Yes, sir.

Q. And had nothing to do with use and occupancy? A. No. I have made that up since Friday, I told you, and gave it to Mr. Vanderbilt this morning.

Q. Based on those figures? A. How else could you do it. It is based on the record, the number of stages, and that is the only way that anybody could get it. I do not know where you would get the figures from —you have to take them from the detailed estimate made up as this is, very carefully made.

Q. In figuring the period of reconstruction, a visit to the site would be a considerable help in making it? A. A visit to the site?

Q. Yes, an observation of the condition as it actually was? A. Yes, if I was contracting—

Q. You have answered. You said yes. That is all.

MR. VANDERBILT—I want to correct one figure which I gave in asking Mr. Robinson a question; I supported it on the basis of a settlement of $229,279.67. The settlement figure on which this settlement was made, I would like to read into the record. There was a sound value claimed on the building of $231,073.10, and a loss of $175,312.83. A sound value claimed on the machinery and equipment of $268,031.93, a loss claimed of $215,560.73. A sound value claimed of $212,553.10 cents, and a loss of $180,993.80, on stock.

Summarizing each of those three figures in each set, makes a total claim, sound value, $711,658.13, and a

loss claimed of $571,807.36. To that loss claim there was added $3,192.64, making a total settlement of $575,-000. So, in order to reach the maximum figure of the loss of the building, I would add that compromise figure of $3,192.64 to the loss of $175,312.83, which would make the maximum loss on the settlement, the total of those two figures as the building, 178,505.47.

Do you want to look at those figures?

MR.. GILHOOLY—What is this?

MR. VANDERBILT—That is the settlement we received.

(Witnessed excused.)

STEVEN NEGREY, called as a witness on behalf of the defendant, being first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. VANDERBILT:

Q. Mr. Negrey, will you state for the purpose of the record, your engineering and construction experience and education? A. Well, I was graduated in engineering from the University of Alberta in Canada, and I am now with Mason & Son, builders, of Brooklyn. Previous to that, I was with McCrosson and Company

for a year. Then with the Clifford Construction Company of Elizabeth two years; the New York Edison previous that; previous to that, with the American Concrete Steel Company of Newark.

Q. How long were you with that concern? A. I was with them three years, under Mr. Shaw.

Q. Have you had experience in building the type of building of Igoe Brothers in Newark? A. Yes, sir.

Q. Had you ever seen Igoe Brothers' plant in Newark before the fire of 1925? A. Yes, sir.

Q. Are you familiar with the general type of construction? A. I am.

Q. Have you been furnished with a copy of the Fletcher-Thompson report which has been marked in evidence on behalf of the complainant? A. Yes, sir.

Q. And a copy of the building plan and so-called progress chart contained in that report? A. Yes, sir.

Q. Have you examined the Fletcher-Thompson report, as to its accuracy and completeness? A. Yes, sir.

Q. Turning to page 3 of the Fletcher-Thompson report, which was headed "replacement; successive steps necessary to replace a plant of this character under the conditions prevailing are as follows," and then lists them from A to K. Will you tell us whether or not that is a correct statement? A. I have not got a copy of the Fletcher-Thompson report here.

Q. I beg your pardon. I thought you had. (Handing report to witness.) A. Yes, sir, that is.

Q. Now, would those steps each have to be taken consecutively? A. Yes, as we have outlined them here.

Q. No, I am referring to the Fletcher-Thompson report, page 3. I am asking you if each of those steps would have to be taken consecutively? A. We would

have to take the steps consecutively and analyze them as we have.

Q. I mean, in the building, replacement of these buildings, would each of these steps have to be taken consecutively, or do they overlap? A. They would have to be taken consecutively.

Q. Will you refer to page 8 of the Fletcher-Thompson report, supplementary report, building S? Have you got that before you? A. Yes, sir.

MR. GILHOOLY—You said supplementary report. Do you mean the first?

MR. VANDERBILT—I beg your pardon. It is the original report, page 8, building S. Under the heading, Walls, rebuild 85 M. brick, 154 man days. Will you tell the Special Master whether or not in your judgment that is a correct figure? A. No, it is not.

Q. Will you tell him why not? A. Why, according to this estimate, it is based on a mason laying 555 bricks per working day. We are getting today on work that is more difficult than this type of work an average of 800 to 1000 bricks per man day.

Q. And could those same figures, same quantities, 800 to 1000 brick a day be obtained from masons in 1925? A. Yes, sir.

Q. Now, what is the reason for saying that the estimate that I have referred to on page 8 of the first Fletcher-Thompson report is not correct?

MR. GILHOOLY—I object to the form of the question. He might state his opinion.

Q. In your opinion.

THE MASTER—It is understood he is giving his opinion. I do not like the form of the question. A. May I have the question again?

Q. You have referred to this figure they gave involving only laying 555 brick per day, whereas you say a mason could lay from 800 to 1000 brick a day, as being a criticism of this particular item. Can you tell us whether or not there is any other element that, in your judgment, is incorrect in this particular item? A. The average is indicated that one man will lay 555, or a mason will lay 555 brick per day, meaning that there is no labor, no specified amount of labor applicable to that mason, as a helper, while it is known in construction how much labor you need to assist a man in laying up his brick.

Q. Referring to the next item on that same page, 90 feet of coping. A. Yes, sir.

Q. What have you to say with respect to that? A. 90 feet of coping in the Fletcher-Thompson report would take four man days to put up 90 feet. This would average about 23 feet per man per day. That coping, any mason—

MR. GILHOOLY—What page are you referring to?

MR. VANDERBILT—The same page, the following item, 90 feet of coping.

THE WITNESS—90 feet of coping. If a man did not lay up 90 feet of coping for us in a day, we would not have him on the job. I have allowed about one day and a half for one mason to lay that coping up.

Q. Referring a little farther down the page 8 of the

Fletcher-Thompson report, roofing, 5-ply roofing, 24,000 square feet. What have you to say with respect to that item, and also of the 550 lineal feet of gravel stop and flashing, 81 man days? A. That average is about three squares, or a little better than three squares, 360 square feet per man per day. Now, from experience gained during the course of construction and also from records of the roofers who are laying up this material daily—

MR. GILHOOLY—I think, if you are relying on somebody else—

THE WITNESS—Our observation.

THE MASTER—Your own observation?

THE WITNESS—Our observation and working records, because we have to do that in order to keep a record of our costs. That figures out to about 400 square feet per man per day. That is a minimum. You can get better than that on a fairly decent run of roofing.

Q. Turn to page 9, headed miscellaneous, 22 steel sash, 9 by 13, 11 man days. What have you to say with reference to that? A. They average about two sash per man per day. It would take a man half a day to put one of those windows in, one unit; it is not in sections. As a general rule, a contractor usually plans to hold his costs to a minimum consistent with the progress of the work. The wall is usually brought up to a height where these sash can be placed. Under such conditions those sash should be placed in a day and a half without any trouble, all 22 of them. That happens every day of the week.

Q. That would be one and a half man days? A. That would be three man days.

Q. Three man days instead of eleven man days? A. Yes.

Q. Turn to page 10, foundations, 40 man days. What would you say, in your judgment, would be the amount of time?

MR. GILHOOLY—I would like to object unless the witness can testify that he saw the foundations which were there after the fire. He has testified to having seen the building before the fire. I don't recall his testifying that he saw the ruins.

Q. Have you seen this plant since the fire? A. Yes, sir.

MR. GILHOOLY—I am referring specifically to this building B.

THE MASTER—Did you see these damaged walls?

THE WITNESS—I have seen the damaged walls, yes.

Q. Now, in your judgment, how long would it take to remove the damaged walls, foundation repairs, on building B in man days? A. I would figure on that type of building they could remove those in ten man days.

Q. Take the next item, brick walls, 61 M brick, 10 B. S. sills, 85 man days, how long, in your judgment, would it take to do that work? A. Well, now, this would be similar to that item I have outlined on building S, allowing 800 brick per man per day.

Q. Well, how long would it take to do it on that basis? A. That would take about 76 days.

Q. Go to the next item, roofing, tin and gravel roof, 1700 square feet of flashing and gravel stop, 180 lineal feet. A. That averages about 340 square feet per man per day, while the same method, if applied to that, as I have for building S, would be about 400 square feet per man per day.

Q. Turn to page 11, building C, under walls. "Brick wall, 20 M brick, 6 B. S. sills, 30 man days." On what basis of production is that figured in the Fletcher-Thompson report?

MR. GILHOOLY—What was that page—11?

MR. VANDERBILT—Page 11 under roof.

MR. GILHOOLY—Building C?

MR. VANDERBILT—Building C. Can you find it on the Fletcher-Thompson report?

THE WITNESS—Yes.

A. Now, their figure there is 666 per man day, while my basis there is similar to that on building S. I figure they will lay up at least 800 brick per day. I have added here that I am of the opinion that it should be noted that building S, size 91 by 225 they maintain an average of 555 brick in a day, while in building B, a building 37 by 43, an average of 725 brick, a much smaller building, and on building C, 26 by 40, an average of 666 brick per day, still a smaller building than the first building where they laid a lesser amount of brick. Now, usually on a

large structure of similar construction to that of building S, they would lay up more brick than they would on a smaller structure.

Q. I call your attention to the next item down on page 11, roof tin and gravel roof, 1040 square feet, flashing and gravel stop, 130 feet, five man days. A. That averages 208 square feet per day, which is no comparison to what we have been averaging before, and I still maintain they will lay 400 square feet a day to a man.

Q. Turning to page 12 under building D, walls, "Relay 154 M brick and piers, set sills and coping, 1080 man days." A. Well, the average works out to about 856 brick per day. The averages have been around 550. 856 on comon brick, when you can almost lay face brick on those averages.

Q. Further down on the same page, "First floor, lay 74 square feet two inch plank, 30 man days.." On what basis is that figured on the Fletcher-Thompson report? A. That averages 245 square feet per man per day or, say, a man will complete an area of about ten by 25 feet in a working day.

Q. Is that too much or too little? A. Which I think is unreasonably low. Any man should be able to put down two inch plank and complete a greater area than 10 by 25, or he would never be on the job.

Q. How much should he complete? A. He ought to complete from 400 to 600 square feet of plank.

Q. Turn to page 13. "Lay rough and finished flooring, 15M square feet, 35 man days." What have you to say with respect to that? A. That is an average of 429 square feet of double flooring a day to a man. That is they have to lay double flooring, a finished floor

on top, meaning this is a completed area of 429 square feet, while in the preceding criticism I made, there they only laid 245 square feet of rough plank, and this will be a combined area of 858 square feet, taking in the rough flooring and finish flooring. Certainly that does not look right. It is not right from my knowledge and my past experience.

Q. Go to the next item of roofing, 7,000 square feet and 350 feet of flashing, 25 man days? A. That averages about 280 square feet a day, and that is no comparison with what we have experienced, where a roofer will lay 400 square feet.

Q. Turn to page 14, building I, under foundation, 82 cubic feet of concrete, 6 man days. What have you to say with respect to that? A. That averages about half a yard to a man a day. If that concrete was mixed by hand, the result would be from one and a half to two yards a day. You ought to be able to get that out of your men.

Q. And if mixed by machine? A. You could, with modern equipment— today there is very little concrete mixed by hand, it is mostly mixed by machinery.

Q. Go to the next item.

THE MASTER—In case it were mixed by machinery, how many man days?

THE WITNESS—You usually figure on getting about three or four yards per man— four yards per day for a man, average.

Q. The next item, flooring, 2 inch plank, 5000 square feet, 20 man days. How much does that average according to the Fletcher-Thompson report? A. That

averages 250 square feet a day per man, indicating that that is about ten by 25 feet area to a man.

Q. You say a man should do how much? A. I should say that a man would do 600 square feet per day, five to six hundred.

Q. Go to the next item of roofing, 9000 square feet of roofing, 18 man days? A. Well, that averages 500 square feet, while they have laid double flooring of a combined area of 858. Roofers ought to be able to get around 800 square per day without any difficulty.

Q. Turn to page 15, building E, foundations, relay 700 brick and 18.8 B. S. sills four man days. How much is that according to the Fletcher-Thompson report? A. 175 brick per man per day.

Q. That should be around 800? A. You ought to be able to get on foundation work 1000 brick, having no openings or anything to worry about on the walls.

Q. On the same page, walls, relay 38.2 M brick, 64 man days. How much does that average? A. That averages 597, while I still maintain the average runs about a minimum 800.

Q. Page 16, under flooring, 14,000 square feet of two inch plank, 50 man days.. A. That averages 280 square feet per day.

Q. That you say should be four hundred to five hundred? A. 400 to 600, or 500, thereabouts.

Q. The next item, roofers, 16,000 square feet, 32 man days. A. My basis there is similar to that of the building D.

Q. The next item, roofing, 14,000 square feet, 5-ply, 45 man days. How much does that average? A. That averages 311 square feet per day. I still maintain that 400 feet can be laid up on that type of structure.

Q. The next item, 680 lineal feet of flashing and gravel stop, eight man days. A. That item I do not feel should be considered at all, because the flashing and gravel stop is usually laid up in one operation with the roofing. It is nothing more than a member of two by by three for gravel stop, that is, nailed down by the roofer with the roof, and nailed, it is laid right over it.

Q. Turn to page 17, building S, flooring 4700 square feet of two inch plank. How much does that average? A. That averages 300 per square feet per day.

Q. 800 to 1000. A. Instead of 400.

Q. 400. A. Two inch plank, 400 to 500.

Q. The next item, roofing, the last item on the page, 6,000 square feet of roofers, 12 man days. How much does that average according to the Fletcher-Thompson report? A. That averages 500 square feet per day, while I think a man ought to be able—usually lays up some—well, around 800 square feet of roofers.

Q. Page 18, 5500 square feet of 3-ply roofing, 15 man days. What do you say to that? A. That is similar to the one I have listed for building C.

Q. The next item, 310 feet of flashing and gravel stop, four man days. A. That item should not be considered, because that is part of the roof construction, as I have outlined in a preceding item similar to that.

Q. What have you to say in general with respect to buildings H and P, F and G, taking up the following pages of the report? A. My exceptions are similar to those as they are on these buildings I have outlined, and brought out the more conspicuous items.

Q. Are you familiar with the plan which has been prepared by H. F. Robinson and marked Exhibit D-1, the photostat? A. Yes.

Q. From that and from your knowledge of the nature of construction before the fire and the condition of the building after the fire, can you tell us how long it would take to reconstruct the plant? A. Why, my estimate, as I have made a chart of the reconstruction for the plant—I feel that that plant could be reconstructed in 84 working days.

Q. And have you that chart with you? A. Yes, sir.

Q. Does that show it item by item? A. It shows item by item, the principal items of construction, yes, sir, affecting that plant.

MR. VANDERBILT—I offer the chart in evidence.

By MR. GILHOOLY:

Q. When did you make up this chart? A. I made that up yesterday.

Q. When did you make your inspection of the building? A. Two weeks ago.

Q. When did you see the building before that? A. I have seen that building as I have traveled on the Pennsylvania Railroad between New York and Newark—

Q. Are you making your estimates from what you saw on the Pennsylvania Railroad? A. I am making my estimates based on my examinations made at the site.

Q. Let us get down to the time of the fire. When was it you saw this site before the fire? A. I have seen it in 1924 and 1925.

Q. You saw it as you were passing by on the train? A. Yes.

Q. There was nothing unusual that attracted your attention to the site, was there, passing on the train?

A. The only unusual part, after the fire, was debris laying on the ground, knowing there was a fire.

Q. Nothing before the fire? A. Nothing attracted my attention particularly.

Q. You never inspected that plant minutely and never went on the ground before the fire, did you? A. No, sir.

Q.. Your sole ideas of that plant were from observation made passing on the train, is that right? A. No.

Q. Before the fire, I am speaking of. A. Well, before the fire, yes.

Q. That is the only time you ever saw the plant? A. Yes, sir.

Q. After the fire, when did you go on the premises? A. I was there two weeks ago. That is, on the ground.

Q. That is the first time you were on there? A. Yes.

MR. GILHOOLY—I certainly object to this man's testimony as to this chart because, admittedly, he is not qualified to testify.

THE MASTER—I do not know what is on the chart.

MR. GILHOOLY—He is now undertaking to give his opinion as to the length of time it would take to reconstruct that plant, and he is basing it on his observation, fleeting glance he had passing on the train. Certainly, I don't think it goes to the credibility, but I think it goes to the competency of this witness. Nobody could give an idea of how long it would take to replace the plant unless he went there and made some specific examination.

THE COURT—He said he did.

MR. GILHOOLY—He said that he went there two weeks. They have to show that the plant remained unchanged, which is not the case according to Mr. Igoe's testimony. They have partly rebuilt the plant.

MR. VANDERBILT—I want to call the Court's attention to the fact that if this goes to this witness' testimony, it goes with equal force to the Fletcher-Thompson testimony. They were not on the site of this plant for about a year after the fire.

MR. GILHOOLY—No.

MR. VANDERBILT—Their own report states that.

MR. GILHOOLY—They were there before the debris was removed, and these pictures were made in January, 1926. I don't think that we ought to be bound by this man's observation while passing in a train. If your Honor wants to let it in for what it is worth, all right, but I don't think it has any weight.

THE MASTER—I can weigh it later. I will admit it and note your exception.

By MR. VANDERBILT:

Q. Referring to this Exhibit D-2, your chart, Mr. Negrey, does this chart make full allowance for all the steps which would have to be taken from the getting over the shock, as Mr. Robinson described it, up to the time when the building is ready and complete as a building?
A. Yes, sir.
Q. And, in your judgment, these buildings could be reconstructed during this period of 84 working days?
A. Yes, sir.

Q. And does that make allowance for inclement weather? A. Yes, sir, that does.

Q. How much allowance did you make for that? How many days did you allow for that?

A. On the brickwork, I have allowed four days for bad weather. That is apart from Sundays and holidays.

Mr. Vanderbilt, cross-examine.

10

CROSS EXAMINATION

By MR. GILHOOLY:

Q. You do not know, do you, Mr. Negrey, that there were actually 12 days during that period that men could not work on that building? You do not know, do you? A. I have not kept track of rainy days.

Q. You just made a guess? A.. My estimate is
20 based on data computed from past experience in former estimates.

Q. You are making a guess? A. It is not a guess at all; it is an average.

Q. You did not consult the weather reports? A. I did not.

Q. You could have done that? A. No, I could not have gotten that.

Q. You say that you are employed by McCrosson & Company. Do I understand that correctly? A. Yes,
30 I was employed by them.

Q. When were you employed by him? A. Well, what do you mean by that?

THE MASTER—When?

Q. When were you employed by him? A. Let me see—I was with him two months ago and for a year preceding that.

Q. For a year preceding that? A. Yes.

Q. So, you were with him for a year. You were not with him when he was acting as appraiser in this matter? A. No, I was not.

Q. Don't you think, from your experience, that you would be in a better position to judge the length of time it would take to reconstruct this building, if you had been on the site shortly after the fire—wouldn't you be in a better position to judge. A. I do not believe so. It is not—

Q. It does not make any difference at all to you? A. That type of building, there is nothing unusual about it, it is a common type of construction.

Q. Can you tell me from your data which you have collected, how many thousand feet of pipe there were in this building? A. No, I could not tell you.

Q. Don't you think that would be necessary for you to have some approximate idea, in order to form a conclusion as to the time it would take to reconstruct it? A. Not of the pipe, no.

Q. Can you tell me from your own data that you collected, nothing else, how many square feet there were in this building, brick construction? A. I can give you the number of brick.

Q. From your own data? A. From my own data. I have the report here. I have checked it up.

Q. Whose report was it? A. Mr. Robinson's.

Q. You are relying on his report? A. His inventory, not his report.

Q. And nothing of your own? A. I have checked

his figures from the measurements obtained from his drawings.

Q. When did you start to do this work? A. Two weeks ago.

Q. Two weeks ago? A. Yes, sir.

Q. And how long did it take you to make your figures, computations? A. I was finished with my figures last night.

Q. It took you two weeks to do that? A. Yes, sir.

Q. You did not prepare any chart or anything like that, however? A. That one that is here, that is all.

Q. That is the only chart? A. Yes, sir.

Q. And if you had to measure up the job and make your own calculations, you think it would take you a little longer than two weeks? A. I did not put two weeks full time in on this; I am busy on other work.

Q. You did this as a side issue? A. Yes.

Q. You do not know how many windows there were in building S, do you, from you own record? A. No. I do not know only from what is in this inventory and what was on the drawing.

Q. Did you count the number of windows? A. No.

Q. At no time in your calculation, did you count the windows? A. No.

Q. Did you count the number of piers in that particular building? A. I checked the piers with the drawing.

Q. Did you count them? A. I did not count them in the field, no.

Q. Did you count them on the drawing? A. I counted them on the drawing, yes, sir.

Q. Did you count the number of concrete piers used to support the building, that are used as its foundation?

A. Well, the interior piers, yes, but the outside is supported by walls.

Q. Did you make a record, your own data? A. No.

Q.. You have not got the date? A. I haven't an inventory, because I could not prepare an inventory in the little time I had.

Q. But you had certain figures which you worked on, and you made certain calculations, didn't you? A. I made certain calculations, yes.

Q. On working sheets. Have you got those work papers with you? A. These are the working papers, this man's papers here, which I have checked up.

Q. Have you got your work papers here? A. This is the only work paper I have, Mr. Robinson's report. This is an inventory. I checked that.

Q. You have taken certain calculations, too? A. I used his report for measurements.

Q. You used his report for measurements? A. Yes.

Q. After having gotten the measurements, you made calculations on work sheets? A. Yes.

Q. Have you got those with you? A. No, it shows the dimensions asked for and I felt that I did not need that.

Q. You figured up the number of man days? A. Yes, sir.

Q. Have you got that calculation with you? A. The calculation is here.

Q. The original sheet? A. The calculation is here.

Q. The original sheet? A. This is my original sheet.

Q. This is your original sheet? A. Yes sir.

Q. You must have arrived at those figures by some

other calculations. You had work sheets to arrive at those calculations? A. Yes.

Q. Where are they? A. There are some here on the brick work that I have kept.

Q. These are your figures (indicating)? A. Yes. That is on the brick work, a comparative sheet.

Q. There is nothing in here on the work sheet that would show the number of windows? A. No, there is not.

Q. Doesn't that play a material part in determining the speed with which a workman could work? A. Not necessarily.

Q. Do you mean to say that a man can work on a wall that has many windows in it just as fast as he can on straight brick construction with no windows? A. If he had any face brick he probably would be slackened up.

Q. On this particular job? A. On this particular job, no.

Q. There were a lot of windows there? A. A lot of openings.

Q. A lot of openings. And that takes the time of the mason up, doesn't it, as he goes along with the work? A. It takes a little time.

Q. And you can't work as fast as on straight brick work? A. Yes, but the average on straight work would be more than 800.

Q. Did you take into consideration the fact that building S contained a number of openings? A. Yes. That is what the figure is based on.

Q. And you said 800 to 1000? A. Yes, sir.

Q. And you used that calculation all along, irrespective of the type of construction? A. Yes, sir, but it is one building, one unit.

Q. If this building had many piers and many windows, it would slow up the men? A. The type of piers in it would not slow them up. In fact, it would increase it, because it is solid construction.

Q. When did you see the place? A. Two weeks ago.

Q. You don't know what was there four years ago? A. There does not seem to be a change outside of the fire, except cleaning up the debris.

Q. Quite a few buildings down? A. The walls are up.

Q. In part. A. Building S walls appear to be all up.

Q. And you took that into consideration in making your estimate, did you not? A. Yes, sir.

Q. And you say that you made no differentiation between straight work and work with open spaces; is that right? A. Not in that particular type of construction, no, because it is all uniform more or less.

Q. What is the nature of the walls in building S? A. I would have to go to the inventory for that.

Q. Point it out on the inventory, if you will? A. That is a 12 inch wall.

Q. Does it make any difference in your calculation whether the 8 inches, 12 inches or 16 inches, with respect to the speed with which the men can work? A. Very little, on that type of construction.

Q. No difference at all? A. Very little.

Q. You say that you inspected the walls of building S, is that right? A. What is that?

Q. You say that you inspected the walls of building S? A. Yes, sir.

Q. Are you sure of that? A. Yes, sir.

Q. And you were up there two weeks ago? A. I was up there two weeks ago.

Q. You are not mistaken in the building, by any chance? You know which building I am referring to? That was referred to on Exhibit D-1 as R; is that correct? A. Right.

Q. You are positive that you saw those walls two weeks ago? A. Yes, those walls were there two weeks ago, and I think they are there now.

Q. Just how high are those walls at the present time? A. They are about 12 feet high.

Q. About 12 feet high. Can you see the window openings in there? A. Yes, sir.

Q. They are still there? A. Yes.

Q. Are you sure of that, too? A. Yes, sir.

Q. Now, you say that, in your opinion, that Fletcher-Thompson have been too liberal in allowing time for the restoration of the frames also, the steel frames. The installation of the steel frames, you said they were a little too high in that; is that right? A. Yes, sir.

Q. As a matter of fact, it would not make any material difference in the progress of this building how long it took, would it, as the brick work is going on just the same? A. I don't quite get you.

Q. Well, if they had the openings made it would not make any difference how long it took to put these frames in, so long as the other work was going on, would it? A. No. You get the building up, your walls, to a certain height, and as they progress with the work, the windows go right in.

Q. The windows go right in? A. Yes.

Q. If it took a man a day longer, it would not make any difference in the total time of construction? A. It should not take longer.

Q. Assuming that a man—suppose he loafed on the job involved, it would not make any difference with re-

spect to the length of time it would take to construct that building, because the additional work was going on at the same time; is that a fact? A. That would not make any difference, no.

Q. You went over this report of Fletcher-Thompson in detail? A. Yes, sir, I did.

Q. And you went over it for the purpose of testifying in this trial, didn't you? That is why you went over it? A. I did not know I was going to testify.

Q. You were asked to criticise it. A. I was asked to look it over and see, in my judgment, what I thought of it.

Q. To point out everything you found to be different, in your opinion? A. Yes.

Q. And with the exception of those things you pointed out, you agree with the report, do you? A. I can't say that I do, no.

Q. Have you any other objection that you have not testified to? A. Not at my finger tips. I just picked those out.

Q. You went over that in two weeks? A. Yes, sir.

Q. And you wanted to point out as many things as possible to Mr. Vanderbilt, isn't that a fact? A. Yes, sir.

Q. And you made a report to him, didn't you? A. Yes, sir.

Q. And you read from that report here today? A. I do.

Q. And you gave all the specific details? A. Right.

Q. Where you thought there was a difference of opinion? A. Yes, that is right.

Q. Then, doesn't it follow that the other matters you

did not see fit to criticise are in accord with your opinion, is that right? A. I do not get that .

Q. The other items. A. Well, some of them may be all right and others may not.

Q. Some of them. Don't you think— A. In other words, I think the whole report is similar to the items that I have pointed out.

Q. Don't you think the fact that in some cases Fletcher-Thompson allowed only 577 square feet of brick a day laid by a mason, and in other cases, as high as 800, that they had given careful consideration to the particular work involved; that is indicated by that report, isn't it? A. Well, I don't feel that way about it, because it is a positive fact that a man will lay up more that 175 brick a day, and there is one instance there—

Q. It does not make any difference what corners he has to turn? A. Absolutely not, for 175 brick per day. You would not keep a man on the job.

Q. This is your only work sheet? A. My only work sheet, yes.

Q. That is your only work sheet? A. Yes, sir, that is, outside of this inventory here.

MR. GILHOOLY:—That is all.

BY MR. VANDERBILT:

Q. The items you have testified to, specific criticism of the Fletcher-Thompson report, were various man day items, were they not? A. Right.

Q. And your progress chart is a criticism of the Fletcher-Thompson progress chart? A. Right.

By MR. GILHOOLY:

Q. Did you take into consideration as to the number

of days within which this building could be restored, that there was a strike in Newark? A. Yes, I did.

Q. Did you add that to your period of time? A. No, I did not, because I did not feel it was necessary.

Q. If the strike was on, would you add the number of days of the strike to the days you have given? A. Well, in the first place, I did not think it was worthy of consideration, because I happened to be working in Elizabeth at the time—

Q. You knew the strike was on in Newark—wasn't it? A. It was not a general strike.

Q. It was a carpenter strike? A. It was a carpenter strike.

Q. And it lasted from May to June 5th? A. It was a strike.

Q. They were out? A. Out with certain contractors, but every contractor they were not out with. In fact, we had carpenters working.

Q. You say that you took that into consideration? A. I did.

Q. Did you make an allowance for it in one way or another? A. I did not, because I did not think it was necessary.

(Witness excused.)

MARSHALL N. SHOEMAKER, called as a witness on behalf of the defendant, having been duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. VANDERBILT:

Q. Mr. Shoemaker, where do you live? A. Newark.

Q. Where is your place of business? A. 15 Central Avenue.

Q. What is your business? A. Civil Engineer and Architect.

Q. How long have you been in that business? A. Practicing that for 20 years.

Q. Are you familiar with the Igoe Brothers plant in Newark? A. I am.

Q. Did you know it before the fire? A. I did.

Q. Have you seen it since the fire? A. I have.

Q. Have you read over the two reports of Fletcher-Thompson? A. I did.

Q. Which are exhibits in this case. On a building of the construction of Igoe plant, what is a reasonable amount of brick that a mason should lay in a day? A. It depends somewhat on the thickness of the walls. On a 12 inch wall, I would say 1000 brick a day.

Q. And what is the amount of flooring that a carpenter should lay a day, of the type of flooring that is there? A. They will average about 400 feet board measure per day per man.

Q. What is the amount of roofing that a carpenter should lay? I think that was the other item. A. You mean slag roof or roof put on by carpenters?

Q. Roof put on by a carpenter. A. That is usually —it may be one inch or two inch material.

Q. I mean the material that was used here. I am referring to the— A. A good deal of it was one inch roofers. They would average on that between six and seven hundred feet per day, if that is what you refer to.

Q. Well, one item was five-ply roofing. A. That is slag roofing.

Q. That is slag roofing. How much of that should a man put down a day? A. A gang will do about 800 feet per day.

Q. What does a gang consist of? A. It consists usually of about five men.

Q. Are all those of equal standing? I mean, are they all roofers or is there a boss and helper, like the plumbing gang that comes to my house? A. There is a foreman of the gang and usually four roofers, but they all work.

Q. Are you familiar with the plan which is attached to the Fletcher-Thompson report? A. I am.

Q. And with Exhibit D-1, which is the photostat of Mr. B. F. Robinson's report? A. Yes sir.

Q. Can you tell us, Mr. Shoemaker, how long it would take to reconstruct that building or group of buildings there? A. You mean all these sections?

Q. Yes. First give us all, if you can, if you have it that way. I have not seen your chart. A. I think, everything, by August 26th.

Q. From April 9th? A. No, April 13th.

Q. Well, the fire was April 9th, wasn't it; is that correct? A. Yes, sir.

Q. To August? A. August 26th.

Q. August 26th. What is this chart you are now reading from? A. It is a make-up of the figures I made showing the space for the plans, removal of debris, awarding of the contract, repairs to foundations, all the brick work, timbers, roofing, finishing, and painting.

Q. The vertical red line indicates what? A. Sundays.

Q. The vertical blue line indicates what? A. Holidays and rainy days.

Q. You took account of rainy days in that period? A. I did.

Q. Did you make allowance for the so-called strike that is referred to of the carpenters? A. I did not.

Q. Why not? A. Because I was using carpenters. That is, I mean the contractor who worked for me as architect was doing work during that period. They were delayed about two days.

Q. And does this chart take into consideration everything which reasonably had to be taken into consideration as to the period of time which would be required to reconstruct that group of buildings? A. Yes. That is, up to the painting work. I have not included any electrical work.

Q. You have included painting? A. Yes, I have included painting.

Q. Would the length of time be any less if you included building F, H and A, which were used primarily for storage purposes? A. The letters I have for that, Mr. Vanderbilt, are A, G, P and H.

Q. Yes, two-thirds of P was in rented, and A, G, H, were storage warehouses for jobbing material primarily.

Q. Did the fact of their being in this chart prolong the length of the job? A. Yes, depending, if you used the same or practically the same number of men, because the amount of material was more, if you included the four other buildings, which were warehouses.

Q. Eliminating those four buildings, namely, A, G, H and P, the northerly two-thirds of P, how much earlier would the plant be finished through the painting? A. July 18th.

Q. The 18th of July? A. Yes.

MR. VANDERBILT:—I desire to offer the chart in evidence.

(Chart referred to marked Exhibit D-3.)

Q. Is there anything unusual, Mr. Shoemaker, about $178,505.47 of construction work being done on a job of this character in that period of time? A. I do not think so. It would depend a good deal, Mr. Vanderbilt, on how many men you can operate.

Q. Did you take into consideration in preparing your figures, the use of a reasonable number of men having regard to the nature of the buildings and the physical layout, the kind of construction, and all the other facts that a careful engineer or contractor would take into consideration? A. I did.

MR. VANDERBILT:—That is all.

CROSS EXAMINATION BY MR. GILHOOLY:

Q. You said you saw the plant, Mr. Shoemaker? A. Yes, sir.

Q. When did you see it? A. I have known the plant for the past 30 years.

Q. Did you ever make an inspection of it before this fire? A. Not an inspection, no, sir.

Q. What did you say? A. Not a thorough inspection. I have been through the building previous to the fire.

Q. You have been through the building? A. Yes.

Q. What was the occasion of your going through the

building? A. I used to buy a good deal of stuff from Igoe Brothers, structural steel.

Q. You never went through the building to make any particular observation as to the character of the building; that was not your purpose? A. No.

Q. And your attention was never directed to anything of that character? A. No, sir.

Q. When was the first time that you saw the ruins after the fire? A. I was down, I think, the day after the fire, just out of curiosity.

Q. Not to make any measurements? A. No, sir.

Q. When was the next time you saw it? A. I have seen it a number of times; that is, just casually.

Q. Just passing by on a train? A. Passing by—no, not on a train. I drive a good deal.. The duties of my work require that I do that, and sometimes I am in the vicinity, as I say, of Igoe Brothers' plant.

Q. You paid no particular attention to it, after having satisfied your curiosity the first time? A. No.

Q. You did not know at that time that you were going to testify here? A. No, sir.

Q. When did you last inspect the plant? A. I was there Friday and again on Saturday; just this last Friday and Saturday.

Q. You made no measurements at that time, did you? A. Only approximate measurements, checking the plan given to me by Mr. Robinson.

Q. But all the debris had been removed at that time, a good portion of it? A. Yes, sir.

Q. Could any part of the ruins be used? A. Well, there was some parts of the walls that could have been used.

Q. Did you test them out in any way to see whether they could remain or would have to come down? A. No, only from observation.

Q. You made a casual glance at the walls, is that right? A. Yes, practically.

Q. With no idea of putting them to any test? A. No.

Q. In your chart, how much time did you allow for the removal of the debris? A. For all of the buildings?

Q. Yes. A. I have divided this, you see, into two sections.

Q. Three weeks. A. Yes, sir.

Q. All of the buildings? A. Three weeks.

Q. That only included the removal of the debris, not the machinery? A. No. I figured roughly there was —when I was at the plant there used to be an awful lot of wire in rolls.

Q. You saw a lot of machines there too, didn't you? A. Some—nail machines, wire drawing machines. That is when I visited it years ago.

Q. Yes. But you do not know anything as to what was in the building at the time of the fire? A. I do not.

Q. When you saw the ruins the next day after the fire, there was a considerable amount of debris there, wasn't there? A. Yes, sir.

Q. But when you allow three weeks, you only refer to the building and not to the removal of the destroyed machinery? A. No, not the machinery.

Q. And you could not give us the length of time, in your estimate, that would be required to remove that? A. No.

Q. That would be a guess? A. That would be a guess.

Q. And you have not added that in the chart? A. No, sir.

Q. If that were added, of course, it would prolong the time of building, would it not? A. No, I hardly think so. I think they could remove it while the other gang was removing the wire and debris, and some of the walls that would have to be torn down.

Q. From a practical standpoint, if they were going to remove the debris, they would push the walls over and remove each one of them? A. No, I don't think they would. Some of those walls sections of buildings, are as wide as 100 feet and in many instances, there is a lot alongside them where they could be pushed out, I mean so the debris could be pushed out almost any time.

Q. Do you think they could push the debris on somebody else's property to get rid of it? A. No. I am assuming that Igoe had more property than that.

Q. You are assuming something you do not know is a fact. A. I do not know.

Q. Did you make that assumption in figuring your chart? A. I figured three days. I figured that they could remove the debris with the wire and other things, in a way, in order that they might start work.

Q. When, in your estimate, could the material to be used in the construction of the building, be placed on the site? A. I could have all the brick and lumber I wanted there inside of ten days.

Q. Did you calculate that you would have all that material ordered immediately? A. No, it would take a couple of weeks before—with about seven draftsmen working, I feel that we could complete all the plans, and then possibly it would take in the neighborhood of about two weeks in accumulate bids if you were going to have bids on it.

Q. You say that you would have to have seven draftsmen working on a job of this kind? A. Yes, sir.

Q. How long a time would it take to measure up the whole building? A. I think we could do that in three or four days.

Q. Measure the whole thing up in three or four days? A. Yes, sir.

Q. And thereafter, you would have to prepare the plans and specifications? A. Yes, sir.

Q. You think that would take about two weeks? A. About two weeks' time, yes, sir.

Q. Now, before you can do any work at all, you would have to remove some part of the debris, wouldn't you? A. Yes, sir.

Q. And no part of that could be removed until it cooled off. It was pretty hot the day you saw it? A. The day I saw it it was pretty hot.

Q. It was about a week before any man could start to move anything, even if they wanted to? A. That I do not know, how long it would take to cool off.

Q. Did you take into consideration any particular site where this debris could be removed to? A. No, sir, but I figured—

Q. You did not consider that? A. They could usually take it down to the dumps. They are not far from the Igoe plant.

Q. And dump it there? A. Yes, sir.

Q. And all of that could be removed in two or three weeks? A. Three weeks time.

Q. Excluding, however, the machinery? A. The machinery, yes, sir.

Q. And there was more debris in machinery than there was in walls, was there not? A. I could not answer that, because I do not know how much machinery was there at the time. There did not seem to me to be a whole lot of machinery in the entire plant.

Q. I show you Plaintiff's Exhibit 1 and ask you if the day you went down there to see the ruins, you saw anything that looked like the picture on the first page, the lower left hand corner? A. Yes. I think that is the last building down. It looks like it.

Q. There is quite a little machinery in there, wasn't there? A. Well, there were a lot of bolts and pulleys shafts, and a lot of drawn wire, apparently, in rods.

Q. How many men would you say that you could safely work on this job? A. Well, I have estimated that we could work 50 laborers; I mean, cleaning up the debris. I figured masons—I figured 5 carpenters and I figured three gangs of roofers.

Q. How many bricklayers did you say? A. 20.

Q. You think that 20 would be as many as you could work with any particular success? A. To work so that everything else would work in conjunction with it. It might run 25 sometimes and it might be only 15 at other times, but an average of about 20 men.

Q. You spoke about these bricklayers laying 1000 bricks a days? A. Yes, sir.

Q. Are you getting 1000 brick a day laid by bricklayers today? A. Yes.

Q. On work— A. Yes, sir.

Q. —of the character of this building? A. On a three story and basement building, they have averaged 1200 brick a day on a 12 inch wall.

Q. You only know about one of the walls being a 12 inch wall; you did not know what the walls were generally? A. Yes, sir, when I visited there Saturday—

Q. I mean, all of the buildings. A. All of the buildings?

Q. Yes. A. They were only 12 or 14 feet high, and the buildings would call for a 12 inch wall with probably a pilaster under the trestle.

Q. Some were higher, weren't they; two stories high? A. As I remember, the plant ran practically all one story, although the plan here shows there was one building two stories in height.

Q. Now, the fact that there was a considerable amount of open work for windows, that would cause some delay in laying the brick, wouldn't it? A. Well, the last building down, I think it is—no, building S, has walls about eight feet high which are still standing, and then there was a pilaster in between the sides that measured about 18 feet, center to center of pilaster, and the curtain wall in between the pilaster.

Q. You say you did not take that into consideration, the electrical work? A. No, sir.

Q. Did you take into consideration the plumbing? A. No.

Q. Did you take into consideration the heating? A. No.

Q. No piping either, I don't suppose? A. No, sir.

Q. Now, as an architect, Mr. Shoemaker, if you were drawing plans and specification, you would, of course, consider the needs of your client? A. Absolutely.

Q. As to the particular type of construction carried on? A. Yes, sir.

Q. And if there was a considerable amount of wiring required for numerous motors, you would cover that in your original plans, would you not? A. Not always. We cover usually electrical wiring for lights in their plant; also, we always show the necessary plumbing arrangement to meet the requirements of the building.

Q. You would install additional electric wiring after

the building was constructed? A. For power wiring and things of that kind, because we would not know exactly where the machines would be placed .

Q. You did not know just what power was required in this plant? A. I did not, sir.

Q. Therefore, you can't tell how long it would take for that work? A. No, sir.

Q. You do not know how long it would take to restore the plumbing and heating, do you? A. No.

Q. You said that you did not take that into consideration? A. No, sir.

Q. Why didn't you take those items into consideration? A. Why didn't I?

Q. Yes. A. I had no information as to the amount of plumbing and electrical wiring there was in the job originally.

Q. That is why you could not put it in? A. I could not put it in.

Q. You said that you were more or less familiar with buildings of that type? A. Yes, sir.

Q. And those particular buildings—and yet you did not make any estimate as to the time of either of those items? A. No, sir.

Q. Did you look at the old boilerroom? A. No, just passed by.

Q. You did not look to see what foundation was under the boilers? A. No. But I imagine it was piling and concrete capping possibly on top of it.

Q. If you had not examined these foundations, how can you give us an estimate as to how long a time it would take to remove the debris? A. I don't think, on the question of the power house, it would be necessary to remove very much debris.

Q. You did not examine it? A. No, sir.

Q. You do not know what it is, then, do you? A. No.

Q. You said something about carpenters should be able to lay 400 board feet? A. 400 feet board measure.

Q. If you had made a minute examination of it, and allowed time for that, that might or might not add to your estimate, then? A. Yes, sir.

Q. That is not square feet. A. No; if it was two inch plank, it would be twice what we ordinarily consider for one inch sheathing.

Q. So, the Fletcher-Thompson report is in square feet and your estimate is in board feet? A. Board feet, yes, feet board measure, we call it.

Q. Now, do you think it would be practical to start construction of all these buildings at one time? A. No, sir.

Q. Where would you start, in your opinion? A. Well, I think if it was a case of getting under way to manufacture, I would start at the building needed first to manufacture.

Q. You assume that these buildings were all a unit, as one unit, where would you start? Would you start at building S? A. F?

Q. S. A. That is the last one down?

Q. Yes. A. Well, I think I would take in S and the power house. I think the power house is one of the first things that I would take, the power house and possibly building S, because it would work out more conveniently.

Q. Then you would increase your force as the work went on, presume, and go through from that end up to the other? A. I would, yes, sir.

Q. You would not start constructaion of the ware-

houses at one end and building S at the other end at the same time? A. I hardly think so.

Q. Why wouldn't you? A. Because I think there would be a tendency at some time to come together at a point that would make considerable confusion. As in any job, I think that you would have to start as many buildings as you could conveniently with the number of men that you would need to employ on the job.

Q. In employing these men you, as a careful builder, would see that you did not have men standing around idle? A. Absolutely.

Q. And your force would be controlled by that element, would it not? A. Yes.

Q. Did you take into consideration the site with respect to the storage of building material? A. Yes.

Q. Did that enter into your calculation? A. Yes, sir.

Q. It would not be practical to bring in a lot of building material, if you did not have any place to put it? A. No.

Q. You would not do that? A. No.

Q. It is self-evident. Therefore, you would have a limit, would you not, to your organiation of the work with respect to obtaining material? A. Yes.

Q. And if you were trying to erect the buildings at both ends, coming to the middle, that would block off your means of getting to the work from the outside, would it not? A. Yes, sir.

Q. That would not be practical? A. No, sir.

Q. Did you hear Mr. Robinson's testimony this morning? A. Only a portion of it. I was here but I could not hear that very well.

Q. To get the plans and specifications out in the time that you mentioned, you could consider that a pretty

fair job, wouldn't you? A. Yes. We would have to put our efforts on it with seven men.

Q. You would have to go full speed ahead? A. Full speed ahead.

Q. And if you were doing the work—by the way, how many draftsmen have you got? A. I have four.

Q. You have four. That would necessitate your going out and getting three more men if you were doing the job, would it not? A. Yes, but we have a draftsmen's exchange so that we can get men inside of 24 hours.

Q. But usually an architect tries to work with his own force? A. Yes.

Q. It is more practical? A. Yes.

Q. And if you were using your own force, in the normal cause of events you would allow more than two weeks? A. Yes, sir.

Q. Three or four? A. Three or four weeks.

Q. That is, the estimates you gave are based on getting this work done not in the usual normal course of events, but with all speed ahead? A. With all I needed.

Q. With abnormal speed? A. I don't think it would be abnormal speed. It would be the usual course, because you can only get so much work out of masons, and you can only get so much work out of carpenters.

Q. Couldn't you hire more masons? A. You could, but I don't think the job would warrant more than 20 masons on it.

Q. You think that would be a fair estimate? A. I think, on a number of jobs, I have had as many as 30 masons on a job, but that does not always work to the best advantage of the job. They complete it too early for the other men to follow them up.

Q. Now, if a person who was contemplating erecting a building went to an architect, it is not the common

thing for the architect to drop everything he is doing and confine himself solely to this? A. Only under special conditions?

Q. Only under the stress of special conditions? A. Yes, sir.

Q. And if you were to follow that practice, that would add to your time before you could get your plans out? A. Yes, sir.

Q. There is a possibility that if you were to do that in the normal course of events, it might add a couple of weeks on to the progress of the work; is that right? A. Yes, sir.

MR. GILHOOLY:—That is all.

REDIRECT EXAMINATION

By MR. VANDERBILT

Q. How long would it take, Mr. Shoemaker, to do the power house and boiler house by themselves? A. That is known as buildings B and C, I think.

Q. B and C, yes. They are the smaller buildings. A. I had a total here of about 100,000 brick and about 20,000 feet of lumber. I would say approximately one month's time would do that.

MR. VANDERBILT:—That is all.

(Witness excused.)

EDWARD F. McCROSSEN, called as a witness on behalf of the defendant, having been duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. VANDERBILT:

Q. Where do you live? A. Leonia, New Jersey.

Q. What is your business? A. Mechanical engineer.

Q. How long have you been in that business? A. 15 years.

Q. When did you first see the Igoe Brothers plant? A. Shortly after the fire. I don't recall exactly; probably a week; I don't recall.

Q. Have you had experience in the erection and equipment of plants such as that? A. I have had considerable experience in the erection of industrial plants. I have not built the particular wire plant they had there. We built a power house and I equipped that.

Q. Is there anything peculiar about the equipment of the plant, or is it ordinary mill construction? A. It is ordinary engineering construction, and nothing peculiar about it.

Q. Referring to the Fletcher-Thompson, bearing now on the question of equipment, refer to page 1-A in the supplementary report of Fletcher-Thompson, Section C, where an estimate of the work in the engine room is given as six men, 20 days. What can you say from your experience as an engineer with respect to that estimate in the Fletcher-Thompson report? A. That is over-estimated, in my opinion, very considerably.

Q. Why? A. There are too many men taking too long to do it, for that size pipe and that amount. These pipe—four men, in my opinion, could do that in 12 to 13 days.

Q. Referring to Section D, building D on the same page. A. That is estimated by the Fletcher-Thompson report, two men for five and one-half days, or expressed in terms of dollars, a $20 team, having a pipefitter and helper, would mean $110 to install $23.75 worth of fitting, $28.85 worth of pipe and fittings.

Q. Where did you get those figures as to the pipe and fittings? A. This is an exact copy—I have an exact copy here of the items covered in the claim under that section in the fire loss.

Q. Will you produce that, so that Judge Lynch can have that? A. Shall I read this off?

Q. No. Have you the original, from the claim? A. Yes.

Q. In other words, what you are now referring to under building D is the physical equipment which had to be replaced? A. Exactly, the piping.

Q. Yes, the piping. That is what we are dealing with under this page 1-A. I think that you will have to read that right into the record. A. Building 1, Section D—

Q. That corresponds to what is called building D in the Fletcher-Thompson report? A. Yes, sir, We took these as not separate buildings; they are not, they are many segments of one building.

Q. Building D and Section D refer to the same physical property? A. Yes.

MR. GILHOOLY—May I ask what you are referring to?

THE WITNESS—Section D. I took that from the original claim filed by—

MR. VANDERBILT:—Filed by Igoe Brothers?

MR. GILHOOLY:—Is that the original?

MR. VANDERBILT:—I think it is the one that came to us; that came from Miller and Maltbie, adjusters.

THE WITNESS:—Miller and Maltbie, their names are on the back. Each one of those sections are in the blue folder. We just pinned them together as we came along.

MR. GILHOOLY:—All right, no objection.

THE WITNESS:—Building 1, Section D, steam and water pipe and fittings, 29 feet of half inch pipe, $1.45; 80 feet of one inch pipe; $7.20, 4½ inch nipples, 12 cents; 2¾ nipples, 6 cents; 4 1 inch nipples, 16 cents, 1½ inch elbow malleable, 6 cents, 6 1 inch elbows, cast iron 54 cents; 1½ inch T malleable, 7 cents; one 1 inch T cast iron, 13 cents; 1½ Navy union, 12 cents; 2 1 inch Navy unions, 36 cents; 1¾ inch bushing, 4 cents; 1 1 inch plug, 3 cents; 1½ inch cap, 3 cents; 1½ inch Globe valve, Jenkins, $1.32; 1¾ Globe valve Jenkins, $1.82; 1 1 inch Globe valve, Jenkins, $2.32; installation $23.75; 60 feet of two inch pipe, $10.50; 1 2 inch elbow, 24 cents; 1 2 inch by 18 inch nipple, 28 cents; 1 two inch T, reducing, $2; a total of $52.60 for labor and material.

Q. According to the Fletcher-Thompson report, how much labor would it require to install this total of $52.60

of material? A. Well, if I may correct you, there is only $28.85 worth of material and $23.75 for labor in the claim. They have two men five and one half days to install $28.85 worth of material.

Q. What would have been reasonable?

MR. GILHOOLY:—How much do you say they are charging according to the time here?

THE WITNESS:—Two men, five and one-half days, using a $20 team, union rate, at that time, would amount to $110.

Q. What would have been, in your opinion, a fair cost of installing that equipment? A. Cost?

Q. Yes, for installing that equipment? A. $20 at the top.

Q. Now, referring on page 2 to building or section I, what was the total amount of material and installation originally claimed for in the original Igoe Brothers claim? A. $191.88.

Q. What is the cost which Fletcher-Thompson estimate for the installation? A. For installation, at the labor rate we just used, two men, $20, would be $400.

Q. To install $191.88 worth of pipe? A. Yes, sir.

Q. What, in your judgment, would be the number of men and the number of days and the cost for installing that? A. Let me see, we worked that out, two men could install it in six days.

Q. And that is? A. $120.

Q. Now, referring to section or building P, what was the total claim for labor and material made in the original claim of Igoe Brothers for building and equipment loss? A. $46.48.

Q. And what is the estimate of Fletcher-Thompson for this installation? A. Two men, eleven days, the equivalent of $200.

Q. To install $46.48 worth of pipe? A. Yes, sir.

Q. What, in your judgment, would be the reasonable men, days and dollars to install that? A. A team could put the pipe in a day and a half. It would cost $30.

Q. Referring to section or building S, what is the amount of pipe and fittings originally claimed on this building? A. $257.86.

Q. What was the installation— A. I beg your pardon. My error. That is, material installed on that was $128.93;—$328.69.

Q. In the original claim? A. In the original claim for both labor and material.

Q. What is the estimate by Fletcher-Thompson? A. Two men, $40, equivalent of $800.

Q. To install $257.86 worth of pipe? A. Yes, sir.

Q. What, in your judgment, would be the reasonable cost in men, days and dollars? A. Two men could install that in about 12 days, at a cost of approximately $240 or $250.

Q. Referring to page 5 of the Fletcher-Thompson report, what have you to say with reference to the time estimated for installing the transmission shafting? A. That has been very much over-estimated, in our opinion, at least 33-1/3 per cent.

Q. Why do you say that? A. Well, we have worked it all out on a detailed basis of what, in our opinion, is the correct time. The correct amount of time that should be allowed for installing this equipment, putting the shaft in in accordance with the specifications, and then, after we had completed that, worked those figures out, then I checked back on the original claim and found

the amount of installation, labor claimed for that work, and figured it by dividing by the labor rates, and we found they substantially check.

Q. Is this the check-up you refer to (indicating)? A. That is our estimate, yes, sir; that is my estimate of the man days necessary to install the different pieces of equipment in this plant, and I arranged it to parallel the Fletcher-Thompson report to make it easier of comparison.

Q. And referring to this memorandum I now hand to you, will you explain to the Special Master what that consists of and how it relates to this report, if that will expedite things; if not, don't refer to it, if it will not expedite matters. A. Let me see if I can expedite matters by working it out .

Q. Or would it be quicker to go through as we are going? A. I think that it will be a little bit quicker if we go this way.

Q. All right, then, continue with your comment on the power transmission. A. The shafting and the power transmission in building C and D is estimated by Fletcher-Thompson at 218 man days. We estimated that at 179 man days. At the time the original clam—at the time this claim was filed in the fire loss—

MR. GILHOOLY:—I object to any reference to that. I do not see how that is material. There is nothing in that fire loss about the length of time.

THE MASTER:—I think that you have completed your answer anyway, unless there is some other question. I think that your answer has already answered the question.

MR. VANDERBILT:—Unless you want his reason for his statement, rather than his naked conclusion.

THE MASTER:—I assume that there will be some cross examination on that. If you want to go into it further you can do so.

Q. How did you reach that figure; that is what I am trying to get at? A. These figures are our estimate in man days, paralleling the claim of Fletcher-Thompson, and is based on my experience in this kind of work and my knowledge of the installation of transmission and power equipment. As I stated a few minutes ago, our estimates check out with the claimed amount of labor claimed at the time by Igoe Brothers when that amount of labor is divided by the prevailing rate for labor and mechanics. That is merely a check of interest, but we tried to get at it from different angles. This is an estimate which I made from my knowledge of the work. We are consultants for Medart Company, who are the biggest shaft manufacturers and so forth in this country.

MR. GILHOOLY:—You continually refer to "we". Did you do this work yourself?

THE WITNESS:—Individually, yes, Mr. Gilhooly.

THE MASTER;—Whenever you say we you mean I; is that right?

THE WITNESS:—Yes, sir.

Q. Come back to the claim on building D, that you were telling us about. What was the claim for material in the original schedule filed? A. $3,745.33.

Q. And that was the claim for labor, installation? A. $1,632.99.

Q. What was the proportion of labor to material?
A. 43 per cent.

Q. And is that above or below the ratio generally found to be the true ratio as to the cost of installation of transmission in this territory?

MR. GILHOOLY:—I object to that. I think if this witness testifies as an expert, he may testify as to his opinion of what it could cost and the length of time it would take to do this work, and anything other than that is totally immaterial. We are now on a time basis and not on a cost basis.

MR. VANDERBILT:—That may be true, your Honor, but we have here in this case a previous detailed inventory prepared by expert adjusters, Miller & Maltbie, who have been in business many years, and in that detailed inventory or schedule, as it is called, is a statement of all of the labor as well as a statement of what the material was on each of these buildings, and we have the right, as that was the claim that was submitted as representing the amount of loss, actual physical loss by fire, to use it as a check and in the legal sense as an admission as to what the cost of installing these same items would be if the building were reconstructed. I don't say that it is absolute, that no other testimony can be introduced to offset it, but it does seem to me that it is pertinent evidence as expressing the belief of the assured at the time it submitted its building claim, as to what the labor would cost, and it is corroborative of the testimony which Mr. McCrossen is now giving as an expert, and we are simply taking this means on each item of calling it to the Court's attention, rather than seeking afterwards to put that exhibit in evidence and extract

from it, which would be very painful, both for some special master or some vice-chancellor, if they had to wade through it. I am merely seeking to simplify the proof as much as I can.

THE MASTER:—It will be admitted and your objection noted.

MR. GILHOOLY:—Mr. Vanderbilt's answer does not meet my complaint about the question, but he wants to know what the reasonable time is. That pertains to something entirely different.

MR. VANDERBILT:—I will withdraw the question, then.

Q. What would be a reasonable time for installing this material you have just been referring to, Mr. McCrossen? A. The equipment in Section D, I think we are talking about.

Q. That is right A. The equipment, power transmission in Section D, 179 man days.

Q. At a cost of what? A. That would run out about $18. We have got a little mixed up there with C and D in the record. That would come out at about 1611—it would come out exactly at that, 179 days, at the average rate of $9 a day.

Q. As against the cost of Fletcher-Thompson of—A. Let me see, that is $1967.

Q. Referring to Section E on the same page, what is the Fletcher-Thompson estimate? A. The Fletcher-Thompson estimate is 163 man days.

Q. What is the value of the material involving, according to the original Igoe Brothers schedule? A. $2263.53.

Q. What is there claimed about of the installation labor in that original claim? A. $981.78.

Q. What is the proportion of labor to material in that original claim? A. 43 per cent.

Q. Dividing the $981.78 by the average rate per day,—what was the average rate per day, by the way? A. $9 per man per day.

Q. Give us your estimate as to how many man days is required for installing this equipment? A. 109.

Q. And is that a reasonable estimate? A. Our estimate made up for that group of shafts was 108 man days, by days for each shaft.

Q. Referring to section F or building F, what was the Fletcher-Thompson estimate of man days? A. 45 days.

Q. What is the amount of material involved in the original Igoe Brothers schedule? A. $394.03.

Q. What is the amount claimed for labor for installation in the original Igoe estimate? A. $189.24.

Q. What was the proportion of labor to material? A. 48 per cent.

Q. Dividing $189.24 by the average rate of $9 a day, gives how many man days? A. 21 man days.

Q. And is this a reasonable amount? A. Yes, sir.

Q. What was your estimate on that? A. 21 days for the four shafts in that section.

Q. What is the Fletcher-Thompson cost in dollars on this item? A. On this particular item?

Q. The cost of labor, I mean? A. That figures out $405.

Q. And that is the labor cost for installing $394.03 worth of shafting? A. Yes, sir.

Q. Refer to section P or building P—What is the Fletcher-Thompson estimate of the cost of installing the

transmission, and so forth? A. They estimate 23 man days for the two shafts.

Q. And how much material was involved in that item, according to the original schedule filed by Igoe? A. $141.54 worth of material.

Q. And what was the amount of installation they claimed in that original schedule? A. $72.

Q. And how long would it take to install that material? A. Section P, we figured two men four days, eight days all told.

Q. At the Fletcher-Thompson rate in days and men at the prevailing cost of $9, what would be their labor charge for installing $141.54 in shafting? A. $207.

Q. And what does the shafting in the building consist of? A. There are two little shafts in there. One shaft is eight feet six inches long, and 1-15/16 in diameter, with two hangers and two pulleys; one 20 feet long by 1-15/16 in diameter, three hangers and pulleys.

Q. Will you turn to pages 8 and 9, dealing with the electrical work? A. Yes, sir.

Q. And tell us whether or not in your judgment the Fletcher-Thompson report correctly states the man days for the electrical work? A. No, sir, that is over-estimated by approximately 50 days.

Q. In your judgment, how long would it take in working man days? A. 146½ man days in my detail on that.

Q. As against a total of how many Fletcher-Thompson—192, I see at the bottom of page 9. A. 192, yes.

Q. Turn now, if you will, to page 10 of the Fletcher-Thompson report of building or section B. What, in your judgment, would be the reasonable time to take for miscellaneous repairs on boilers? A. Two men could do it in about a week—could do it in a week.

Q. And Fletcher-Thompson charge up how much? A. Two men, two weeks.

Q. At the time of the filing of the original schedule by Igoe Brothers, what was the estimate for repairs on that item in the original schedule? A. It was not listed in the original schedule; only the sound values were given, not the damages—I mean, the replacement cost, not sound value. In the original schedule they did not list the damages.

Q. What was the estimated repairs and replacement? A. The estimate for the repairs at that time was $760.

Q. That was made up how? A. That was repairs to the foundations, water columns, gauge glasses, ten inch scale gauge, angle pipe, valves, in the amount of $415. The asbestos covering on top of the boilers, John-Manville quotation, $107; wiring up, brick, painting, patching and miscellaneous, $175, a total for the three boilers, for material in the list, $760.

Q. Refer to the next item on page 10, building or section C, what, in your judgment, would be the fair amount in man days and dollars for the work referred to there? A. Building C on page 10—just a moment, sir, until I figure this out. I estimate to repair the—to install the equipment in building C, a total of 174 man days.

Q. Fletcher-Thompson's estimate is? A. I do not know what that is; all it says is, "reinstalling two engines would require six weeks' time to complete this work as would customarily be re-erected by the engine builders." That is meaningless.

Q. It does not tell the number of men, in other words? A. No, sir, it is not a complete sentence.

Q. What did you give as the estimate on this? A. 174 man days, total.

Q. Turn now to page 11 of the Fletcher-Thompson report, item 51, the estimate requiring 8 man days or $80 to install. What was this item? A. That was a spare block valued in the claim at $75 and was not installed.

Q. Why do you say it was not installed? A. It was not. It was laying there; it was not installed.

Q. Surplus material? A. Surplus or spare.

Q. What is item 57 on this page, for which is charged $45? A. Item 57 was an old spare No. O Sturdevant blower, valued in the original claim at $49 and in storage on the second floor. Fletcher-Thompson requires four man days to install it.

Q. Was it installed at all in the original plan? A. No, sir, in storage on the second floor.

Q. If it had been installed, how much would it take? A. One day.

Q. For how many men? A. One.

Q. Refer to item 60 also on this page. What was that? A. That was an old Buffalo blower valued in the claim at $30, which was not in use, but in storage on the second floor. Fletcher-Thompson estimated two men two days to install it.

Q. How long would it take if it were installed? A. Probably one day and a half.

Q. But it was not installed prior to the fire? A. No, sir.

Q. What is item 65? A. Item 61, did you say?

Q. I will go back to 61. What was item 61? A. That was a small speed lathe in storage on the second floor, valued in the claim at $25. Fletcher-Thompson estimate taking two man days to install it.

Q. And if you were to install it, how long would it take? A. Two men could do it in a day without any trouble, if it was installed.

Q. But it was not installed at the time of the fire? A. No, it was in storage, not installed.

Q. Item 65. A. That was an eight inch block bench, valued at $630, also in storage on the second floor.

Q. And how much do Fletcher-Thompson put in for installing it? A. Four men five days.

Q. Deducting from their total at the bottom of this page, 321, is it? A. 321, yes; 314—there are two estimates on that page.

Q. 314 days—the items that you have eliminated in the previous questions by reason of there having been articles in storage rather than installed, would leave a reduced charge on the Fletcher-Thompson basis of how many days? A. 276 days.

Q. What was the claimed value of this material that is installed in the original schedule of Igoe Brothers? A. The total claimed amount for installation was about $1800.

Q. Have you got a fair estimate of what the actual cost of such installation would be, in your judgment? A. Yes, sir.

Q. What do you estimate? A. 203 man days.

Q. Referring now to page 12 of the Fletcher-Thompson report, building or section E, the machine shop, what are the various items which are there represented by numbers. Of what do they consist? A. Those are machine shop tools.

Q. Were they unusual in character or ordinary? A. No—very common variety of tools.

Q. And is this cost installing such tools a matter of common engineering knowledge? A. Yes, sir.

Q. The Fletcher-Thompson estimate is 110 days? A. Yes, sir.

Q. $990 in money? A. Yes, sir.

Q. What is your estimate of the cost of installing those tools? A. We have 104 man days.

Q. Or a cost of — A. $9 per man, $936.

Q. Referring to page 13, what was the amount claimed in the original schedule filed for the material or for the labor represented on this page by items one to 41? A. $2249.

Q. Or at $9 a day, how many man days A. 250.

Q. And according to the Fletcher-Thompson report, it would take how many man days to install? A. 310.

Q. Is the figure of $250, given in the original schedule reasonable, in your opinion? A. Yes, sir.

Q. What do you estimate it, figuring the debris? A. We have 259 days.

Q. Referring now to page 14 of the Fletcher-Thompson report, what was the original claim for installation cost in the original proof of the items 1 to 21 in section or building F? A. $340.

Q. How many man days? A. 38.

Q. As against a claim on the part of Fletcher-Thompson of how much? A. 78, but the column is added up wrong; it should be 72.

Q. This is still at the rate of $9 per day? A. Yes, sir.

Q. Referring to section or building H on the same page, what was the claimed installation cost in the original schedule filed by Igoe Brothers on these items? A. $942.

Q. How many man days? A. 103 man days.

Q. As against how many claimed by Fletcher-Thompson? A. 113.

Q. Referring now to page 15, items 94 and 101, represent what? A. They consist of the annealers and muffle.

Q. Were they completed destroyed by the fire? A. No, sir, they were partially damaged .

Q. Would they require rebuilding as indicated on the the Fletcher-Thompson report? A. No, sir.

Q. At the time of the filing of the original schedule of loss, at what amount were they put in for labor and material both to repair these units? A. The estimate at that time was $1,378.

MR. GILHOOLY:—That is not your question. You asked him what the figure was.

THE WITNESS:—That also was listed in the replacement cost in the schedule, without any claim at all.

Q. Can you refer to that? A. No, sir. At the time of the loss adjustment investigation and inspection, the estimate was made for repairs at $1,378.

Q. That is not covered by Igoe Brothers? A. No. They just listed the replacement cost new without any replacement.

Q. What did you estimate the cost of repairs? A. $1,378.

Q. And is that a fair estimate of that cost? A. Yes, sir. We had some bids in.

Q. Of that item of $1,378, how much was for repairs? A. It was approximately $825, which was labor, and the balance material.

Q. That represented how many man days? A. 92.

Q. As against how many claimed by Fletcher-Thompson? A. 268.

Q. Referring now to section or building P, on the same page, how much does the first item, tumbling bar-

rel cost to install? A. About $15 to $18, two men, one day.

Q. Is that a complicated piece of machinery to install? A. No, sir, very simple; about as simple a thing as you can find.

Q. What about the estimate of 89 days to install it? A. I think that is absurd.

Q. The net item is a separator. How much does that weigh? A. That weighs 300 pounds. I have got the drawings—picture of that.

Q. Does it come set up for use, ready to put in? A. Yes, sir. These come packed up in crates, ready to set up, does not require anything except what has to be done to set it up; take it out of the crate and bolt four legs which screw on.

Q. What was the amount of installation cost claimed? A. You would have to connect, of course, the pulleys to the line shaft, but that is just a small item.

Q. What is the cost of installation claimed in the original schedule of Igoe Brothers? A. $15.

Q. What is the estimate Fletcher-Thompson here make of the cost of installing it? A. Two men two days.

Q. The next item is a tumbling barrel? A. That is a smaller one than the other one.

Q. What was the claim for installation cost in the first schedule filed by Igoe Brothers? A. $7.50.

Q. Is that reasonable? A. Yes, sir.

Q. What do Fletcher-Thompson here claim? A. Two men, two days.

Q. And in dollars? A. That is four men, $36.

Q. The next item is a tin machine. What was the claimed installation cost of that in the original schedule? A. $21.16.

Q. What is the Fletcher-Thompson estimate in man days and dollars? A. 16 days and $144.

Q. Is the original claim a reasonable one? A. Yes, sir.

Q. The next item is a second tin machine. A. Yes, sir.

Q. What was the original installation cost of that claimed? A. $150.

Q. Was that reasonable? A. Yes, sir.

Q. What is the Fletcher-Thompson present estimate? A. 22 man days.

Q. Or how many dollars? A. $198.

Q. The next item is, I suppose, a galvanizing pot and furnace? A. Yes, sir.

Q. What is the original schedule cost of installation? A. Why, that was brought up to $200, or approximately 22 man days.

Q. What do Fletcher-Thompson here claim? A. 11 man days.

Q. What was the installation cost of the next item, zinc coater, in the schedule originally filed by Igoe Brothers? A. $220.

Q. How many man days? A. 25 man days. Fletcher-Thompson estimate 22.

Q. What is the next item? A. That is a little rattler.

Q. What is the size of that? A. The size of that —that is a cast iron rattler, 16 inches in diameter, 28 inches long.

Q. How long would it take to install that? A. Oh, a man could put it in in half a day. Fletcher-Thompson estimate two men two days, four days altogether. There is a mistake in the addition in that column, too; it ought to add up 91 instead of 81.

Q. Refer to building or section S on that page, item No. 5, is what? A. It covers the baker, and that was only partially damaged.

Q. Did you make an estimate of what it would cost to repair that baker? A. Yes, sir.

Q. At the time of the fire? A. Yes, sir.

Q. What was your estimate? A. $1,247.50.

Q. Of that how much was for labor? A About $650. That proportion of it was labor and the balance material. That equaled, in man days, 72 man days.

Q. As against the claim of Fletcher-Thompson of 99 man days? A. Yes, sir, 99 man days.

Q. What is the next item, item 6? A. That covers a bull block.

Q. Was this covered in the original schedule of Igoe Brothers? A. Yes, sir.

Q. What did they there claim as the installation cost? A. $200, approximately 22 man days. That is the estimate by Fletcher-Thompson, too.

Q. Item 23, what was that? A. Item 23 covers two small wire benches. The estimated installation cost was $175.

Q. In the original schedule? A. Yes, sir, in the original schedule; 20 man days. Fletcher-Thompson estimated 22.

Q. What is item No. 24? A. That is another eight inch wire bench, a small one.

Q. What was its condition at the time of the fire? A. It was only in the process of being put together. It was not built.

Q. In the original schedule, what was the estimated installation cost? A. $75, 8½ days.

MR. GILHOOLY:—Are you sure that you have the right building? I understand that there was no eight inch bench. Are you sure that you made the proper comparison?

THE WITNESS:—Item 24, yes, sir.

MR. GILHOOLY:—You are positive of it?

THE WITNESS:— Yes, sir.

MR. GILHOOLY:—I understand that there was not any such thing in the building.

THE WITNESS:—This bench was being built, erected.

MR. IGOE:—We had no eight inch blocks.

THE WITNESS:—The tables were being built. I can show you on the schedule.

MR. GILHOOLY:—We will come to that in a minute.

THE WITNESS:—We will come to that in a minute. I can read the exact dimensions, but this is a small bench that was built over in building S. I will check it right now. It will not take but a minute.

Q. Mr. McCrossen, what length of time would it take to equip and install machinery in this plant, including the floor in the boiler room? A. My estimate of that is 1948½ man days.

Q. Now, how many working days would it take to install this machinery? A. All of it could be installed

in—do you mean—let me get you clear, sir—do you mean the total, aggregate time in days to install the equipment?

Q. To get a running plant after the buildings are up? A. After the buildings are up—we install all the equipment in six weeks' time.

Q. Do you have to wait to start installing the equipment for all the buildings to be up? A. No, sir.

Q. Assuming that the boiler house and engine room, buildings B and C, could be put up within one month after the building was started, could you start equipping those rooms without waiting for the other buildings to be finished? A. Surely.

Q. How long would it take to do what they call tuning up; is that in addition to the time you have mentioned?

MR. GILHOOLY:—I don't think the word tuning has been used; it was tooling.

MR. VANDERBILT:—I beg your pardon. A. I will have to have some explanation. What was covered by that?

Q. You heard the gentleman the last time— A. I was not here. I was out of the city when that came up.

Q. The testimony of the Fletcher-Thompson expert was that it would take considerable time to tool up by reason of this being special machinery and making the dies and so forth.

MR. GILHOOLY:—May I interpose an objection here? I understood Mr. McCrossen to say that he had had no experience in plans of this character, and therefore, I don't think he is qualified to pass on this as an

expert, unless he can show some special qualification. I don't think they have established him as an expert in manufacturing concerns such as this.

Q. Have you had any experience in steel wire? A. Yes, sir.

Q. Will you state to the Special Master what your experience in that line has been? A. I was consulting engineer for Sloss Sheffield Steel & Wire Company for a number of years. We built their blast furnace. We have handled their warehouse work. The only special machines in here that I was specifically—that I said specifically I did not build were wire and nail mills; all the rest of the equipment is the common ordinary variety of equipment.

Q. Do you know what kind of dies they use? A. Yes, sir.

Q. What kind of dies did they use? A. They had especial dies for nail mills, and they had wire drawing dies. The total amount of the dies—

Q. Are they standard—do they have standard dies for standard nails? A. Yes, sir. Here is one of the wire dies.

Q. Are they simple dies or is there anything extraordinarily difficult to make about them? A. All dies are more or less difficult, but they can be purchased, and you can have them made; it is a question of time. This is a wire drawing die from the Igoe plant (producing die).

Q. How long does it take to make a nail die? A. It depends on the size of the die. These nail dies can be bought from the people that make the nail machines.

Q. Then they can be purchased? A. Yes, sir.

Q. Then they tool them up, complete the alignment? A. Certainly. It is concurrent with all the rest of it.

Q. Do they furnish sample dies with these nail manufacturing machines? A. Yes, sir.

Q. And those dies can be duplicated just like the sample dies? A. Certainly. I can order all the dies you want and have them ready by the time the plant is finished.

Q. Can they be duplicated by an ordinary mechanic? A. An ordinary die sinker, die manufacturer.

Q. Now, Igoe Brothers do have some special nails which they make, quite unlike the ordinary run of nails? A. Yes, sir.

Q. Is there any reason why the dies for the machines that manufacture those nails could not be made concurrently with their building and the setting up of equipment in the machine shop? A. There is no reason whatever for any die they use not having been made concurrent with the construction of that plant. There are die shops all over the country that make dies.

Q. Their own men could have made them. A. Their own men.

Q. How soon were you down there after this fire, Mr. McCrossen? A. I think I will have to refer to the record to find out.

Q. Approximately? A. Ten days or two weeks, I am figuring on.

Q. When you were down there, was the business of Igoe Brothers totally or partially suspended, so far as manufacturing was concerned in that plant? A. Well, that section of the plant that was involved in the fire was all destroyed; very little salvage; there was very little manufacturing going on in that section of the plant.

Q. But there is no doubt that the plant suffered total suspension as a result of that fire, is there? A. No, sir.

Q. Reference was made by the Fletcher-Thompson expert to the fact that you could not get more than ten millwrights to work on this job at a time?

MR. GILHOOLY:—May I interrupt? Are you going to withdraw the question that you put to the witness asking for his—I thought you were qualifying him as an expert; you had some question to which I objected.

THE MASTER:—I thought you had withdrawn it and started all over again.

MR. GILHOOLY:—There was a question.

MR. VANDERBILT:—Mr. Stenographer, can you find the question?

(The question was read by the Reporter as follows):

"The testimony of the Fletcher-Thompson expert was that it would take a considerable time to tool up, by reason of this being special machinery and making the dies, and so forth"—

THE MASTER:—That is as far as Mr. Vanderbilt got with his question.

MR. GILHOOLY:—I guess there is no question then.

Q. From your knowledge of the equipment of the plant and assuming the testimony given by Mr. Robinson and Mr. Negrey and Mr. Shoemaker with reference to the time it would take to complete the building, how long would it be before the output of the plant would be restored to the extent of 15 tons a day?

MR. GILHOOLY:—Well, I object to that question, unless it can be definitely stated which one of the three estimates as to the time it would take to reconstruct would be taken into consideration by this witness.

Q. Take into consideration, Mr. McCrossen, the one most favorable to the insured; take the longest time.

MR. GILHOOLY:—I object to that. It gives this witness too much opportunity to speculate. It should be definitely stated—the form of the question,—assuming their testimony is that it took a definite period of time.

THE MASTER:—Yes.

Q. Assuming Mr. Shoemaker the estimate with respect to the plant, Exhibit D-3, plus your own estimate as to the length of time it would take to set up the equipment and tool it, how long would it be before the plant was up to 15 tons per day production, from the day of the fire?

MR. GILHOOLY:—I interpose an objection to that on the ground that it has not as yet appeared that this witness is qualified as an expert to testify about plants of the type of Igoe Brothers. He was asked the question, how long it would take to tool up, and he did not know what tooling meant. He has not given testimony to indicate that he has had the slightest degree of experience in plants manufacturing wire and wire nails, and therefore, any opinion coming from this witness must necessarily be guessing and not based on his actual experience. I think he is not qualified to testify as to the length of time.

MR. VANDERBILT:—He has testified that the kind of dies which are used were—which is the meaning, as I understand it, of tooling—are the kind of dies that can be bought from the manufacturers of these machines, or, with respect to the special nails that Igoe Brothers made, that their own man had in the past and could at this time remake those same dies, and that, as to the dies being made for special machines, he has testified as to his knowledge about these machines, not as a manufacturer of wire, but as a mechanical engineer. It seems to me that he has qualified himself for this kind of testimony.

MR. GILHOOLY:—May I have an opportunity to cross-examine him? That is what I thought I would have.

THE MASTER:—Yes.

By MR. GILHOOLY:

Q. Mr. McCrossen, what experience have you had in manufacturing plants? A. Manufacturing plants?

Q. Yes. I withdraw that question. What is your occupation? A. Consulting engineer.

Q. And you have been for how long? A. 15 years.

Q. Prior to that time, you graduated from where? A. Special course in mining engineer at the Ohio State University and a special course at Alabama Polytechnic Institute in mechanical mining.

Q. Mechanical mining? A. Yes, sir.

Q. Nothing to do with the manufacture of wire nails? A. I know of no course that has to do with the manufacture of wire nails.

Q. You mentioned that you were with some company as consulting engineer? A. Yes, sir.

Q. What was the name? A. Sloss Sheffield Steel & Iron Company.

Q. What did they do? A. Manufacturers of pig iron.

Q. That has nothing to do with wire nails? A. No, sir.

Q. And steel wire? A. No, sir.

Q. What other experience have you had as engineer or any capacity, since you got out of college? A. Let me give you the particular items in order to make it clear to you.

Q. All right. A. Prior to the war, I owned the McCrossen Engineering Company with three offices, in New York, Seattle, and Birmingham. We had 20 draftsman in the beginning.

Q. That is you? A. That is myself. It has been my company from the beginning. I was consulting engineer for the Sloss Sheffield, the Corona Coal Company, the Coosa Portland Cement Company, the Kilby Frog & Switch Company.

Q. What did they make? A. Steel frogs, railroad equipment. I operated the Birmingham Boiler Works and owned it. We manufactured there dies and plates.

Q. For boilers? A. For all kinds of structural work. We had some dies.

Q. Nothing to do with wire nails? A. Nothing that small.

Q. Go on. A. And the Rainier Coke & Coal Company.

Q. That was coke? A. By-products of coal, coke plant. The Shaefer Manufacturing Company, steel manufacturers.

Q. What kind of steel manufacturers were they?

What kind of steel did they produce? A. Fabricated steel; plates, bars, angles, beams, and so forth.

Q. They did not make nails? A. Not in a structural steel plant. The Joubert Goslin Machine Foundry Company.

Q. What kind of work did they do? A. Manufacturing machinery of different kinds, especially cotton presses, oil plant machinery, sugar evaporators, sugar presses, special presses of all kinds, benches and presses somewhat similar to these; machine work of all kinds. If I am not mistaken, during the war I was assistant director of operations of the nitrate plants at Mussel Shoals, Toledo, and Cincinnati, in charge of the designing of equipment of all that plant. Subsequent to the war, I have opened my offices here and have been engaged in much the same line of work then as now.

Q. You have never been in a nail or wiring making plant in all that time? A. I have never been in one?

Q. I mean, you have never— A. Are you asking me, was I, or are you making the statement?

Q. I am asking you if you ever were concerned with a company— A. I have never been directly employed by them, no.

Q. And you have never designed any tools for such a plant? A. Not any nail and wire tools.

Q. That is what I mean. A. No, not nail and wire tools.

Q. Do you know what the expression tooling up means in connection with wire manufacturing concerns? A. I have an idea, yes. I told you what it is.

Q. What is your idea? A. You are figuring the length of time to get all the wire drawing dies and forming dies ready to start nail making and wire drawing.

Q. That is your idea of tooling up? A. That is what it is.

Q. You have never superintended the construction of any dies— A. I have.

Q. (continuing)—for a wire manufacturer? A. No.

MR. GILHOOLY:—I certainly think that it now appears this man does not know anything about wire making plants; has never designed any machinery; never had anything to do with them. His estimate would be no better than my guess.

THE MASTER:—Is there any difference between this kind of plant and the ordinary kind of machine plant?

MR. GILHOOLY:—I think there is.

THE MASTER:—I do not know. I am asking the question.

MR. GILHOOLY:—Yes, it is entirely different.

THE MASTER:—Of course, in these hearings before a Special Master, the policy is to be liberal in the admission of testimony so that the matter will not come back again. I will admit the testimony and note your objection, and give it what weight it may be possible to give it in my consideration. What do you gentlemen intend to do?

MR. GILHOOLY:—It looks as though we will have to go on again. Do you have much more from this witness?

MR. VANDERBILT:—No. I am practically finished.

THE MASTER:—You will have quite some cross-examination?

MR. GILHOOLY:—Yes.

MR. VANDERBILT:—Let him answer this one question:

By MR. VANDERBILT:

Q. Assuming Mr. Shoemaker's figures as to the length of time it would take to reconstruct the plant, and take your own estimate of the length of time it would take to equip and tool up the plant, how long would it be—taking into consideration what overlapping there may be in those two things, by reason of their being able to be done concurrently, to some extent—how long would it be after the fire before the plant would be up to the production of the 15 tons per day?

MR. GILHOOLY:—I assume that you are including in that question, the estimate of Mr. Shoemaker?

MR. VANDERBILT:—I referred to it, yes. A. He figured four months,—five to five and one half months.

(At this point an adjournment was taken to a date to be fixed.)

July 11, 1929. 10.00 o'clock a. m.

(Met pursuant to notice.)

Appearances as before noted.

MR. VANDERBILT:—I would like to suspend Mr. McCrossen's examination to put on Mr. Louis.

KENNETH LOUIS, called as a witness on behalf of the defendant, being first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. VANDERBILT:

Q. Mr. Louis, where do you live? A. Worcester, Massachusetts.

Q. And with what concern are you connected? A. The Morgan Construction Company.

Q. And what is their business? A. They are consulting engineers in steel plant equipment and manufacturers of rolling mills, wire mill equipment, producers of gas machines and other steel plant equipment of that nature.

Q. What is their size in their line? A. I presume that we do more business than any one in the country in our line.

THE MASTER:—What is the name of your concern?

THE WITNESS:—Morgan Construction Company.

Q. And how long has the concern been in business? A. I should say, perhaps 45 years.

Q. What is your position, Mr. Louis, in the concern? A. I am in charge of all business relating to wire mills.

Q. And how long have you occupied that position? A. 20 years.

Q. Did you know the Newark plant of Igoe Brothers? A. Yes, sir.

Q. Did you visit it at any time either before or after the fire that occurred in 1925? A. Both before and after.

Q. How many times do you recall that you visited it before the fire? A. I cannot definitely recall more than one visit to the plant before the fire.

Q. And about when was that? A. Probably 1924.

Q. And at that time, did you have an opportunity to become familiar with the extent of the plant and the type of equipment? A. In a general way.

Q. I mean, were you shown through the plant at that time? A. Yes, sir.

Q. Do you recall who was there at that time? A. I recall Mr. Peter Igoe, Mr. Woodward and Mr. Cooney —is it—Cooney or Cooley.

Q. Cooney. A. Cooney, yes.

Q. Well, now, will you describe to the judge, in a general way, the equipment of the plant as you saw it when you were there before the fire? A. I only have a general recollection of it. I only carried away a general impression that it was very old stuff, and obviously of no value; probably could not be operated profitably. I am referring only to the wire and nail equipment. There may have been some specialties, some flat wire or other equipment that I paid no attention to, but it was the wire

and nail equipment that interested me. I carried away the impression that was worse than obsolete.

Q. Well, now, will you outline to the Court why you say it was obsolete or worse than obsolete? A. Well, it dated back to the days of wooden construction.

Q. You mean for the wire machinery? A. For the wire machinery.

Q. Yes. A. And the wooden construction is very difficult of upkeep. The upkeep expenses are very high. It is practically impossible to maintain it in alignment. The power required to operate it is abnormal. The delays for repairs are considerable, and, in fact, it is generally considered that wire drawing equipment of that type is really a liability. It is a losing game to try to operate it. The impression I carried away was that it was that kind of a plant; badly in need of something, an earthquake or something of that nature.

Q. As contrasted with the type of machinery which you have just been describing, will you outline to the judge what the modern type of wire and nail machinery is, or consists of? A. There has been a striking—

MR. GILHOOLY:—Now, if the Master please, I don't see how this is material. The policies of insurance in this case, as near as I can make out, are to restore the profit making facilities. We surely are not concerned with a modern plant or whether it is not a modern plant. I think we are going pretty far afield, and for that reason, I don't think it is material.

THE MASTER:—What is the point?

MR. VANDERBILT:—The point I am driving at, Judge, is to show the length of time that it would take

to equip this plant with modern machinery. I suppose I can get at it in this way:

Q. Did you have any correspondence with Igoe Brothers after the fire? A. Yes, sir.

Q. Have you that correspondence with you? A. Yes sir,

Q. Will you produce it, Mr. Louis? A. Yes, sir.

Q. What was the first correspondence you had with Igoe Brothers? A. May I interrupt a moment?

Q. Yes. A. I hope that nothing is going to come out that would require this to be put in evidence, because, in my haste, all I could do was to steal these from our original files; I did not have time to get any photostats. I can tell you anything that is in this correspondence and refresh my mind from the same.

Q. It will safely get back to you. I don't think that you need to be concerned with that.

THE MASTER:—You are all holding your own exhibits.

MR. VANDERBILT:—Yes, each side is keeping its own exhibits.

MR. GILHOOLY:—I think, if he is going to testify from them, they should go in evidence.

THE MASTER:—They will be marked.

Q. What was the first correspondence which you had after the fire? A. I find a letter which I wrote on the 10th of April.

Q. 1925? A. 1925.

Q. May I see it? A. (The witness hands letter to counsel.) May I substitute this other copy?

MR. GILHOOLY:—I would like to have the originals, if we are going to have them introduced.

THE WITNESS:—Of course, Mr. Igoe has the originals in his file. I have nothing but carbon copies. Those two are identical (indicating).

MR. GILHOOLY:—We received no notice to produce. I do not want to stand on technicalities, but I would not like to be bound by anything of which I have no knowledge.

THE WITNESS:—These two are carbon copies of an identical letter.

MR. GILHOOLY:—Subject to Mr. Igoe's reading it, I can see no objection.

No objection.

Q. Which one of these was it you suggested that we mark? A. Mark the orange one, please, and let me have the yellow one.

MR. VANDERBILT:—I offer this in evidence.

(Letter of April 10, 1925, marked Exhibit D-4.)

Q. Did you personally write this letter, Mr. Louis? A. Yes.

Q. And was it mailed in the ordinary course to Igoe Brothers? A. Yes, sir.

Q. And is it true, as a matter of fact, as mentioned in your letter, that you generally carry enough wire ma-

chines in stock to equip quite a respectable nail, wire mill, for a certain range of sizes? A. Yes, sir.

Q. That you can supply right off the reel? A. Yes, sir.

Q. What was the next correspondence which you had with reference to the matter? A. I find a letter—there was no acknowledgement of the letter in evidence, but I find a letter from Igoe Brothers of April 17th, stating that they are very much—

Q. Have you the letter with you? A. Yes, sir

Q. May we have the letter? A. (Witness hands letter to counsel.)

MR. GILHOOLY:—No objection.

MR. VANDERBILT:—I offer this in evidence.

(Letter of April 17th from Igoe Brothers marked Exhibit D-5.)

Q. And did you reply to that letter? A. I replied to that letter on the 21st of April.

Q. Have you a copy of that letter? A. Here is a copy of the reply (handing letter to counsel.)

MR. GILHOOLY:—Mr. Vanderbilt, if he wants to take these exhibits away, may I suggest that he read them into the record and let him keep them?

THE MASTER:—We can make copies later.

MR. GILHOOLY:—We can have them copied right in.

THE WITNESS:—I have the copies of my own let-

ters. The letters from Igoe Brothers, I have only the originals.

MR. GILHOOLY:—Could they be copied at recess?

THE MASTER:—Yes.

THE WITNESS:—They are very brief; just a few words.

MR. VANDERBILT:—I offer this letter in evidence.

(Reply to Igoe Brothers' letter, dated April 21, 1925, marked Exhibit D-6.)

Q. You wrote this letter, did you, Mr. Louis? A. Yes, sir.

Q. And it was mailed in the regular course of business to Igoe Brothers? A. Yes, sir.

Q. And is it true, as stated in your letter, that your company could deliver Morgan-Connor machine in four to eight weeks, depending on the characteristics of the electrical current? A. Yes, sir.

Q. And heavy rod benches with Carroll friction blocks require generally twelve weeks? A. At that time, yes.

Q. Single block vertical spindle bulls, as shown in catalog, page ten, usually carried in stock. Did you carry them in stock at that time? A. We carried them in stock at that time.

Q. And fifteen frames as shown on page fourteen, could they be delivered in six weeks? A. Yes, sir.

Q. And could you, as you stated, supply motor-

driven—direct motor-driven blocks for single holing or same arranged with double deck blocks? A. Yes.

Q. For two draft work? A. Yes.

Q. What was the next correspondence, Mr. Louis? A. I received a letter dated April 27th from Igoe, asking for a price and delivery on wire machines.

Q. Have you that letter? A. Yes (handing letter to counsel).

MR. GILHOOLY:—No objection.

MR. VANDERBILT:—I offer this.

(Letter of April 27, 1925, from Igoe Brothers, marked Exhibit D-7.)

Q. Did you reply to that letter? A. I replied under date of April 29th.

Q. May I have it please? Was this letter written by you? A. This letter was written by me, yes, sir (handing letter to counsel).

Q. And mailed in the ordinary course of business to Igoe Brothers? A. Yes, sir.

MR. GILHOOLY:—No objection.

(Letter dated April 29th, marked Exhibit D-8.)

Q. Is it true, as you said in paragraph 2 of this letter, Exhibit D-8, that "if we had a free hand with regard to electrical equipment we could probably get a group of about ten machines running in your plant in four weeks." A. That is true, yes.

Q. What do you mean, with a free hand with regard

to electrical equipment? A. The machines were in stock and could be delivered immediately, but we had to equip them with motors and controls and delivery depended on our ability to pick those up quickly. If we were allowed to choose whatever manufacturer we pleased, we could shop around to see who had the motors and control equipment in stock. If they would limit us to General Electric or Westinghouse, and limit us to a certain voltage or number of cycles for the motor, delivery might run to ten weeks or more.

Q. Is that what you meant when you said, "If the equipment is A.C., delivery may run ten weeks, particularly if you tie us up to one particular manufacturer?" A. Yes, that is the idea.

Q. That meant a particular manufacturer of motors? A. Of motors, yes.

Q. How was the equipment driven before the fire at the Igoe plant? A. My recollection is that it was driven from line shafts, which were connected in some way to an engine. I don't recall the type of drive, belt or rope, or something of that general nature.

Q. Was it steam drive or electrical drive?

MR. GILHOOLY:—I think the testimony should be stricken out. The witness palpably is not qualified because he has no clear recollection. I don't think that we should go into the realm of speculation.

MR. VANDERBILT:—I don't want speculation.

THE WITNESS:—I recall it as an engine driven plant, with machines driven from line shafts.

Q. Is it true, as stated in the second paragraph of your letter that so far as the machines themselves were

concerned, you were prepared to make delivery, and the only question was as to the length of time which it would take you to get the motors to connect with them. A. That is true.

Q. And that, you say, would take up to four weeks if you were given a free hand, and ten weeks if you were limited to a particular type of motor? A. That was a very liberal estimate. I might have secured motors within one week. We were tolerably certain that we could do it in four weeks.

Q. Did you receive any reply to this communication D-8? A. No reply.

Q. Did you have any further correspondence with Igoe Brothers with reference to supplying machinery for a new plant? A. We received an inquiry two years later. Perhaps I am not allowed to refer to that, because I have not brought the original letter.

Q. What was it about? An inquiry or what? A. There was an inquiry in 1927 for a direct motor-driven block with double deck equipment. I have a copy of my letter, but I have not the original letter.

Q. May we see your reply? A. My reply refers to their letter of November 4, 1927. My reply is dated the 19th.

MR. GILHOOLY:—I have no objection.

MR. VANDERBILT:—I don't recall whether anything is said there about delivery.

THE WITNESS:—I don't think so. I don't think delivery was in question; it was general information about that general type of equipment; no information that they wanted to buy it.

MR. GILHOOLY:—It seems to me that we are getting very far away from the date of the fire, November 4, 1927; his letter is 2½ years from the fire, and beyond the period that anybody expects to recover on here.

THE MASTER:—I will admit it for what it is worth. You may have an exception.

(Letter dated November 19, 1927, marked Exhibit D-9.)

Q. That was the only correspondence that you had with Igoe Brothers on the subject of this Newark plant? A. That is all we ever had.

Q. Did you have any occasion to visit Igoe Brothers after the fire with reference to the rebuilding of the new plant? A. I visited them in June.

Q. 1925? A. June, 1925.

Q. Yes. Who did you see then, Mr. Louis? A. Well, certainly Mr. Woodward and Mr. Cooney. I don't recall whether I saw Mr. Peter Igoe at that time. I think I did.

Q. What did they say with reference to the rebuilding of the plant? A. I am afraid that I can't answer definitely, Mr. Vanderbilt. I can only recall what general impressions I took away from the interview.

Q. When did you see them next, if you did see? A. I believe I saw them three times that year. I have made a note of the date, but I think you probably have the note.

Q. Is that it at the bottom of the page there (indicating)? A. Yes. December 8th and December 30th of the same year.

Q. And who did you see then? A. The same people, Mr. Woodward, Mr. Cooney and Mr. Peter Igoe.

Q. And do you recall what, if anything, was said at that time about rebuilding the plant? A. I can't quote anyone, Mr. Vanderbilt. I can only tell you the impression I brought away.

Q. When next did you see anyone with respect to this plant? A. I find that I did not call on them again until June, 1926.

Q. And saw the same people? A. I can't recall.

Q. When did you call on them? A. In August, 1927.

Q. When next? A. March, 1928. Those were merely routine calls, just to keep in touch.

Q. Just routine calls. Was anything said to you on any of those occasions of their starting to rebuild the plant? A. I was given to understand—

MR. GILHOOLY:—I object.

THE MASTER:—No.

Q. You can state what you understand. There must have been a conversation. A. I am sorry. I can't repeat that conversation.

Q. Now, Mr. Louis, have you ever had any experience in the building, or supervising the building of any other wire and nail plant? A. Yes, sir.

Q. Which ones? A. Well, it is a very long list, Mr. Vanderbilt. We have supplied wire equipment to most of the mills in the country. We have—

MR. GILHOOLY:—I think the witness is not answering the question. It is not responsive.

THE MASTER:—Strike out the answer.

Q. Start over again. A. Yes. Did you ask me which plants?

Q. Yes. A. I will mention the latest which is Sheffield Steel Corporation at Kansas City, Missouri.

Q. Where is it located? A. Kansas City, Missouri.

Q. When was that plant built? A. The plant was built during the latter half of 1928.

Q. What was your relationship to the construction of this plant of the Sheffield Steel Corporation? A. Consulting engineer.

Q. What was the relative size of the Sheffield Steel Corporation plant that you had to do with in the latter part of 1928 compared to Igoe Brothers Newark plant? A. The Sheffield plant started out at perhaps three times the output of the Igoe plant, and was designed for rapid development to about ten times the capacity of the Igoe plant.

Q. And can you tell us how long it took to build the buildings and equip this Sheffield plant with machinery and get it in operation?

MR. GILHOOLY:—I object to that on the ground that it is wholly immaterial. The conditions would have to be shown to be the same to be of any materiality in this case; the condition of the site and many other matters of considerable importance, particularly time of construction and the needs of the parties would have to be explained and negatived, or thoroughly explained, at least; therefore, I think that certainly is not competent. It is immaterial in this issue.

THE MASTER:—I rather agree with you, but I will

permit the testimony to go in and permit you an exception.

MR. GILHOOLY:—That does not count for very much in Chancery.

THE MASTER:—You know what these master hearings are; it is safer to let the testimony go in, and then eliminate it. I can ignore it, and the Vice-Chancellor can eliminate it, if we do not think it is competent.

MR. GILHOOLY:—Under those circumstances—

THE MASTER:—Yes. A hearing before a Special Master is different from a hearing in open court.

MR. VANDERBILT:—Will you repeat the question?

Q. (The pending question was read by the Reporter).

A. Would I be permitted to give a few dates.

Q. Yes. A. I recall several dates, landmarks on that job. On the 17th of July, I visited the plant. The buildings that—

MR. GILHOOLY:—What year?

THE WITNESS:—1928. The buildings that had previously occupied the site were not all torn down yet. Excavation for column bases was just starting. I should say that here might have been fifty or sixty yards of excavation.

MR. GILHOOLY:—If the Master please, while he is permitted to answer that question under your Honor's

ruling, I don't think that we should be charged, in addition, with this construction matter, which he certainly is not qualified to give, and I think this testimony has that trend. If he is going to answer the question directly, I will have to submit to the Master's ruling. We wanted the time.

THE MASTER:—We want the time.

THE WITNESS:—Just—

THE MASTER:—Just the time.

Q. How many weeks, days or months? A. Five months.

Q. Five months. That is from the time you saw the building— A. From the time the excavation started, the first sod was turned, until the mill was delivering finished material into the warehouses, ready for shipment.

Q. How long did it take of that five and one half months' period, Mr. Louis, to supply the machinery in the plant? A. I am not sure I understand you.

THE MASTER:—From the first to the last shipment, I suppose.

MR. VANDERBILT:—I mean, to equip, to install the equipment and machinery in the plant. In other words, how much of this five months was devoted to building construction, and how much to the installation of equipment and machinery?

THE WITNESS:—I think I can give you what you want.

Q. Yes. A. On the 17th of November, we were notified that there was sufficient roof in place to cover the machinery, and that they could receive shipments. On the 29th of December, six weeks later, we received a telegram saying that they were in full operation.

Q. That is a period of—

MR. GILHOOLY::—Give me that again.

THE WITNESS:—November 17th we were notified to ship.

THE MASTER:—The last date.

THE WITNESS:—And December 29th, they telegraphed they were in operation.

Q. That is one month and twelve days? A. Yes.

Q. And that involves a shipment of a much greater distance than would have been necessary in the Igoe Brothers plant? A. 1500 miles.

Q. Was it the same class of machinery as would be used in fitting up Igoe Brothers plant? A. Yes, sir.

Q. Only there was three times as much to be supplied? A. I don't like to get involved in a discussion, but modern machinery can do about twice as much per unit as the machinery that was destroyed. I will answer that by saying that the machinery was figured for three times the production Igoe Brothers was making.

Q. How much of that one month and twelve days was devoted to tooling up, as they call it? A. None at all. I don't understand. I don't know if I understand what tooling is. In fact, I do not. I do not know the term.

Q. Is tooling up necessary on this modern wire and nail machinery? A. No, sir.

Q. It comes ready to operate? A. The machines are ready to operate.

Q. In what period of time, Mr. Louis, could your company have equipped Igoe Brothers with machinery so as to get them in normal operation?

MR. GILHOOLY:—I object on this ground: The witness has said in his testimony that he paid no particular attention to the special machines which they had for special work; that he only noticed the general machines they had for ordinary wire and ordinary nails, and it appears in this case that there was considerable machinery that was used soley for the manufacture of specialities. This witness has stated that he did not pay any particular attention to that. Therefore, any estimate that he would give would not be based on facts, but merely hazarding a guess. Therefore, he is not competent to testify. There is no testimony, further, as to the number of machines which we had in the plant.

THE MASTER:—What about that?

Q. Your fitting up would not depend on the number of machines they had, but on the amount of output that they wanted to have as a result of the fitting up, wouldn't it? A. The output, yes, sir.

Q. And assuming that the output of the old plant had been 35 tons a day, how long would it have taken to supply the machinery to equip the plant?

MR. GILHOOLY:—Now, I certainly object to that because the tonnage which was part of this output was special wire and nails, and unless the question will embrace the character of output as well as the quantity, I think it is inadmissible; it is not competent.

THE MASTER:—I agree with you as to that.

Q. Well, would the length of time which it would take you to equip this concern depend on what particular kind of nails were to be made? A. No, sir.

Q. And why not, Mr. Louis? A. It does not, as a rule, take special machinery to make special products, in wire and nail plants. It simply means that there must be slight adjustments and changes of dies in standard machines, or if wire of a special finish is to be required, there must be a special treatment of the wire before it reaches the machines. The equipment generally is the same.

Q. Were you familiar with the output of the Igoe Brothers plant before the fire? A. Yes, sir.

Q. Taking into consideration the output of 35 tons a day of the type which Igoe Brothers produced before the fire, how long would it have taken you after the fire to have supplied them with machinery?

MR. GILHOOLY:—I renew my objection.

Q. Allowing a free hand for the purchase of electrical machinery?

MR. GILHOOLY:—I renew my objection on the ground that it now appears that the witness has affirmatively stated that in the production of special wire and special nails adjustment would have to be made and new tools required, therefore that becomes very material in figuring the time necessary to equip the plant in the condition it was before the fire.

THE MASTER:—If the witness will take that into

consideration before that question is answered—I assume it is embraced in the question.

MR. VANDERBILT:—I did, specifically. Answer that.

MR. GILHOOLY:—But, they have not as yet explained the character of the specialties manufactured, the length of time it would take to make certain tools to manufacture the specialties we did manufacture; until that is explained, his guess is no better than mine or the Master's. He is not competent to testify.

Q. Are you familiar with their output before the fire? Do you know what they made? A. Yes, sir.
Q. Take that into consideration.

MR. GILHOOLY:—Well, now—

THE MASTER:—Do you want to cross-examine him on that?

MR. GILHOOLY:—Yes, sir, I think I should have an opportunity to do that.

THE MASTER:—You may cross-examine him on that.

CROSS EXAMINATION

By MR. GILHOOLY:

Q. Mr. Louis, you say that you were in the plant before the fire? A. Yes, sir.

Q. Do you know what time you were there? A. I think it was 1924.

Q. Is that the best recollection you have? Can you give us the month? A. No, sir.

Q. Do you know whether it was in the early part or latter part of 1924? A. I haven't the faintest idea.

Q. You have no knowledge of what they were manufacturing in the early part of 1925, have you, of your own knowledge? A. If you mean I did not see them manufacture it, that is so.

Q. You were not there, of course, were you, in 1925? A. I was not there in the early part of 1925.

Q. So, you know nothing of your own personal knowledge of what was being manufactured? A. I know what could have been manufactured with the equipment they had.

Q. Do you know what they were manufacturing? Your answer must necessarily be "no," isn't that so? A. As I understand it, I am not allowed to know what they were doing unless I saw them doing it at the time.

Q. You are the witness. A. Certainly not.

Q. When a special type of wire or nail is ordered, that, of course, requires special equipment, doesn't it? A. If I can—

Q. Can you answer that yes or no?

MR. VANDERBILT:—I think the witness should be permitted to explain.

THE WITNESS:—I will be misunderstood, whateer I say. If you will let me explain, I will say "yes."

Q. I will withdraw the question. Specialties are only produced by wire manufacturers upon a special order; isn't that true? A. As a rule.

Q. And until you receive the special order, an order which is not the ordinary one, you do not prepare to fix your tools for that character of work, do you? A. As a rule that is so.

Q. That is so in all cases, isn't it? A. Taking a general rule.

Q. And, therefore, where special wire is ordered, is is to be manufactured these tools haev to be made specially for that particular order? A. I can't agree with the line you are going along. There is nothing—

Q. Then, your answer to that is "no"; is that right? A. There is nothing required in special wire that could not be prepared in a matter of two or three hours.

Q. You mean that you could prepare dies and tools? A. Every die, I would say, could be made in five to ten minutes.

Q. That is your impression of it? A. That is my knowledge of it, sir; not my impression.

Q. You did not go through the plant in its entirety when you made your visit in 1924, did you? A. I think I was shown the entire plant.

Q. Well, now, please tell us what they had in the plant, from your own recollection. A. My recollection is of having seen from 75 to 80 wire blocks, arranged in groups, say, of from six to ten, and of those, I should say that perhaps one-third were what were known as rod blocks; blocks of a diameter ranging from twenty to twenty-four inches, and capable of drawing wire from the rolled rod. The other two thirds being re-drawing blocks, to handle smaller wire. I should say that perhaps one-third of the entire equipment was—perhaps one-fourth of the equipment was capable of producing what is called web wire.

Q. Can you tell us where the wire drawing equip-

ment was in the plant; what part of it? A. I seem to recall it as being mostly in the building whose end fronted on the canal or ditch.

Q. When speaking of the end, what do you mean by the end, the last building? A. I mean the building fronting on the ditch of some sort. And I seem to recall most of the heavy wire drawing machinery as being on the ground floor of that building.

Q. Do you know where the cleaning house is in the wire mill? A. Yes, sir.

Q. Where was that situated? A. My recollection is that was in the opposite end of the plant, quite a distance from the heavy rod benches.

Q. Are you sure that it was not right alongside of it? A. I am afraid that my recollection is rather faint. I go through a good many wire mills in the course of a year, and this was a good many years ago.

Q. And you made only one visit to this plant? A. Before the fire?

Q. Before the fire? A. I believe that I had made another visit to the office, but it was only one occasion on which I was taken through the plant.

Q. What was the occasion of your visit at that time; to sell machinery? A. To sell machinery.

Q. You testified on your direct examination that you paid no attention to the special machinery that was there; is that correct? A. That is not quite correct.

Q. You want to modify that? A. I want to modify that by saying that I saw everything. I think I saw everything that was there, and I paid attention only to the items interested me with a possible view of replacement.

Q. And they were what? A. They were on their entire wire mill and the nail plant. I recall—I seem to

recall that there was some cold rolling done, and I had no interest in that, and just gave it a side glance as I went by. It interested me, only insofar as a wire mill that I would supply material to.

Q. You at that time were not interested in the nail machines? A. Yes; the nail machines always should be closely—

Q. Were you or were you not? A. I was not selling nail machinery.

Q. Then you were not interested in the nail machinery? A. As a consulting engineer, I was interested in the entire plant.

Q. I am now talking about your visit in 1924. You were only interested in the wire drawing machinery; is that right? A. No, sir.

Q. You were not selling nail machinery? A. I was not selling nail machinery.

Q. You had no interest in it? A. A consulting engineer has an interest in things that he does not sell.

Q. You were there for the purpose of selling machinery? A. I went to get any kind of job that I could get, as engineer or contractor.

Q. You never tried to sell them nail machinery, did you? A. I don't think I mentioned the word to them.

Q. You were not interested in nail machinery as a salesman? A. As a salesman of machinery I was not interested in nail machinery.

Q. Therefore you paid no attention to the nail machinery; is that correct? A. That is not correct.

Q. That is not quite correct. Have you ever sold nail machines? A. I don't think we have.

Q. So your interest solely, then, is that of a manufacturer and salesman— A. Don't misunderstand me. We have acted as purchasing agent; as consulting engin-

eers, we act as purchasing agents and buy nail machinery for resale.

Q. You are speaking of your company? A. I am speaking of my company, yes.

Q. But you do not sell them? A. Personally?

Q. Yes. A. Oh, yes.

Q. Only as a jobber, not as a manufaceurer? A. Not as a manufacturer. We recommend the purchase of certain nail equipment, but we handled the matter in the way that best suits our customer.

Q. Getting down to 1924, can't you recall—your recollection seems to be pretty good on what you saw—can't you recall when you saw it? A. No, I can't. I am sorry. If I had known you were interested, I could have looked it up.

Q. You could have referred to your file to refresh your recollection as to the time, or approximate time; is that right? A. Yes, indeed.

Q. Yet you can remember everything you saw in the plant? A. I can remember pretty well my state of mind about what I was trying to do, what I hoped to do with them at that time, and that gives me a clue as to the year it was; about the way I was working in 1924.

Q. You do not know how many nail manufacturing machines they had in this plant in 1924, do you? A. I can only estimate.

Q. You would have to guess? A. It would not be a guess; it would be an estimate.

Q. You were not interested in nail machines, were you? A. Yes, indeed.

Q. Were you trying to sell them as jobbers? A. No, sir.

Q. Nor as manufacturer, of course? A. Probably I had better tell you just what was running in my mind.

Q. I do not want what was in your mind. I want to know what you saw there? A. I think I saw the entire—

MR. VANDERBILT—Now—

THE MASTER—I think the witness can answer the question. He can handle himself pretty well.

MR. GILHOOLY—I don't want what was in his mind.

THE MASTER—No, you did not ask that.

MR. GILHOOLY—I have no further consideration on this. I still press my objection . The witness is not competent to testify because he has not given us anything more than just a guess as to what was in there. He would have to have a knowledge of the character of machines and character of output, and he is not an expert on nail making machines.

THE MASTER—It goes to the weight that the testimony is to be accorded. Some witnesses have more knowledge than others. This witness has some knowledge, and based on his knowledge he gives some information. I overrule the objection.

DIRECT EXAMINATION (Resumed)

By MR. VANDERBILT:

Q. Taking into consideration, Mr. Louis, the output of Igoe Brothers before the fire—

THE MASTER—Both as to character and quantity.

Q. —both as to its character and quantity—by quantity, I am assuming it to be approximately 35 tons—how long would it have taken you in the period immediately after the fire of 1925, being allowed a free hand in obtaining the electrical equipment, to have supplied Igoe Brothers with the machinery and had it installed ready for operation? A. I have already answered that in a letter as four weeks. Probably if I were pinned down to a penalty and bonus basis, I would ask for five weeks.

MR. VANDERBILT—Cross-examine.

CROSS EXAMINATION

By MR. GILHOOLY:

Q. Mr. Louis, you do not sell rivet making machines, do you? A. No, sir.

Q. And you have had no experience in the manufacture of them, have you? A. No.

Q. Do you or do you not know that a considerable part of Igoe Brothers business was rivet making? Did you know that? A. I did not know that a considerable part of it was. I knew that they had some rivet machines.

Q. Did you take into consideration in figuring your estimate the time to equip this plant fully with rivet making machinery? A. Yes, sir.

Q. Did you assume that the rivets were standard, were manufactured by standard machines, or did you figure on special machinery for that character of work?

A. I do not know of any special machinery that is required for special rivets.

Q. Then do I take it that your knowledge of rivet machinery is limited to standard products; is that right? A. Standard is so loose a term.

Q. Well, what do you mean by a loose term? Maybe I can be more explicit. A. Well, I should call standard machinery, machinery which could generally be found in stock, not rebuilt on special order, not specially designed to order.

Q. And machinery which would have to be specially designed, of course, was not taken into consideration by you in making your estimate? A. Certainly not.

Q. And your estimate, also, with respect to wire drawing and nail manufacturing was based on a common wire factory and common nail factory, isn't that true? A. Unless I can answer fully, it would be misleading.

Q. You may answer fully. I want your answer. A. What you really want to know is whether Igoe Brothers would have required a line of wire and nail machinery that they could not have had out of stock?

Q. No. I do not want that at all. I want to know, if, in making your estimate as to the time in which you could fully equip this plant, you based it on the consideration that Igoe Brothers were maintaining a common wire and common nail factory? A. No, sir.

Q. What did you consider in forming that estimate to the nature of their product? A. I took my inference from Igoe Brothers letterhead, which told me about what I needed to know.

Q. And that is what? A. That they are making bright, copper, annealed, galvanized, tin wire, I knew, and header wire.

Q. What does that convey to you; that they are manufacturing common wire or special wire? A. Manufacturing low carbon wire.

Q. Manufacturing low carbon wire? A. That tells me all I need to know. That gives me a clue as to the sizes of their products.

Q. You are relying, then, in forming your judgment, solely on the nature of the advertising matter that appears on their correspondence; is that right? A. That, together with my recollection from a trip through the plant.

Q. You saw some machines for specialized work when you went through the plant, didn't you? A. I would not say that, no. I saw machines which could have produced specialties.

Q. Would you say there were no such machines? A. I will say that I do not recall having seen any machines that could not be picked up in the market.

Q. After you had gone around and visited the plant, examined all the machines in the plant minutely or otherwise, did you examine the product as finally manufactured? A. Yes, sir.

Q. Did you examine all of it? A. I examined what fell under my eye, as I walked through the plant.

Q. And you were paying no particular attention to the finished product, were you? A. I always pay particular attention to the finished wire.

Q. Then you only saw on your inspection the wire they had manufactured that particular day? A. That is right.

Q. So, you did not know what they manufactured theretofore or subsequently thereto? A. I saw what was in the process of manufacture at that time.

Q. Was that of a common nature, common wire?

A. That is another very elastic term.

Q. Was it anything out of the ordinary? A. Not for the East, no; the markets of the East require something a little—

Q. I am talking about what you saw. A. I am trying to answer as to what I saw. These Eastern markets require something a little better than the ordinary common product of the markets of the West, and Igoe naturally was meeting the requirements of this Eastern market, his wire was probably a little better finished, perhaps a little truer to gauge than the common run of wire nails made for the Middle West. But as Eastern markets go, it was typical; a typical Eastern wire plant and product.

Q. Still there was nothing that was extraordinary or out of the usual run, was there? A. No, nothing extraordinary about it.

Q. So, if, in fact, they did manufacture wire and wire nails which were of an unusual character, that was something that did not come under your observation when you were at that time; is that correct? A. No; I won't say that. I saw odd shaped nails and nails with peculiar heads, peculiar points. Those are to be seen in any Eastern nail plant. The Eastern nail plants, you understand, do not go heavy for the common nails.

Q. Then it was not a common nail factory, was it? A. It was—that is awful hard to answer—it was a cross between a common product and a specialty plant.

Q. If you were informed, or if it should appear, or it should have appeared, rather, in this case, that they were highly specialized in this particular manufacturing business, would that change your opinion of it? A. No, sir.

Q. It would still be the same? A. My opinion as to what?

Q. The length of time to equip it. A. No, sir. It would not change my opinion.

Q. It would not or would? A. It would not.

Q. And that, too, with the fact that they specialized in rivets, specialized rivets, that would not change your opinion either? A. That would not change my opinion.

Q. You, of course, have had no experience in rivet making machines and the output of rivets, have you? A. That is not a fair statement. As consulting engineer and as manufacturer of wire machinery, I see hundreds of rivet machines. I have to discus the character of the product with the owners, and I have to be prepared to supply the proper product to them.

Q. Let me ask you this: You speak about being consulting engineer. May I ask your preliminary education in this particular line? A. How far back would you like for me to go?

Q. Start with your college degree. A. General schooling.

Q. You have a degree of what? A. Bachelor of Arts.

Q. That has nothing, of course, to do with engineering? A. The degree itself, no.

Q. And after you were graduated from college with this degree what did you pursue? A. I should say that I specialized in metallurgy and metallography. I studied that under Professor Silver of Harvard. From there I went with the Bethlehem Steel Company.

Q. And you had, of course, nothing to do with wire drawing or wire making or manufacturing nails, did you? A. And I became a specialist in the manufacture of steel. I was in charge of the steel plant.

Q. The Bethlehem Steel— A. (interrupting):

Don't misunderstand me. I do not mean the whole plant, but the steel plant, which is that division of the plant devoted to the refining of steel, open hearth steel.

Q. What did you do after that? A. After that, I went with the American Steel and Wire Company, where I did research work. I moved around among the mills looking for chances to improve the process, and the disposition of waste products and things of that sort.

Q. That had nothing to do, of course, with the manufacture of wire or wire nails, did it? A. The American Steel & Wire Company were making wire and nails and rivets, and every wire product.

Q. The manufacturing end of it did not come under your supervision or your attention; you were only looking into the research work with respect to the quality of steel; is that correct? A. No, sir, no indeed. I was concerned with every detail.

Q. How about rivets? Did you manufacture rivets? A. They did.

Q. Did you have any part in the manufacture of rivet making machines? A. No. From the American Steel & Wire Company I went with the Morgan Construction Company and took charge of this business of wire machinery.

Q. Then, as consulting engineer, your activities did not take you into the fields of rivet making, did they? A. They have taken me along the edge of that field a number of times.

Q. Just the edge, but never intimately acquainted? A. They have taken me to the point of having to investigate the machines on the market and make recommendations to my customers as to what machines they should buy, and how they should be installed and arranged, and how the product should be handled, and how the raw material should be brought to them.

Q. I take it that you are not— A. I have never operated a rivet machine, if that is what you are getting at, nor have I ever designed or built a rivet machine.

Q. You are not a mechanical engineer but your engineering qualifications are based on your personal experience? A. Very largely.

Q. You said that when you inspected this plant in 1924 that the equipment was very old and could not have been operated profitably; is that correct? A. Yes, sir.

Q. Would you change your opinion as to the profitable factor of this company's business, if you knew that the net profits for the year 1923 were $197,678.50? A. No, sir.

Q. Would that change your view? A. No, sir.

MR. VANDERBILT—I object to that unless that is segrated between jobbing and manufacturing. That does not appear as yet.

Q. Well, referring to the report of the Commissioner which is evidence, the average adjusted profit for the year 1923-1924 was $90,435.51, from the manufacturing end of this business. Does that change your opinion as to its profitableness? A. No, sir.

MR. VANDERBILT—I object to that, on the ground, as I recall it, that figure related to both jobbing—

THE MASTER—The question confines it to manufacturing, and the answer is "No."

Q. If they could not operate the mill profitably, how do you account for that profit? A. There are a lot of things going on in the accounting department that are unaccountable.

Q. This is an account that has been gone over very carefully by an accountant, and the umpire, and definitely arrived at, so it is not a question of accounting, but a question of actual profit? A. You mean the figure has been set up and agreed on. I don't have to accept that figure.

Q. I am asking you to predicate your opinion on the assumption they have a profit; would that change your opinion as to whether or not this mill was operating profitably with the machinery you saw in there? A. That question does not seem to make sense.

Q. Can't you answer that question? A. I don't quite know what I am answering.

Q. I will change it. A. You say, assuming the mill was running at a profit, was it running at a profit. I can't change that.

Q. Would that change your opinion? A. No, sir.

Q. Why wouldn't it change your opinion? A. If I knew of my own knowledge that profit had been made, I would know that profit had been made; that is all.

Q. Would you say, then, with this old equipment, and assuming that profit had been made, that the mill could be run profitably with what you saw—is that correct? A. Then you are asking me whether white is white and black is black.

Q. Then your answer is that it was. A. I do not know any sensible way to answer such a question.

Q. Now, Mr. Louis, you said this mill could not have been run profitably with what you saw there? A. Quite right.

Q. Assuming that it was run with a profit, what element would enter into consideration to explain that profit? A. Funny bookkeeping.

Q. That is the only thing? A. That is the only thing I can think of.

Q. Assuming that they were honest people. A. I would say it is just as possible that if the machinery had been all written off at a value of zero, and there had been no further charge for depreciation, a profit might be shown.

Q. That is the only way that you could account for it? A. That is the only way that I could account for it. That is the way in which I would attempt to account for it, if I knew a profit existed.

Q. Would you not attribute the fact that the company made a profit to the fact that they are specialists in their line? Wouldn't you attribute the profit to that? A. No, I don't think so.

Q. Wouldn't you attribute the profit that they made to the fact that they had special equipment with which they made special wire and nails?

MR. VANDERBILT—May I interrupt to object to this whole line of testimony on the basis that the figure which counsel is using is a figure which applies both to manufacturing and jobbing, the figure of profit.

MR. GILHOOLY—I am reading from the report.

THE MASTER—I misunderstood it, then. I understood that the question related to manufacturing only.

MR. GILHOOLY—I am reading from the profit wherein it is set forth that the average adjusted profit for one year represented by both manufacturing and jobbing, but since we are only concerned with manufacturing, the profit that necessarily applies is 62.68 per cent. of $144,401.09, which is $90,485.51, which is the adjusted profit on the manufacturing.

Q. You do not know, in the last analysis—you can't understand how this concern made a profit with the antiquated machinery; is that correct? A. That is correct.

Q. You say that you communicated with Igoe Brothers on April 10th; is that right? A. Yes ,sir.

Q. And the purpose of it was to try to sell them equipment? A. Yes.

Q. And you have not, as yet, succeeded in selling them any equipment, have you? A. No, sir.

THE MASTER—Do you hope to sell them any in the future?

THE WITNESS—No, sir.

Q. The tools you contemplated furnishing as part of your equipment were the tools which were for the common ordinary run of wire; is that correct? A. We had tools that could be used for anything that Igoe was manufacturing.

Q. You do not know what he was manufacturing, Mr. Louis, do you? A. I probably could not satisfy a lawyer that I knew, but we people in the wire business know the wire business pretty well, and we know what each other—we know what our friends are doing.

Q. Could you give me a detailed list of everything that as manufactured by Igoe Brothers? A. No.

Q. Then you do not know, Mr. Louis, what they did manufacture? A. I don't believe Mr. Peter Igoe knows, in that sense.

Q. I am asking you, not Mr. Igoe. A. I don't think that anyone else on earth knew except the warehouse men on that particular day, as a wire plant shifts from day to day, according to how the orders run.

Q. On this day in 1924, the exact date of which you can't remember, how long were you in the plant? A. My recollection does not go that far, but it must have been an hour or two; two hours, perhaps.

Q. Who escorted you through the plant on that day? A. I think it was Mr. Woodward.

Q. Are you positive? A. No, not at all.

Q. You would recall the man; you know Mr. Woodward, of course? A. I know Mr. Woodward. It was either Mr. Woodward or Mr. Cooney, I believe, on the whole, it was Mr. Cooney. I recall talking with him, I think, on that first trip.

Q. Isn't it a fact that part of that time was spent in the office? A. Undoubtedly, yes.

Q. Do you know about how much time you spent in the office and how much you spent in the mill? A. No, sir.

Q. You were there trying to sell? A. Yes, sir.

Q. And no doubt most of that time would be spent in the office trying to sell your product to this manufacturer; isn't that so? A. No, it would not be, because this was my first trip for quite a while, and my first effort would be to get acquainted with the plant.

Q. Now, let me ask you this— A. I probably spent just enough time in the office to fish for an invitation to see the mill.

Q. Let me ask you this: Do you recall stating on your direct examination that you paid no attention to the flat wire or special equipment? Do you recall stating that? A. I must have said something of the sort.

Q. That is true? A. If that is what the stenographer has.

Q. Well, I am now asking you: Is that a fact? A. Broadly speaking, yes, sir.

Q. You paid no attention? A. I paid no attention to the flat wire.

Q. To the flat wire. Why do you say that you paid no attention to the flat wire equipment? A. Why, to be perfectly truthful, I know very little about flat wire, and if a mill was to be installed that involves flat wire, I should have to get some one who knew more about it than I.

Q. But you had some machines for flat wire manufacturing? A. Life is too short to learn all these little side branches of the business. I just dismissed the flat wire as something that somebody else would have to look out for.

Q. You did see some machinery for the manufacture of flat wire, didn't you? A. I saw some cold rolling machines. My recollection is that they were of the type generally known as flattening machines; that is, they worked from a round wire, from a drawn wire.

Q. Getting to this special equipment. You say that you paid no attention to the special equipment. May I ask you why you would pay no attention to the special equipment. A. It is a matter of very small interest to a person in my position; nearly every mill has various small lots of special equipment tucked away in the corner to handle work which is peculiar to that particular district or market. In my business, undertaking the complete engineering and building of plants of that sort, I generally dismiss that stuff from my mind, because it can be always picked up and shoved in at the last moment. It was something that has very little bearing on the main problem.

Q. You were primarily interested at that time in supplying standard equipment; that is the answer, isn't it—standard machines? A. Yes, sir.

Q. So, having paid very little attention to this special equipment and the flat wire equipment, you could not be in a position to give us an estimate of just how much they had on hand, are you? A. No, sir.

Q. And, I take it, by the same token, not being interested in the selling of rivet machinery, you paid very little attention to that? A. Yes, sir.

Q. How about the wire straightening machines? Do you handle them? A. We don't build them, no.

Q. And not building them— A. We very seldom handle them in any way.

Q. Therefore, I take it, that you have no direct interest—you paid very little attention to that feature? A. I only noted that there were a few there. I noted their general type and size likewise.

Q. The manufacture of bale tie machinery— A. No.

Q. You would have no particular interest in bale tie machinery that might be there in the plant? A. It would interest me to know whether there was any there or not, and about how much.

Q. Do you recall seeing any? A. I don't recall seeing any.

Q. You would recognize bale tie machinery if you saw it, wouldn't you? A. Yes, sir.

Q. And you say that you were all through the plant? A. Yes, sir.

Q. Can you explain to us how that escaped your attention if such machinery was there? A. I could forget a lot in five years.

Q. Then you attribute that to your lack of recollection rather than the fact that there wasn't— A. (interrupting): I undoubtedly saw them. They probably entered into my calculation when I was making a mental

picture of what I would be able to sell them, what wire equipment I might be able to sell them, and then that drifted out of my mind again.

Q. I take it that as a consulting engineer and with the experience that you have had you are familiar not only with manufacturing but also the installing of machinery of this character? A. Yes, sir.

Q. You don't install this machinery until all your power transmission is up, do you? A. No, I would not say that. Of course, machinery going into an existing plant always finds the transmission equipment ready to connect.

Q. Yes, but I am considering a plant of the character of Igoe Brothers. It would naturally be under construction. You would then wait before shipping your equipment until the power transmission was in, wouldn't you? A. No, I would not say that. Probably we would ship the equipment as soon as there was a roof and clear floor for it to be set up.

Q. You would withhold setting it up until you had all your shafting and so forth in? A. Of course, untill the transformers and necessary electrical wiring were there, the machines could not be connected. They could stand there, that is all.

Q. You mean to say that you would merely deliver them on the site, later to be installed as soon as that other work had been completed? A. Unless we happened to have the job of completing that other work. We take all sorts of contracts, you know.

Q. But, assuming that the erection of the building would be done by some one other than your own company, you would have to wait, then, until they installed the transmission; that is correct, isn't it? A. Well, let us be sure that we understand each other. Perhaps I

do not know what you mean by transmission. Are you speaking of line shafting and belting?

Q. All of that. A. There is none of that being installed nowadays.

Q. There was such machinery in Igoe Brothers, wasn't there? A. Yes, sir.

Q. There was a considerable amount? A. Yes, it was not installed recently.

Q. You say you would not today install such machinery— A. No.

Q. If you were putting up a new plant, but you would have to take that into consideration if you were replacing an old plant as you saw there in 1924? A. No, sir. We would not undertake to replace the benches I saw in 1924.

Q. Your company was not equipped to replace the machinery you saw there, was it? You did not manufacture that type of machinery? A. We did not care to.

Q. You did not do it, I am saying? A. That is so.

Q. Then, I take it, you could not have replaced the machinery that was in Igoe Brothers plant exactly as it was at the time of the fire? A. "Could not," is not true We could do anything, if we were paid for it, but we did not.

Q. Assume that you were going to be paid for it, and you were to replace what you saw in the place, you say that you could, physically, do that? A. By special order, yes.

Q. How long would it have taken, in your opinion, to have replaced all the machinery and equipment you saw in Igoe Brothers' plant in 1924? A. Well, I hardly think that is fair.

Q. Can you give us an estimate as an expert? A.

There were a good many obsolete machines. I recall some nail machines that came from Germany. Would you want us to go back to Germany and secure—

Q. (interrupting) I am asking you if you can give me an estimate of the time necessary for your concern to replace that plant exactly as it was at the time of the fire? A. I would not like to commit myself.

Q. You would say, however, that it would take far longer to replace that plant as it was at the time of the fire than it would by the machinery that you were selling? A. Yes, indeed.

Q. And all your estimates are based on the character of machinery you are now selling—were then selling? A. Yes.

Q. And not based on what you saw at the time of the fire? A. Absolutely not.

Q. Then, it would take considerably longer to fit that plant up exactly as it was? A. I doubt if I could ever get drawings or an indication of what was there.

Q. You would have to get your drawings first, if you did not do that? A. Yes.

Q. That would take quite a length of time, wouldn't it? A. It would be more or less like installing a museum.

Q. Assuming that you had to install a museum, you would have to make your drawings first, wouldn't you? A. Yes, sir.

Q. Then you would have to manufacture the machines from the drawings, wouldn't you? A. Yes, sir.

Q. That would take a long time? A. Yes.

Q. Would you say three months was a conservative time within which to do that, to put that plant in operating condition, just as you saw it in 1924? A. I don't think anybody could have done it in three months.

Q. You would want to have six months? A. At the very least.

Q. Six months at least. You spoke about tooling up. I understand there is another expression that is quite similar, that is tuning up? A. Yes.

Q. After you install equipment, you have, of course, to tune up all the equipment, don't you? A. Yes.

Q. That is like tuning up a new automobile; you try it out for a while and then adjust it; isn't that correct? A. Yes, sir.

Q. And you have to allow some time for that, don't you? A. Yes, sir.

Q. And you can't test out that machinery until all your power equipment is installed? A. No, sir .

Q. Put it to its ultimate test? A. That is correct. You can test a machine as soon as you have sufficient power to connect to it for operation.

Q. But that would not be putting it to its real test which it will have to undergo subsequently? A. Why, yes, sir. As soon as there is enough power connected to a machine to operate it, it is usually started up and operated in the normal way.

Q. Normal way. A. And tuned up, as you say.

Q. When you start manufacturing and start production, you find certain adjustments necessary, don't you? A. Generally.

Q. And you have to make adjustments at that time, don't you? A. Generally, yes.

Q. So, if you had a contract to install this machinery and put it in perfect running condition, you would have to wait until you were in production before you could make the final adjustment, wouldn't you? A. Yes.

Q. That, of course, takes time, doesn't it—well, that is no question; it is argumentative. A. I could tell you just how much time, if you want it.

Q. That, of course, would depend on the conditions you found existing at the time you had to make your adjustments. A. It is pretty well standardized.

Q. Isn't it a fact that there are many plants with equipment similar to that which was in Igoe Brothers plant now running throughout the country? A. Not very many left; not very many.

Q. Have you been in the American Steel Wire Company at Worcester? A. Yes, sir.

Q. Haven't they got equipment quite similar to that in Igoe Brothers? A. Some of their equipment is of about the same nature.

Q. A good part of it is, isn't it? A. Well, I have not been through their plant for two or three years. Changes may have been made. Yes, I will say that a good part of it bears a strong family resemblance to Igoe Brothers plant.

Q. You find that there are numerous plants throughout the country of such character; isn't that a fact? A. Well, numerous—let's see—perhaps that kind of plant represents three, four or five per cent of the country's output.

Q. What territory do you cover in selling this equipment at the present time? A. All over he world.

Q. All over the world? A. Yes.

Q. And you would say that there was only about three to five per cent of the plants having similar equipment to that in Igoe Brothers; is that right? A. Well, here again we are dealing with flexible terms. There are all sorts of grades. I think I see what you are trying to get at; you want me to admit—

Q. I don't want you to admit anything. I want you to tell us the facts. A. I will state them. I think the plant of the American Steel in Worcester is an extremely

old plant, has a good deal of old equipment; some of it looks fully as bad as Igoe Brothers.

Q. Did you ever inspect their plant in Cleveland? A. I have seen their plant in Newburgh.

Q. Cleveland? A. Newburgh Works, Cleveland.

Q. And they are the same, are they not? A. Considerable better.

Q. Have you been out to the Pittsburgh Steel Company lately? A. Yes. Lately—within two or three years, perhaps.

Q. How long is it since you have been covering the world with sales? A. I am still covering the world, but in the last couple of years, perhaps I had better say that a good deal of my attention has been given to Europe.

Q. The last couple of years. A. I have been out of the country several times in the last two years.

Q. So, you are not quite familiar, then, with the conditions existing during that period? A. They could not build old benches during that time. I think I know all the old ones.

Q. How about the Pittsburgh Steel Company? Weren't they running on about the same blocks as Igoe Brothers? A. I don't think I can say. I have been in their mill very little, very little.

Q. Referring to the Bethlehem plant at Johnstown, have you been there? A. I have been in that plant, yes, sir.

Q. That is a pretty antiquated plant, too? A. That is a mixture of modern-old and very modern. They have a good many wooden frame benches of the period about 1904 or 1905.

Q. Have you any of your machines there? A. No.

Q. Have you any idea how many plants of this character there are in the country? A. That is old plants?

Q. That is, old and new wire making and drawing and nails? A. There are about 250 establishments where wire is drawn in this country. Some of them are not known to the public. I imagine that there are some of them I have not dug up yet, but I could put my finger on about 250 different establishments where wire is produced; wire is drawn through dies.

Q. The plants I have mentioned all have old equipment? A. All those have some old equipment.

Q. Have you ever been out to the Youngstown Tool Company? A. Oh, yes.

Q. That is old machinery in there, too, isn't it? A. We were consulting engineers and built that plant.

Q. Haven't they got any old machinery in there? A. What is that?

Q. Haven't they old machinery similar to Igoe's in there? A. No.

Q. It is all modern? A. It is semi-modern. It dates back about 1908-1909, and was pretty well advanced at that time. They bought the best they could at the time they were looking for it.

Q. That was machinery that was in use 21 years ago? A. Yes, sir.

Q. And do you know how long Igoe Brothers had been in business in Newark? A. I do not know of my own knowledge.

Q. Well, now, would it surprise you to know that Igoe Brothers were only in business 22 years at the time of that fire in Newark, and this machinery was acquired? A. It would surprise me to know that anybody 22 years ago was building machinery of that type, if that is what you mean to say.

Q. I suppose that you would be surprised to learn then, that over this period of 22 years Igoe Brothers turned in a handsome profit with this machinery? A. No, that would not surprise me, unless you make the point that that profit resulted from the use of this particular machinery.

Q. Operating the machinery they had; you saw it; would that surprise you? A. It would horrify me.

Q. You would not attribute it wholly to bad bookkeeping, would you? A. If that were the fact, I should have to cease my operations. I should have no excuse for my existence.

Q. You haven't been able to sell Igoe Brothers? A. No, sir.

Q. These are all big mills, aren't they, that you have made reference to? A. Yes, I think all you have spoken of are all big mills.

Q. They are all the size of Igoe Brothers or larger? A. I think that all you have mentioned were considerably larger.

Q. So, I am not referring to the small fry, but I am referring to the big men in the business; is that correct? A. Yes, sir. Answering that question correctly, you are referring to large mills. They are not the type we are discussing, but they are large mills.

Q. Wait a minute. You say that they are not the type we are discussing. I understand that they were similar to Igoe. A. No. I only agreed with you that the wire drawing equipment in those plants—some of it was somewhat similar to Igoe's wire drawing equipment.

Q. It is not your modern machinery? A. No. In other words, it is of an earlier period.

Q. Did you have anything to do with the installation

of that equipment in 1908 in Youngstown? A. Personally, no.

Q. Were you with the company then? A. No. That was in the year before I came with the company. The work was just being wound up when I came.

Q. As a matter of fact, isn't much of that equipment similar to that which was in Igoe Brothers? A. It was very dissimilar.

Q. You are positive of that? A. Yes.

Q. May I ask you what difference there was? A. The most striking difference was that most of Igoe's machinery was wooden frame machinery, and all of the Youngstown machinery was steel.

Q. Does that make any difference in the output, in the efficiency? A. That in itself does not make any difference in the output; it makes a difference principally in the upkeep. Then with wooden machinery there are certain connotations to hiring men of low speed. In fact, the very fact that the machine is built with wooden frames dates it in a period when labor was cheap, and very little attention was paid to economy in labor in the wire mills. I can hardly conceive of the possibility of wooden frame plants being efficient plants, partly on account of the wooden frames, but mostly of the things wooden construction connates.

Q. Whether or not machinery which your company was producing in 1925 was the best possible machinery is a debatable question, isn't it? A. No, sir.

Q. Men's minds may differ? A. I don't even admit that. There was considerable difference of opinion as to whether it was worth the price asked for it. I will admit that.

Q. In other words, men in this industry might reasonably want to use products manufactured by other

companies than your own; that you will admit? A. Yes.

Q. Although you can see no good reason for it personally? A. Quite so.

MR. GILHOOLY—That is all.

REDIRECT EXAMINATION

By MR. VANDERBILT—

Q. Mr. Louis, these concerns referred to by counsel, do they make their own wire? A. Yes.

Q. And that accounts, of course, for some of the size of them; I suppose they draw their own wire down from rods? A. The concerns he mentioned are large, completely integrated plants who do everything from manufacturing pig iron to the finished product.

Q. Was this same line of work done at Igoe Brothers in all its degrees? A. No.

Q. What did they start with? A. Igoe Brothers worked from purchased rods.

Q. Now, referring to the type of machinery which was there at the time of the fire, do you know of any concern which has either started a new plant or rebuilt after a fire, earthquake or other casualty, which has started out and reequipped itself with wooden frames? A. No, sir.

MR. GILHOOLY—I object to that on the ground that we are entitled to have our profit-making facilities restored in the same condition they were at the time of the fire. That is what the insurance companies insured. If they were profitable to us at that time, we had reason

to expect that they would be profitable in the future. So, I think that is immaterial.

THE MASTER—I don't think that affects your claim, your rights, that question, in any way.

MR. GILHOOLY—It would have this effect: We were entitled to rebuild just as we were at the time of the fire.

THE MASTER—Certainly. That does not take away your argument.

MR. GILHOOLY—I see the point the Master is making.

THE MASTER—I will permit it.

Q. Do you know of any plant which has been so rebuilt or newly constructed which has had transmission power of the type which was in the old Igoe Brothers plant.

MR. GILHOOLY—I object to that on the same ground.

THE MASTER—I will permit it.

A. I am answering "no".

Q. Do you know of any plant which has been so reconstructed in which they have ever deliberately sought out second hand machinery to replace the used machinery which they had there previous to the fire or other casualty?

MR. GILHOOLY—That, I think, is highly improper, because there is no proof that we contemplated second hand machinery.

THE MASTER—No. I sustained the objection to that.

MR. VANDERBILT—Counsel was contending that they were entitled to have exactly what they had before the fire.

THE MASTER—Not second hand.

MR. VANDERBILT—I want to know if he wanted us to get machinery twelve years old to replace machinery twelve years.

MR. GILHOOLY—Your conception is different. We want to build new ones.

MR. VANDERBILT—New machines.

THE MASTER—New machines of the old type.

MR. GILHOOLY—The ones that were tried and true, we might say. .

Q. In this letter you received from Igoe Brothers, D-7, was that a request for the old tried and true machinery, or was it for information on what we have been calling modern machinery? A. That information is for modern equipment.

Q. And if any machines had been furnished along the lines mentioned in Exhibit D-7, that would not have

been, in any sense, a reproduction of the old machinery that was there? A. Absolutely different..

Q. You were asked some questions about tuning up, and I think that you volunteered to say how long it would take to tune up these machines that were put in, but the question was not asked. How long would it take to tune up? A. We always sent an expert wire drawer to tune up the wire machines we sell. Irrespective of the number of machines in the group, he almost invariably finishes the job inside of three weeks. In my estimate I allow three weeks of his time on each installation for tuning up and delivering the equipment to the purchaser in full production.

Q. Was this process of tuning up included in the length of time which you told us it took for the equipment of the Sheffield Steel Company plant? A. No.

MR. GILHOOLY—I object to it on the ground that it is immaterial.

THE MASTER—The witness said no.

THE WITNESS—No. The period of time that I gave you for the Sheffield carried us up to the moment when they informed us that they were in production. That was our cue to send our men to tune them up. You must be in production before you start tuning.

Q. And was the estimate of five weeks which you gave us for putting this plant in shape inclusive or exclusive of the process of tuning up? A. That would be exclusive.

Q. Now, I ask you if you will look over the stock inventory of the material which Igoe Brothers had on

hand at the time of the fire, as prepared and submitted to the insurance companies by their adjusters, Miller & Maltbie, and tell us whether or not there is anything shown on that schedule which could not be manufactured in what you have referred to as standard or stock machines. A. I see a good deal of material here that has no reference to wire manufacturing. I see rolls of roofing paper and stuff that was bought and sold by the Igoe plant.

Q.. In their jobbing department? A. I imagine that you are referring to the production of the wire and nail plant?

Q.. If you will limit that to the products of the wire and nail and tell us whether or not there is anything that they produced that could not be manufactured on what you call standard or stock machines? A. I don't see any product of that sort, that could not be produced on stock machines.

Q. Would steel frames or wooden frames be operated more economically.. A. Steel.

Q. Referring to this period of tuning up, during that period of tuning up there would be production, of course? A. Yes.

Q. Can you say what percentage of normal production there would be in that period of, I think you said, three weeks? A. At the end of the period, of course, you would be in full production. At the beginning of the period, perhaps half production. It is safe to assume that the average over that period of production would be 70 to 75 per cent of normal.

MR. VANDERBILT—That is all on our part.

RECROSS EXAMINATION

By MR. GILHOOLY:

Q. Now, you say that it has been your custom to send one expert wire drawer out; is that right? A. That is right.

Q. And you have had, of course, no experience in the sending out of experts in nail wire mills? A. We have, as a matter of fact.

Q. Well, you don't manufacture nail machines, do you? A. No; but we are frequently responsible for installations that include them. Being responsible, we have to send men to see that they go smoothly into operation.

Q. You send one man out? A. Generally one man.

Q. Can you refer specifically to any particular plant where you sent an expert in the wire mill end of the business? A. I will refer to this Sheffield installment.

Q. The Sheffield? A. Yes.

Q. You say that you were consulting engineer on that job; is that right? A. Yes.

Q. You did not give it your entire attendance or regular attendance, did you? A. You mean, did I attend at the plant itself?

Q. Yes, during its progress of construction. A. No. I called— I made, perhaps, monthly trips to Sheffield.

Q. I take it, then, that you were out there about five times? A. I was out there probably five times.

Q. That is the only one you can think of where you sent an expert? A. That is the only one that I can recall in which we sent an expert nail man.

Q. You only sent one man out; is that right? A. Yes.

Q. Do you know that Igoe Brothers' plant had to operate as one unit? A. I do not know that I understand you.

Q. Now, let me ask you this, then— A. Perhaps I have confused you in that last question. You asked me if I sent one man?

Q. Yes. A. So we did, but that man picked up people he knew were competent and got them on the payroll of the Sheffield Company, to work with him.

Q. That was because it was in a hurry? A. No. That is quite the usual thing to do. Generally we send one good man and let him pick the others.

Q. Getting back to that Sheffield proposition, isn't it a fact that they were most anxious to get into production before January 1, 1929; isn't that a fact? A. Why, not, I don't think they did; had any particular anxiety—as a matter of fact, they wanted to get into production in October.

Q. They were anxious to get into production in October? A. They would have liked to get into production by October.

Q. And they started in July? A. They started thinking about it before July, but it was July before progress could be made on the job.

Q. And they expected to get into production in October; I mean, start the plant? A. Not in July. In July, the best they hoped for was late in November.

Q. It was late December when they got into production? A. In fact, I have with me a copy of a telegram I sent to them in September, predicting that they might draw wire in November but probably not in December.

Q. In other words, their expectations were not real-

ized, and that is quite common, isn't it? A. That is quite common.

Q. And you expect that in pretty near every building operation, and make your estimate to give yourself a lee-way of a couple of weeks? A. Yes.

Q. And you would do that in the Igoe case, too, as a builder? A. If I hoped to make delivery in three weeks, I would tell them five.

Q. You say there is not anything in that schedule of Igoe Brothers' fire loss that could not be produced by standard equipment, is that right? A. Well, I had to go over it hurriedly. That is my strong impression. I saw nothing there—

Q. You have not examined that in detail, have you, that particular list? A. That is a relative term, sir.

Q. When is the first time you saw it? A. When Mr. Vanderbilt handed it to me across the table here.

Q. Your examination therefore was made in a most cursory way; isn't that correct? A. Yes.

Q. You did not take it item by item, did you? A. No.

Q. You would not want to commit yourself to say that every item they have in there could be obtained in the open market, would you, out of stock? A. That is not just the purpose for which I was examining it; it was to find out whether there was anything in there that could not be produced on stock machines, in a standard wire mill.

Q. There isn't anything in there to indicate what they produced, is there? A. No. I simply have the product they were producing and what they were jobbing.

Q. But, confining yourself to the manufacturing end, there is nothing in the proof of loss to indicate what material Igoe Brothers produced? A. No, sir.

Q. There are machines there, however, are there not? A. I did not examine the machine list, but I examined the products in stock.

Q. When you refer to products in stock, what do you mean? A. I mean the finished products, the result of their manufacturing operation.

Q. Was that what you examined? A. That is what I examined, wire, nails, rivets, netting, whatever was found in the stock room or was in the process of manufacture. That is what I take that list to cover.

Q. But I take it from—just, for instance, what are you referring to, what particular items, so that I will clearly understand you? A. I start here on this page, section E. 90 per cent of the items that I examined consist of certain numbers of bundles of wire of a certain size and shape carbon content. I ran my eye down the list to see if there were any special shapes or special carbon or special surfaces of wires that would have been particularly difficult to make and could not have been made on standard equipment.

Q. How about the other ten per cent? You say 90 per cent could have been made on standard equipment? A. Did I say 90 per cent?

Q. I understood you to say so. A. I meant to say 100 per cent.

Q. 100 per cent—building 1, section E. A. That is my recollection.

Q. Referring to the contents of building 1, Section E, do you see anything in there, Mr. Louis—will you say that everything on that page can be made by standard equipment? A. Yes.

Q. 100 per cent? A. 100 per cent.

Q. Referring to the third page, building 1, Section E; will you look at that, please, and tell me whether every-

thing on that list could be manufactured by standard equipment as distinguished from special equipment? A. I see nothing there.

Q. Referring to the third page, building 1, Section E? A. I see one item relating to a flat wire. There are a good many wire mills that are not concerned with the manufacture of flat wire.

Q. That would have to be special machinery, wouldn't it? A. It is not special machinery. It is standard machinery, but it is only occasionally that it is combined with round wire manufacturing.

Q. But it required special equipment? A. It required different equipment.

Q. It was special; that is not in stock? A. That is stock equipment.

Q. You are sure that is stock equipment? A. Yes, indeed.

Q. Turn to Section F. A. With the exception of those roofing items, I see nothing that could not be produced in the standard common product wire mill.

Q. Now, you refer to standard product wire mills. Do you mean by that that the equipment in such mills—I withdraw the question. What do you mean by standard equipment? A. I mean the sort of equipment that a purchaser might hope to find in stock or equipment which he might—equipment for which he would certainly find designs in stock.

Q. That is your idea of your standard equipment? A. That is my idea of standard equipment; equipment that has been built many times, and could be built again in a hurry.

Q. And from that, could be readily obtainable in stock? A. Frequently in stock. It might be that there are a few manufacturers other than ourselves who do

not stock that wire machinery. They mostly build it on order, so as not to tie their money up.

Q. Now, Mr. Louis, your concern has what is known as the continuous wire drawing machines; isn't that right? A. Among other things, yes sir.

Q. And that is something that you are trying to sell to the men in this industry, are you not? A. Among other things.

Q. And you find that a good many concerns do not agree that that is the best machine for their particular use? A. I say that that resistance has pretty well faded away now.

Q. There was a considerable amount of resistance at one time? A. There was a considerable amount of resistance at one time.

Q. And you are trying to overcome it? A. Yes, sir.

Q. So, the industry has not come to a clear meeting of minds with your concern that this is the best type of machine for that particular use, have they? A. I should say that the industry as a whole has come to our point of view, but had not in 1925. That I freely admit. The matter was still in controversy.

Q. There was a serious conflict of opinion as to whether or not it was advisable to instal your machinery? A. It was not a question of whether or not the machine would prove satisfactory, but whether it was profitable. It was rather advanced machinery for the time, and there was a serious question as to whether its better performance justified its higher price.

Q. The machines you speak of as being standard or of some what later manufacture, is machinery which is being put out by your concern, isn't it; you are referring particularly to your company? A. I think that my

company is the only one that stocks wire machinery; that makes any attempt to carry it in stock.

Q. And your company, of course, carries or stocks the machinery necessary to manufacture everything that you have seen on that—or the greatest portion of the things that you have seen on this schedule; is that right? A. We carry in stock machinery that could draw substantially all the products I see on this schedule with the exception of this first item of shaped wire, for which we would require several weeks to build the machinery.

Q. And you are one of the few companies in the country that carry such a supply? A. Very near the only. I think perhaps the only.

Q. If a concern desired to deal with some company other than yours, then the machines would have to be specially constructed? A. They would have to be constructed after the order was received.

Q. After the order was given. Would you say whether or not, Mr. Louis, the machines which your company was manufacturing were more or less experimental in character in 1925? A. They were not.

Q. They, in your opinion, had reached their highest— A. They had developed past the experimental stage, as shown by— that could readily be shown by sales in the two or three preceding years, if you want to go into it.

Q. But the point I want to get clear is this: If Igoe Brothers had elected not to purchase the machinery from you, but deal elsewhere, it would have to have used machinery constructed especially for their use by that other company, would they not? A. Yes.

Q. That would, of course, take considerably more time than the estimate you have given? A. There is an estimate in the letter in the record, in which I referred

to benches not of the controversial continuous type, but of the orthodox type, and told them that we would require probably twelve weeks to deliver such benches.

Q. You testified that if you had everything your own way— that is my recollection of your testimony— that you probably could make installation in four weeks, or a little over four weks? A. Yes, sir.

Q. Contrarily, if you had to accept the conditions which you found existing in this locality, as well as the type of motor, dynamo and so forth desired by Igoe, that would add to your estimate of time? A. That was stated in the letter, that it would probably require eight weeks instead of four.

Q. So, in order to bring the period of reconstruction so far as machinery was concerned within your minimum estimate you would have to have charge of the complete installation? A. Right.

Q. From beginning to end? A. Right.

Q. With no other concern having anything to do with it? A. Right.

MR. GILHOOLY—I think that is all.

By MR. VANDERBILT:

Q. Other concerns than yourself make continuous wire drawing machinery, do they not? A. Yes, sir.

Q. And with reference to any of this machinery, if the order had been given to other concerns, it would have been to make machinery of which they had the plans and patterns available previously; it would not be brand new machinery for which they would have to first make up their construction and so forth, would it? A. Under the circumstances I should say that the inquiry would be for the machinery that could be delivered the quickest;

that would naturally be machinery from existing drawings.

Q. And existing machines made from existing drawings would make practically all the output shown on that— A. Absolutely all.

Q. —that schedule I refer to.

MR. VANDERBILT—I desire to offer the schedule of stock loss as an exhibit in the case. We rest with Mr. Louis.

MR. GILHOOLY—You are making this offer—heretofore it has not been offered. Is this the complete stock loss?

MR. VANDERBILT—That is the complete stock loss, I understand.

MR. GILHOOLY—Is this the list Mr. McCrossen referred to the other day?

MR. VANDERLBILT—That is the stock. The machinery loss is much more voluminous, machinery and building is the other one.

MR. GILHOOLY—I don't think that there is any proof that this is the one that was filed, the original; it appears to be a copy.

MR. VANDERBILT—What happened, if the Court please, is that Miller & Maltbie furnished several copies of this. This is the one that happened to come to us, but there is no question, I believe, that Miller & Maltbie did prepare it. If counsel wants to check it up to ascertain its veracity, I have no objection.

THE MASTER—Let it be admitted, subject to your right to question it.

(Stock loss report marked Exhibit D-10.)

RECESS

Afternoon Session

SAMUEL DOUGHERTY, called as a witness on behalf of the defendant, being first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. VANDERBILT:

Q. Where do you live, Mr. Dougherty? A. 540 Faith Street, Bellvern, Pa.

Q. What is your business? A. Assistant master mechanic, Page Steel & Wire Company.

Q. Where are they .located, Mr. Dougherty? A Mannassen, Pa.

Q. How long have you been with the Page Steel & Wire Company? A. Ten years.

Q. What was your business before you went with them? A. I was a machine erector for the Stevens Adams Weigher Company.

Q. Where were they located? A. Aurora, Illinois.

Q. Now, in the line of your work as assistant master mechanic at the Page Steel & Wire Company, has it

been necessary for you to visit various wire and nail plants in and about Pittsburgh, Pa? A. It has.

Q. Is the Page Steel & Wire Company a large manufacturer of wire and nail products? A. Yes, sir.

Q. How long has that concern been in existence, do you know? A. Well, not exactly, but approximately, I will give 30 years, that plant at Mannassen.

Q. What are your duties at the Page Steel & Wire Company? A. I have charge over the machine shop, installing new machinery, repairing old machinery, and I also have charge of the millwrights and engineers.

Q. Have you personally installed wire drawing benches and wire products manufacturing equipment and nail equipment? A. Yes, sir, I have.

Q. Are you familiar with the dies of this class of equipment? A. Yes, sir.

Q. Have you personally made and adjusted dies for wire drawing benches and nail equipment? A. Yes, sir.

Q. Have you ever been in Igoe Brothers' plant at Newark? A. No, sir.

Q. Have you been given a list of the wire drawing and nail equipment of Igoe Brothers that were damaged by the fire in 1925? A. Yes, sir.

Q. From whom did you get that report? A. Mr. McCrossen.

Q. Did Mr. McCrossen show you the estimate made by Fletcher-Thompson Company? A. Yes, sir.

Q. —of the amount of time it would take to install the plant? A. Yes, sir.

Q. And have you studied that report? A. I have.

Q. Will you state what your opinion is with respect to that report as to the length of time that it would take to install the various wire and nail machine units in the

Igoe plant? A. I think the Fletcher & Thompson estimate is extravagantly overdone.

MR. GILHOOLY—I object to that characterization and move that it be stricken from the record.

Q. Do you think it is high or low?

MR. GILHOOLY—I object He may state his opinion as to the time, but I do not think that it is proper to characterize the report.

MR. VANDERBILT—I will wihdraw it.

Q. Have you made an estimate of the number of men and the number of man-days that would be required to install the equipment listed in the Fletcher & Thompson report? A. Yes, sir.

Q. Have you that estimate with you? A. Yes, sir.

Q. Will you refer to it and tell us how it is made up? A. Well, I have a report on building 1, section D.

Q. Let me ask you how this memoranda is made up, the method of making it up; the first column relates to what, over here? A. Wire drawing.

Q. A description of the machine? A. Yes.

Q. Then, the column to the right of that is the Fletcher-Thompson estimate of men and days, and the total man days. What is this in pencil to the right of it? A. That is the estimate I have of men and man days and the total of man days.

Q. You have carried that through from each item? A. Right through. You can check it right off.

Q. I notice on page 2 of your estimate the words on the third item down, the words "spare, block not in-

stalled". What is meant by that? A. As I was given the information, that block was on spare, and was not installed. As it was a matter of time, they naturally would not do anything with the spare block.

Q. That relates to the next thing listed on the same page? A. Yes, sir.

Q. And the third item on the next page? A. Yes.

Q. What is this item here (indicating)? A. The item there, I have no references, or anything, on that.

Q. You got no information— A. I got no information on that.

Q. What are those words there? A. "Repair item."

Q. Repair item, no information. A. That was something that was damaged that I had no information as to the extent of the damage.

Q. That is the same on the last item on the page? A. Yes.

Q. Do these last three columns to the right that read "Number of men, Number of days, and Total Man Hours"—that represents what, Mr. Dougherty? A. That represents, this one, the number of men would be four men on the job, and the next column would be the number of days, that would be three days; four men three days for the job, which would be 12 one-man days.

Q. Those three columns, then, to the right, represent your estimate of the number of men, number of days, and the total of them represents the number of man days for that particular job? A. Yes, sir.

Q. And you have gone through and made a careful estimate of the length of time referred to in each of the items on that schedule, duplicated from the Fletcher-Thompson report? A. Yes, sir. The information was taken out of the main book over there, the studied report that is given there.

MR. VANDERBILT—I desire to offer for the purpose of expediting the testimony, that estimate, without asking in detail on each item therein-specified, so that he may be cross-examined from that.

MR. GILHOOLY—I should have no objection, in order to expedite the matter, to the admission of that ,subject, however, to my opportunity to have it checked with the Fletcher-Thompson report as to its accuracy.

THE MASTER—Certainly.

(Report of the witness Dougherty marked Exhibit D-11.)

Q. Now, Mr. Dougherty, in your experience in installing equipment in wire and nail mills, have you ever heard the term "tooling up" used? A. Absolutely not.

MR. GILHOOLY—Did you say "tuning up?"

MR. VANDERBILT—"Tooling."

MR. GILHOOLY—No, tooling up.

THE WITNESS—No.

Q. Are wire drawing dies obtainable without delay? A. Yes, sir.

Q. Are they simple dies or complicated dies? A. Simple.

Q. And can they be obtained in the open market? A. Yes, sir.

Q. Do you have to go to one particular place to get them? A. No, sir. There are many places that make dies.

Q. When a new nail mill is set up, is it equipped with dies? A. Yes, sir.

Q. Is it necessary for the purchaser to make the dies, or can they be bought with the mill? A. They can be bought with the machine, as many pairs as the purchaser wants.

Q. After the dies have been tooled, how long does it take to fit them to the machine? A. Approximately 15 to 20 minutes.

Q. Do you know of your own knowledge of nail mill equipment that dies can be purchased from manufacturers? A. I do.

Q. There has been previous testimony given by the complainant in this case that after the machines are installed it would take a considerable amount of time to tool up the machines. From your experience, what have you to say about that? A. Today there should be no tooling up of a machine when it is bought. The tools do the kind of work it is bought for.

Q. And does this apply as well to special products which are made on wire and nail machinery? A. You can order your dies to make any specialty.

Q. And can these special dies be obtained without delay? A. Yes, sir.

Q. Mr. Dougherty, have you studied the list of machinery in the Igoe plant from the original claim made at the time of the fire loss, and from the data given you by Mr. McCrossen, and the Fletcher-Thompson report? A. I have.

Q. And have you also studied the drawings and blueprint plans, Mr. Dougherty, as set forth in the Fletcher-Thompson report? A. Yes, sir.

Q. From a study of these data, what, in your opinion, would be the length of time necesary to install the

mechanical equipment and get it in operation producing wire products and nails, assuming that the machinery was delivered to the job and ready to be installed as needed? A. About six weeks.

MR. VANDERBILT—Cross-examine.

CROSS-EXAMINATION

By MR. GILHOOLY:

Q. Now I understand you to say that you are with the Page Steel & Wire Company; is that right? A. Yes, sir.

Most of your activities are confined to wire drawing; isn't that right? A. Not wire drawing alone. I have wire drawing mills, straight cut, installation of new machinery, repair work, power work, generally, all over the mill.

Q. You do not manufacture rivets, of course, do you? A. No, sir, not rivets.

Q. So, your experience has not been along that line. A. Not in rivets.

Q. You have nothing to do with bale ties either? A. Bale ties; no; I have nothing to do with bale ties.

Q. Did you ever see a bale tie machine? A. Yes.

Q. Did you ever operate one? A. No, sir.

Q. Did you ever install it? A. A bale tie machine?

Q. Yes. A. Personally I never installed it myself.

Q. Now, where did you see a bale tie machine? A. A bale tie machine I seen in an old manufacturing plant

near Pittsburgh. I can't recall where, and the make of the machine. I do not know whether they were using it, but I know the size and approximately the weight of it.

Q. That is an old bale tie machine? A. An old one.

Q. Do you know what style of bale tie machine it is? A. No, sir.

Q. Do you know what kind of ties it made? A. No, sir, I can't tell you that. I just know that it was a bale tie machine, and I know about the size and weight of it.

Q. Do you do very much business with nails? A. Considerable, yes.

Q. And how many machines have you got? A. In the plant where I am now, we have two nail machines. The Pittsburgh Steel, where I go through—

Q. (interrupting) I am talking about your own experience. A. All right, sir, my own experience, through the plant in Mannassen, and what I previously had.

Q. I am asking you what your experience in the Page Steel & Wire Company is with respect to manufacturing wire nails. A. My experience with the Page Steel & Wire Company is that I have set those machines and I have made dies for those machines both for common head nails and for big head nails.

Q. How many machines have you got? A. Two.

Q. One for common nails and one for big heads? A. Depending on how you set the machine and what dies they have.

Q. The nails your concern puts out is confined to the common form of nails? A. The large majority, yes, sir.

Q. And you do not specialize in the manufacture of nails of special types? A. Very seldom—occasionally.

Q. Then, your experience has been confined to what I might call common nails? A. Most of them. But as I said before, we have made special orders for big head nails.

Q. And when you get those orders you prepare special dies? A. We change the dies a little bit, yes.

Q. Did you only change them a little bit? A. We do not change the face. We put more stock through in order to hit harder and get a wider head.

Q. You had to make special dies for the special nails you are now speaking of? A. The ones, we did not; only allowed more stock through wten starting the wire, so as to hit harder and have more stock to flatten out.

Q. The testimony you have given is based on your experience, isn't it? A. Absolutely.

Q. And experience you had in the Page Steel & Wire Company? A. That is what you asked me for right now.

Q. That is what your experience is based on, isn't it? A. No, sir; outside experience setting machinery.

Q. Where did you set machinery? A. I set machinery in West Virginia and Michigan and also in Ohio.

Q. Wire-making machinery? A. No, sir.

Q. Nail-making machinery? A. Not any outside places. I have set barrel machinery in Pittsburgh and Mannassen, and the Page Steel & Wire in Mannassen.

Q. You did not set the nail-making machinery? A. We have set the nail-making machinery in the Pittsburgh Steel.

Q. You did, yourself, personally? A. Personally I have set nail machines.

Q. You set machines, but you did not prepare and set the dies? A. No, sir, I did not set the dies, but I set the machines.

Q. Your whole experience has been with what might me characterized as the common form of wire nails? A. I am estimating the setting up. As to the setting of the dies, I have very little,—you might say nothing to do with setting dies.

Q. You have never had much experience in the manufacture of dies? A. In the manufacture of dies—I have made for about three years,—I made all the dies used on two machines for common nails.

Q. The machine used for common nails, but not specialized nails? A. I did not make specialized nails.

Q. I show you a nail, and ask you if your concern, or any concern with which you were connected, ever manufactured a nail of that kind. A. No, sir. Our concern never manufactured that nail.

MR. GILHOOLY—I would like to have that marked for identification. Mr. Vanderbilt, I want to go ahead and cross-examine this man on some of these specialties. I have a box here in which there are not two alike, and I will put the whole box in and have the whole thing in evidence, and make a part of this one exhibit.

THE MASTER—Mark the box C-17.

(Box of nails marked Exhibit C-17).

Q. Now, Mr. Dougherty, will you kindly go through that box and—I will pick out one of them. Now, I show you one of those nails from this box and ask you if your concern ever manufactured a nail of that kind. A. No, sir.

Q. What kind of nail do you call that? A. I would hate to name that.

Q. Would you say that a special die would have to be made for a nail of that character? A. Nothing more, I imagine, than change the front of that, a change in the size of the steel. If it is made on a small machine, the steel is all the same. You buy that rod right to size, and have to drill your hole anyway.

Q. But you would have to have a special dies for that. A. Sure you would.

Q. You could not buy that in the market. A. You can buy anything you want with the specifications, or send a sample of your product.

Q. If you were going to order a die for that, as an expert, what would you order? A. I would write—either call or have a talk with some die-maker, and I would send a sample of the product; if he did not understand, I would send a man to help him along with the first pair, and he could make it.

Q. That is what you would do? A. That is what I would do.

Q. Suppose that you had mechanics in your own shop to manufacture these, do you think that it would take any time to manufacture a die for that nail? A. No, sir.

Q. How long would you say? A. I would hate to give you an estimate on that.

Q. Are you a die-maker? A. I can make them. I do not know that you would call me a die-maker.

Q. Have you qualified in the trade? A. Not exactly a die-maker, but I have made dies.

Q. You would not call yourself an expert die-maker? A. I would not call myself an expert die-maker, no, sir, I would not, but I would say that die can be made in half an hour.

Q. Then, you would have to make it up specially, wouldn't you; you can't buy that in stock? A. You can have that made outside.

Q. How about this nail here (handing nail to witness). Did you ever see a nail like that before? A. I have seen them before. I never made any of them.

Q. Do you know what kind of nail they call that? A. No, sir, I do not know.

Q. Did you ever see a die for a nail of that kind? A. No, sir.

Q. You do not know how long it would take to make it? A. Not that, no, sir.

MR. VANDERBILT—May I suggest that they be named so that we can refer to them afterwards.

Q. How about this little nail? Did you ever make one like that? A. No, sir, I did not.

Q. How many operations would it require for a nail of that kind? A. A nail of that kind?

Q. Yes. A. I should say two.

Q. Two operations. A special die would be required? A. A special die.

Q. Now, as I take it, your experience has been confined pretty much to common nails; is that right? A. My experience, largely, to common nails, yes, sir. But according to your report, they were made on nail machines. If they were made on nail machines, there surely can be dies to make it.

Q. You are not basing your estimate, then, on the character of the product, but merely on information Mr. McCrossen elected to give you; is that right? A. Again?

(Question repeated by stenographer).

THE WITNESS—I got my information from the main claim, on what I estimated here. I figured that out myself.

Q. Have you got your work sheets with you from which you made your computations? A. No, sir.

Q. Did you have work sheets? A. I have the main slips over there, and this (indicating).

MR. VANDERBILT—By the main slips, you are referring to this inventory of building and machinery loss prepared by Miller and Maltbie.

THE WITNESS—That is where I got my information, out of here.

Q. Now, we will turn to 43. A. All right.

Q. Where did you get this figure on the first page of four men? A. That is not mine.

Q. That is not yours?

MR. VANDERBILT—That has been identified as a copy of the Fletcher-Thompson figures on that particular item.

Q. Building D.

THE WITNESS—Building 1, section D.

MR. VANDERBILT—That refers to the Fletcher-Thompson report. This language is the language from the inventory of Miller & Maltbie, describing that, and then the Fletcher-Thompson man days.

Q. Have you ever set a wire drawing bench 10 by 22 inches blocks, with wood frame? A. Yes.

Q. Have you got wood frames in the plant now? A. Did have.

Q. Have you got them now? A. Not now.

Q. When did they have wood frames? A. About five years ago.

Q. You were with the company then? A. Yes.

Q. How long did they have that? A. They got that before I came there.

Q. You don't know how long it takes to set it? A. Yes.

Q. How long would it take to set it? A. We moved from the wire mill to number 3.

Q. That is how you know how long it took to set it. Was that a 10 by 22 block? A. That is, two 22 inch blocks on it, and there are about eight 24 inch blocks on it.

Q. The one you have? A. The one we have. Which is approximately the same weight, because those blocks that size are interchangeable on those benches.

Q. And you would take four men to do the job- A. Four men to do the job.

Q. You agree with Fletcher-Thompson that it is practical to work with four men? A. Four men on a bench of that size.

Q. What do you include in the work you had to do in that particular length of time, in the three days? A. I included putting the bench on the foundation, tightening it down, and the drive for driving it,—ready for operation.

Q. So it would be in full condition to operate? A. So it would be in full condition to operate.

Q. Does that include tuning up the machine? A. Tuning up the machine?

Q. Yes. A. No tuning up to a wire mill.

Q. You would not have to tune it up at all? A. No, sir.

Q. None whatever? A. No, sir.

Q. Why do you say you do not have to tune up the machinery? A. It is tuned up.

Q. You do not have to tune it up. Is that your unequivocal statement? A. That is my unequivocal statement, you do not have to. You first stack the wire—this comes under operation cost, not installation at all—you point your wire, and you put it through the dies, fasten it in vices on blocks, and then start your block. All you need to do is to kick the foot treadle and the block drops down on the block and it starts.

Q. Would you say that was modern equipment or obsolete wire equipment? A. Which is that?

Q. That you are talking about? A. I would say it is not exactly modern because it is old Seahouse housing. I am talking about a wooden frame front, and wood, except a few numbers, with iron across.

Q. You say you have two like that in the plant? A. We did have. We discarded it.

Q. What did you put in its place? A. We put in its place the same kind of casting, except, instead of using wood we used angle iron.

Q. Have you had experience in your mill with continuous wire drawing machines? A. Continuous wire drawing machines—I have not.

Q. You have not had any of that? A. No, sir.

Q. There is none in your plant? A. No continuous wire drawing frames.

Q. In other words, your company has not committed itself to that process, has it? A. No, sir.

Q. Are you able to run your mill economically with the equipment you have? A. Certain parts of it, certain parts of it, not.

Q. Now, isn't it a fact that you just went through this list and just arbitrarily figured the time it would take? A. I went through there and figured what I could do myself, with the number of men that is on there.

Q. In going over this list of machines which were in the Igoe Brothers' plant, did you find any machines which were specialized machines? A. Not in the size, or anything like that, that would have anything to do with the erection of it.

Q. Didn't you find some of this equipment was not stock equipment? A. Some of it is not ordinary stock, but that has nothing to do with the installing of it.

Q. That does not take longer? A. No, sir.

Q. Nor would it have to do with the tooling up of the machines? A. It would have some difference, ordering the dies, if you ordered them.

Q. Why do you order special dies? A. To make the special products you want.

Q. And you only start to make your special products after you get the order calling for that particular product? A. I do not know when you order the special product.

Q. That is what you do? A. When we have anything special, we order the work.

Q. You order the special dies? A. If we are in a hurry we order them, and if not, we make them.

Q. How many millwrights do you think you could work effectively on this job? A. I did not figure on millwrights.

Q. What did you figure on? A. Machinists and machinists' helpers. What I mean by machinists is a man that can line up close, and if necessary, can get down with a pinch bar.

Q. About how many men did you figure that you could work on this job? A. That would vary, at different times, but approximately, I would say, around 40.

Q. Forty men? A. Around 40 men.

Q. Keep them busy all the time? A. Start when you get ready to work; wait until your building is erected far enough along so that you can start out, then.

Q. Your estimate, of course, is based on using 40 men? A. At some time. I did not mean to say 40 men right along. Maybe sometimes less, maybe sometimes more.

Q. At what period in the installation of this machinery would you say that you would need to use 40 men? A. You could use 40 men—it just depends on how you make the building. If you come down to working your men in bunches, what I have got there, and all the different drives in the mill, you could start in on wiring the mill, with the different drives, and I venture to say, putting up the line shafting, setting the benches, getting the benches in the mill, you could use 40 men. That would have to include the tram man and also the truck drivers.

Q. You are basing your estimate on using 40 men at times? A. At times. Sometimes less and sometimes more.

Q. Sometimes more than 40 men? A. I would not say over 45 at the very most.

Q. What would be the minimum number? A. That is pretty hard to say. Around, I would say, not under 10 to 12.

Q.. When you made your estimate, you were estimating, were you not, on going full speed in order to get the job done just as quickly as you could? A. Absolutely.

Q. Not with regard to economy in price? A. I was going in regard to time.

Q. Time was your main element and not price? A. Time is what you are after.

Q. And just worked as hard and expeditiously as you could? A. Absolutely. If necessary, you had to, you could work—I would say that you could easily work two eight hour terms.

Q. Night and day? A. You could work two eight hour terms, if it is time you are after.

Q. You based your estimate on working two eight hour terms? A. Part of the time, yes.

Q. May I have the length of time that you say it would take to completely install this machinery and tune it up ready for operation? A. I said six weeks.

Q. By the way, what is the usual force maintained by a machinist in that business? A. The usual force?

Q. What is the usual size of the force maintained by a man in the business of installing machinery? A. What is the force?

Q. Yes—the usual force. A. It depends on how big a job he has got. There is no certain amount of men on a job until a man looks it over.

Q. And it is quite unusual to work two terms in the ordinary installation of machinery on any job, isn't it? A. No, sir, it is not.

Q. Now, suppose a man would only work one shift of eight hours, would that double your time? A. No, sir.

Q. Well, it would increase your six weeks, wouldn't it? A. No—what is that?

Q. If you worked two shifts? A. No. It I worked two terms, I would cut down in men, cut down on the day term, and divide up between night and day. If I worked one term, I would put all on the day term.

Q. What would be the object of cutting down the shift; if you had one shift, you would say that you would add more. A. It would not be more than 40 to 45.

Q. But if you worked two shifts you would divide them? A. About 20, each shift.

Q. Why would you have two 20's instead of one 45? A. In some cases where you are cramped for room, 20 men are better than 40. Then 20 at one time and 20 at another time.

Q. Does that indicate to you that 45 would be too many to work at one time? A. For most of the time it may be, and sometimes you can use them.

Q. And have men standing around idle. Can you give me an estimate, or have you estimated—I withdraw that. Have you ever formed an estimate of the length of time it would have taken to install all this machinery with men working one shift of eight hours a day? Have you made such a calculation? A. One shift eight hours a day.

Q. Have you made such a calculation? A. It is calculated right there on those items.

Q. Are these based— A. (interrupting) Those are based on one term of eight hours a day.

MR. VANDERBILT—Referring to Exhibit D-11.

Q. In answer to a question of Mr. Vanderbilt, you have said that it would take about six weeks to install this machinery. A. It would take six weeks' time.

Q. And you answered to me that part of that time

you would have two shifts working. A. Well, that just depends on how the work is going to go. I am going to do this in six weeks.

Q. Have you made up your mind that you wanted to do this job in six weeks? A. Yes, sir .

Q. That is what you started out to prove, that you could do it in six weeks? A. That is what I am trying to prove.

Q. Why are you proving that it could be done in six weeks; because Mr. McCrossen said to? A. No. From personal experience I know how long it takes to set a bench. I have set enough Schuster straight cut on benches to know how long it takes to set them.

Q. You say, in your estimate of six weeks, did you, or did you not work two shifts? Answer yes or no. A. I won't answer it in that way, because part of the time yes and part of the time no.

Q. How much time did you work double shift, and how much time did you work single shift? A. Well, as to the exact time of that, now, I did not figure that out.

Q. You did not figure that out? A. —which I would work eight, and which I would work sixteen.

Q. If your worked machinists out of the usual period of the day, you would have to pay them extra money? A. No, you do not.

Q. If you have Union machinists you would? A. Yes, if you have Union machinists.

Q. Then, you are contemplating installing this machinery by men who are not Union men? A. Yes.

Q. You would not pay double time for working out of the ordinary hours of the day? A. No. You don't do it in other places.

Q. There is such a thing as Union machinists, isn't there? A. Yes, sir, absolutely.

Q. If all the other part of the job was Union, you would have to have Union machinists, or you would have a strike? A. If the other part was Union, yes, you would.

Q. You know that from your own experience? A. I know that from my own experience, but we do not know that Igoe Brothers have a Union plant.

Q. You were figuring that they were not? A. I am figuring that very feel steel plants are Union.

Q. Of course, you knew the builders were the ones that were Union. A. The builders—nine out of ten—it depends on who puts it up, whether it would be Union or not.

Q. Here is a question that I want to ask you: How long would it take to install this machinery working eight hours a day, without using a double shift? A. Eight hours a day?

Q. Yes. A. It would take six weeks.

Q. Working eight hours a day and no longer? A. Eight hours a day it would take six weeks. You would have to put men on there to get it done.

Q. In other words, you would put men on, even though part of the time they would remain idle? A. No. Why remain idle?

Q. If you put 45 men on the job, you could not work successfully? A. You have five or six buildings to work in.

Q. I am talking about the job of putting the machinery up. A. So am I.

Q. Could you use 45 men successfully? A. Yes. I would say that you can have at least one week, or more; you have line shaftings to put up, and hangers to put up.

Q. You are talking about transmission, aren't you? A. Absolutely. It is figured in on the machinery.

Q. You could put in the transmission and power; is that what you are talking about? A. I am figuring enough extra time on each one of those drives for enough shafting on a wire mill, with the exception of the machine itself.

Q. You are talking about the installation of power? A. I am talking about the installation of power.

Q. You have never had experience in the installation of electrical work? A. I am not talking about electrical; I am talking about line shafting.

Q. Line shafting? A. Yes, sir.

Q. Is that part of your work? A. Absolutely.

Q. Well, now, do you include line shafting work with the machinery? A. I included enough line shafting to run one of those benches, with the facts that are there.

Q. How about the hangers? Are the hangers included? A. Hangers are included.

Q. Do you run a bench from a line shaft? A. From a line shaft, on a wire mill—that depends on how many speeds you have on it. From motor to line shaft, then back to the bench.

Q. You do not know what Igoe Brothers had? A. I do not know exactly what they had.

Q. Wouldn't that play a material part in the time that you would allow, if you knew? A. No considerable time.

Q. It would make some difference? A. No considerable.

Q. You did not make inquiry to find out? A. The best I could—so many feet of line shafting will take so much time to put up, and so many feet of line shafting—assume so many feet of life shafting to run those benches

Q. Could you work economically 20 men on this job? A. Could you work economically 20 men on this job?

Q. Would that be better than working 45, from an economical standpoint? A. It might be from an economical standpoint, but not time.

Q. Assume that you were a contractor about to take a contract to install this machinery, working eight hours a day, you would not want to have 45 men working all the time? A. Not all the time.

Q. You would reduce your squad to 20, and work on that line? A. We will say, work, ranging from 20 around 30 at a time; when we are getting this machinery over into place, we have 40; then drop down varying from 40 down to 20, or somewhere around there.

Q. If you were working along those economical lines, you would take longer than six weeks, because you would not put the men on? A. No. It should not take over six weeks to put that machinery in.

Q. Irrespective of the number of men used? A. You have enough men on the job to do it in six weeks.

Q. That is your best estimate? A. That is my best estimate, right around there, six weeks.

Q. No time for tuning up? A. No, sir, not wire mill benches, which I would say we do not allow for tuning up at all.

Q. That six weeks you have referred to, the wire drawing— A. The six weeks' period—the machine shop and all that is estimated there.

Q. Including the wire and nail machines? A. That is, including what is on that slip.

Q. You do not know how long it takes to install a

wire mill machine, you only installed one in your life. A. You say that I only installed one in my life?

Q. How many have you installed? A. Two at the Page Steel & Wire, and two more at the Pittsburgh Steel.

Q. That is four installed in your life? A. Personally.

Q. You want to go on record as an expert in setting— A. I can set them as good as an expert, because I have set four benches, and had others set.

Q. You have had others set; had other people do it? A. Had other people do it.

Q. You did not supervise it? A. Certainly I supervised it.

Q. How many, would you say? A. I would say 12 or 14.

Q. You would say 12 or 14, in your whole experience? A. That is 16 altogether.

Q. And you, by reason of the installation of these 16 machines, consider yourself an expert on installation? A. I consider that I know exactly what time it takes for one man and a helper to set a nail mill. I am judging by the weight of them, and how many bolts are in them, and the transportation of them.

Q. And install the pulleys and hangers and everything that goes with them? A. Absolutely.

Q. Would you say, in wire drawing machinery, you would get full capacity after a day's run, after setting up the wire mill? A. No, sir.

Q. How long before you would get full capacity? A. You would get full capacity after it had been set 15 years. There is a little bit of warming up to do, after the bench is set, for a while.

Q. How long would it take to get full wire capacity? A. Good wire drawing capacity—draw good wire in 15 to 20 minutes.

Q. 15 to 20 minutes. You don't have to tune up the machines once they are set. A. Wire drawing blocks?

Q. Yes. A. No.

Q Everything works to perfection? A. Don't misunderstand me. You can get bad dies and once in a while something breaks.

Q. Don't you have to allow for it? A. Don't allow for it every day it runs.

Q. Brand new machinery? A. Brand new machinery?

Q. Yes. A. I should say no,—don't allow for it after it is started.

Q. How about wire mill machinery?Don't you have to make adjustments? A. Yes, occasionally, once in a while.

Q. Do you think that Mr. Lewis was wrong when he said that he always allowed three weeks for tuning up machinery to bring it to the highest point of efficiency? A. His machinery is new. I have nothing to say about machinery that is new. I am talking about old benches that have nothing but die holes and a few strips of wood. I am talking about that type of bench.

Q. You think that he is confining the three weeks to the type of machinery he is producing? A. Certainly, a man that buys a thing new does not know whether it will bind here or there when he runs it.

Q. That is why tuning up is necessary? A. On a new purchase, yes.

Q. Assuming that Igoe put new equipment of the same character in, that would have to be tuned up? A.

They were putting in equipment the same as they had, which was not new.

Q. Is that what your understanding was when you made this computation? A. I understand they were going—this machinery, in case it had been new, and delivered on the job, the same kind of stuff—don't misunderstand me; when I say new I do not mean modern machinery. Of course, it would be new machinery, but the same type as what they had. What I mean by new—you misunderstood me—was like Mr. Lewis had.

Q. I understand you to say that if they got new machinery of the old type, it would not require time to readjust, and so on. A. I should not say it would.

Q. If they got Mr. Lewis' machinery, they would have to spend some time adjusting it? A. I do not know anything about his machinery. I told you that.

Q. Can you tell me, Mr. Dougherty, how many new benches you have installed and started up, without adjustment? A. How many new benches?

Q. Yes. A. Well, last year, we moved from one wire mill to the other,—

Q. (interrupting) A new one? A. A new one?

Q. Yes?. A. We have new Vaughn blocks. I will give you an example. We have new Vaughn blocks.

Q. Let me stop you. The Vaughn blocks are different from Igoe Brothers'. A. All right.

Q. I am talking about Igoe Brothers' type of new machinery. A. Igoe Brothers' new machinery?

Q. Yes. A. What I am speaking about—Igoe Brothers' new machinery we never installed.

Q. You never installed new machinery of that kind? A. No, I never installed new machinery of that kind, but what would be different in installing old or new?

Q. I am asking you if you ever installed new machinery of the kind that Igoe Brothers had in the plant. A. Not brand new. They are older than I am.

Q. You do not know whether you would have to make adjustments on that character of machinery; if you never installed it, you do not know. A. I should say—

Q. You say you do not know. A. No, sir. I should say, because of the ones I have seen—

Q. While you have seen machinery such as that at Igoe Brothers, you have never installed any new? A. Not brand new, no, sir.

Q. Isn't it a cardinal rule with respect to machinery of this kind, just like automobiles; you have to take it easy while it is new, and gradually work it in? A. Machinery of that type,—there isn't much machinery connected with it. It is not fit close.

Q. Take the wire mill machines; aren't they a little different? A. Most machines today, when they come on the job—

Q. (interrupting) I am talking about machinery of this kind. A. So am I.

Q. They are all set to run without adjustment? A. Not with the adjustment on a car that you speak about, an automobile, which come too tight to run.

Q. I am talking about wire mills. A. Yes, but you referred to an automobile, running it slow.

Q. Confine yourself here to nail machinery. Don't you have to adjust that? A. You will have, as I said before—it might take fifteen to twenty minutes to adjust your dies.

Q. That is all you have to do? A. That is all you have to do, I should say, on any nail machines.

Q. That is your experience? A. On common nails, understand me.

Q. By the way, these 16 nail machines that you set up and supervised the installation of,—were they new machines? A. New machines?

Q. Yes. A. Two we got at our place were new.

Q. Did they run right off without adjustments? A. Well, I will say, on each of the machines, we will give you 20 minutes.

Q. You are assistant master mechanic of this plant? A. Yes.

Q. I take it that they have a master mechanic. A. Yes, we have.

Q. And you go around there to keep all this stuff in adjustment? A. I take care of inside and outside work.

Q. Your machinery gets out of order once in a while, and that is why you are there? A. Yes.

Q. How many machinists have you got? A. We have nine men and four helpers, and we have on at night—

Q. How many machines have you got? A. What do you mean—lathes, planers, or what?

Q. Wire drawing machines. A. Wire drawing machines, approximately three hundred blocks; that is, different sizes, to make nails from; 30 inch blocks down to 8.

Q. By the way, is there anything in this whole report wherein you agree with the estimate of Fletcher-Thompson, any one item? A. There are one or two items there that we come close. I would not say that I just exactly agreed.

Q. There isn't anything there that you agreed on exactly with them? A. Well, now, sir, I did not compare all their items with mine that close. I don't care what he bids on.

Q. Well, I notice a number of— A. (interrupting) Here is what you are going to notice. I had this marked in hours, and people hunting for trouble might accidentally pick that out as days.

Q. What do you mean? Did you think that people were going to hunt for trouble? A. Well, you know, you are cross-examined every place, and I was afraid that you would pick out four days for four hours, and I erased that and put down the fraction of days.

Q. Was that done after you saw Mr. McCrossen? A. Mr McCrossen did not see this report until after everything was over with. So far as his report is concerned, I do not know what he figures.

Q. I see here the erasure, the number of days you speak about, two and one-half, and then you wrote four over it. How do you account for that? A. It is like this: I was afraid that I was cramping you, and I put it up. I wanted to be lenient with you.

Q. When you put that down the first time, you put down your honest estimate then? A. Yes. When I looked over it again, I thought it was all right, and changed it.

Q. Do you want to look over it to see if you cramped them in other places? A. No, sir.

Q. You are satisfied? A. I am satisfied, and I am going to stand by it.

Witness excused.

WILLIAM H. BLOUNT, called as a witness on behalf of the defendant, being first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. VANDEBILT:

Q. Where do you live, Mr. Blount? A. West Brookfield, Mass.

Q. What is your business? A. I am a manufacturer of all kinds of wire and strap steel machinery.

Q. Do you make wire working machinery? A. Yes.

Q. What is the name of your company? A. Sleeper & Hartley, Inc.

Q. Where is their place of business? A. Worcester, Mass.

Q. What is your position in that company? A. Engineer.

Q. How long have you been connected with the company? A. Fifteen years, or more.

Q. In the course of your work, has it been necessary for you to visit the various wire and nail manufacturing plants around the country? A. Yes, sir, it has.

Q. Are you familiar with the manufacturing and installation of wire and nail equipment, and auxiliary equipment for such machinery? A. I am.

Q. Did you visit the plant of Igoe Brothers in Newark shortly after the fire? A. Yes, sir.

Q. How long after the fire? A. I think it was a month; possibly two.

Q. Did you confer with any official of Igoe Brothers Company? A. I met Mr. Peter Igoe and Mr. Woodward.

Q. Did you have any talk with them with reference to the rebuilding and re-equipping of the plant? A. Yes, sir.

Q. Have you studied the original fire claim as prepared by Miller & Maltbie, right in front of you there? A. I have.

Q. And the Fletcher-Thompson report and supplemental report showing their estimate of the time necessary to install and put into operation the equipment which was damaged or desroyed by the fire in the Igoe Brothers' plant? A. I have.

Q. Have you prepared an estimate of the time necessary to install the items of equipment shown in the original claim of Igoe Brothers and in the Fletcher-Thompson report? A. Yes, sir.

Q. And is this prepared with the first column showing the number the item bears on the Fletcher-Thompson report, the second column showing the description of the piece of machinery as in the Fletcher-Thompson report, followed by the number of men and number of days and number of man days as given by the Fletcher-Thompson report? A. I did not follow these figures here, but followed the description.

Q. You followed the description. Have you prepared, in pencil, following that, the number of men and number of days they worked, and then totaled and extended it to get the number of man days? A. I have.

Q. Does that apply to each item shown on theh estimate prepared by you? A. There are several here—

Q. (interrupting) You were told that they were not installed, and you left them out. A. Spares and extras.

Q. And does this statement as prepared by you give the total number of man days, which, in your opinion, would be necessary to equip and install the machinery in Igoe Brothers' plant in Newark? A. It does.

Q. I notice that the repair item on that you omitted, of course. A. I did not know what the condition of it was after the fire.

MR. VANDERBILT:—I offer the report. Cross-examine.

MR. GILHOOLY:—I object on the same ground; subject to my checking it up.

MR. VANDERBILT:—Subject to Mr. Gilhooly's right to check it with the Fletcher-Thompson report.

THE MASTER:—Yes.

(Report of Mr. Blount marked Exhibit D-12).

Q. Mr. Blount, was the wire drawing equipment and nail making equipment in the Igoe plant modern equipment? A. Why, from these reports here, and the blueprints—

Q. (interrupting) You are referring now to the original Miller & Maltbie estimate. A. —the wire machinery was obsolete.

Q. Why do you say that? A. Because the construction today on wire machinery is practically all steel and cast iron.

Q. What was the construction of these machines? A. Cast iron and wood frames.

Q. Are such equipment common in this country at the present time?

MR. GILHOOLY:—I just wonder what materiality that has, and I object to it on the ground that it is not material, for this reason: We were entitled to have reinstalled, under our policies, the machines that we had there at that time; if that was profit making equipment, then that was the equipment to be insalled, not modern equipment. If the Master wants to receive it on the same line, for what it is worth, I will note my objection.

THE MASTER:—I understand your point thoroughly. I don't think that it would interfere with your argument in any way, later on. I do not want to preclude counsel from putting it in, in case he wants to argue it before me or before the Court later. The testimony may be introduced and the exception noted.

MR. VANDERBILT:—Will you repeat the question?

(Question repeated by the reporter as follows: Are such equipment common in this country at the present time?) A. I would say it is not common.

Q. How was the power supplied in the plant before the fire? A. From these claims, I notice that there is a Corliss engine connected with a rope drive.

Q. Shafting and transmission throughout the mill? A. Yes, sir.

Q. Is that common equipment in such mills at the present time? A. No. They have been done away with.

Q. What is used now? A. Belts and motor drives.

Q. Do you know, Mr. Blount, of your knowledge, whether or not there was an easy market for making delivery of wire drawing equipment and nail machinery in the spring and summer of 1925? A. Yes, sir. I was chasing after some business.

Q. Were other manufacturers chasing after business at the same time? A. In the same situation.

Q. When wire drawing and nail making equipment of the type involved in this plant is set up, is there any time taken for tooling the machinery? A. I never heard of tooling, to be applied to nail machinery or wire drawing machinery.

Q. Well, there has been considerable talk about tuning the plant. What have you to say about that? A. Well, tuning the plant—on our nail machines, we run them half a day in our own plant before we put them out, so that they are all ready to go to the plant at operating speed.

Q. So, on machines produced now, tuning is not necessary? A. No, sir.

Q. Were you equipped in the spring and summer of 1925 to supply accessories needed with wire drawing equipment? A. On wire drawing equipment, we do not supply the accessories unless we buy them outside.

Q. Were they readily obtainable at that time from those that do manufacture them? A. They were readily obtainable. We sometimes procure dies for machines to go to foreign countries, and they come in before the machines are ready to ship out.

Q. Was that true in the spring and summer of 1925? A. Yes.

Q. Are these dies referred to complicated pieces of machinery? A. No, sir. Some of them are made out of tooled steel, and some of them out of cast iron.

Q. Can you describe to the Court just what they consist of. A. On heavy steel they use cast iron dies; cast the shape with the impression, and drill the holes and ream them. A fellow can drill one of those plates in about twenty minutes, and ream the holes. On the

finer machines they use tooled steel dies, and the small holes are drilled and reamed. These dies have anywhere from four to eight holes in them.

Q. Would it be necessary to delay the wire equipment in order to get such dies? A. No. It could be ordered in advance.

Q. Would they be ready by the time the machines were ready to install? A. I can get dies at any time within ten days to two weeks.

Q. What concerns are there that you know of that make such dies? A. The Worcester Wire Die, and the Weisser Die Manufacturing Company.

Q. In connection with nail machinery, do you manufacture that too? A. Yes.

Q. Are there any accessories in connection with that that you do not supply? A. No. We supply dies of everything, tumbling barrels and everything that goes with them.

Q. Do these dies have to be set into the machines after they are set up? A. No. They are interchangeable, to correspond with the size of the machines.

Q. Is this common practice with nail machinery manufacturers? A. Yes, sir.

Q. Does this also apply to any special shape nails? A. It applies to special shape nails and special wire.

Q. With reference to some of those, to me, odd looking nails that were referred to, can dies for those be obtained in the same way that you referred to the others? A. Yes. It would take a trifle longer to make them—some of them.

Q. Could they be obtained in the length of time that it would take to order, set up, and equip the machinery? A. Yes, sir.

Q. Are they complicated to make? A. Most of them here are simple, some are more difficult.

Q. Your concern makes these? A. Makes dies.

Q. You make dies. Can you make dies for nails of those various shapes referred to in Exhibit D-17? A. Most all of them.

Q. —In that box you now have? A. Most all of them.

Q. Have you, in your concern, made special dies for special jobs in various countries and continents? A. Yes, sir.

Q. Can you give us some examples? A. We are shipping dies to South America right along. They are going for the first machines we built, that were built in 1912 and 1913.

Q. What are they for? A. Ordinary nails and special. They are located in Columbia, South America, Calais.

Q. Do you think it would be necessary, judging from your experience, to have to delay the starting up of Igoe Brothers' plant, for the purpose of obtaining any special dies for the nail machines? A. No, sir, unless there are a few freaks in here.

Q. What is necessary for you to erect your wire nail machinery? What must you have? A. Simply take it out of the crate, bolt it to the floor, and hook it to the main line and put the pulley on the shaft.

Q. Is this true about equipment made by other wire machine and nail machine manufacturers? A. Mostly.

Q. Mr. Blount, from your study of the Miller & Maltbie claims as to the building and equipment, and the information you obtained further from the Fletcher-Thompson reports, what, in your opinion, would be a

reasonable estimate for the period of time necessary to install the equipment and get it in operation? A. Six to seven weeks.

MR. VANDERBILT:—Cross-examine.

CROSS-EXAMINATION

By MR. GILHOOLY:

Q. Did you say 67 or 6 to 7? A. Six to seven weeks?

Q. Well, now, I understand you to say that you studied the Miller & Maltbie claims. A. Yes, sir.

Q. When were you called into this case, Mr. Blount? A. About a week ago.

Q. And you were consulted, I assume, by Mr. McCrossen. A. Yes, sir.

Q. And he prepared that chart you have there from which you have made the estimate? A. Yes, sir.

Q. After you prepared that chart and consulted with Mr. McCrossen, did you ever consult the chart that was prepared by Mr. Dougherty? A. Do you mean that time chart?

Q. The one he had here similar to the one you had. A. Yes.

Q. You and he compared notes? A. No. I did mine after his.

Q. Did you make up your computation after you had his? A. I worked until two o'clock on it.

Q. You were working on it until this morning? A. Yes.

Q. I take it that you got this Miller & Maltbie claim

to aid you in developing your work. A. I did not have these until—

Q. When did you get them? A. Yesterday afternoon.

Q. Yesterday afternoon. What time yesterday afternoon? A. I got them from Mr. McCrossen at four o'clock.

Q. Then I take it, you went home. A. No, sir, I went to the hotel. My house is too far away.

Q. When did you start working on this matter? A. As soon as I could get settled.

Q. You had your dinner and went to work about eight o'clock? A. It was before that.

Q. You went over that item by item? A. No, sir. I glanced through it. Anything I was uncertain in here, I looked up in here.

Q. You did not make reference to that chart except for the things that you were in doubt.? A. The weight of machines, type, bulks, &c., I had to look up in here.

Q. But for the main part, you relied on the information supplied to you in Exhibit D-12? A. Yes, sir.

Q. Is that right? A. Yes, sir.

Q. Now, that did not give you the weights of any of these machines, did it? A. No, sir. I had to find them in here. (indicating).

Q. Then you referred to the Miller & Maltbie claims to find the weights? A. Yes, sir.

Q. You went over it item by item? A. What is on there.

Q. —between the time you started and two o'clock this morning? A. Yes.

Q. When did you compare notes with Mr. Dougherty? A. This morning.

Q. Did you make any changes as the result of your talk with Mr. Dougherty? A. No, sir.

Q. Did he make any changes as a result of the talk that he had with you? A. No, sir.

Q. Your figures were in accord; is that right? A. Yes.

Q. I notice on here that he has a total of 523 man hours. I would like to know how many you make a total of. A. 516½.

Q. That would be a difference of seven man hours—6½ man hours? A. Yes, sir.

Q. ½ man days? A. Yes, sir. Let me explain—

Q. Let me go on. You may explain on re-direct. Mr. Vanderbilt is very adroit and clever in clearing up any doubt.

MR. VANDERBILT:—Thank you.

Q. —Would you say it was simply a coincidence that you and Mr. Dougherty would come within about half a day of each other in the time for installing this? A. I was surprised myself that we came so close.

Q. That was a shock to you, was it? A. Yes, sir.

Q. You tried to sell Igoe Brothers, didn't you, after they had the fire? A. Yes, sir.

Q. Of course, you did not succeed? A. I did not try to sell them. I went down to see what the situation was and showed them the pictures of our machines.

Q. That is trying to sell them. A. Tried to get them interested.

Q. You did not sell them any of your machines? A. No, sir.

Q. You are a salesman for this company? A. I engineer and salesman.

Q. When you speak of being an engineer, what do you mean by engineer? A. I am not a technical graduate. I had a high school education and I worked under a very clever engineer.

Q. I do not mean to be officious, but I want to get your particular qualifications. A. I have been in wire since 1907.

Q. Your concern has not much to do with wire mills? A. Yes. We have built over 350 mills, built over 100 for the French Government after the War.

Q. One hundred. Where are the rest of them? A. Australia and South America.

Q. How many in Australia? A. About 50 in Australia.

Q. Somewhere else, you said. A. Some in California.

Q. And some in South America? A. A couple in Mexico—several in Mexico.

Q. Very few in California? A. Yes.

Q. In other words, it is not your specialty in this country? A. No, sir. There is more money in other machinery we make.

Q. You haven't confined yourself in this country to wire drawing machines? A. Not wholly. Our specialty is wire spring machinery.

Q. What? A. Spring machinery. Every springmaker in the country uses our machine.

Q. That is different— A. That is 5/8 square.

Q. Igoe does not use it? A. No. Igoe does not make them.

Q. That is your specialty. The other is to fill in. A. The other, we fill in.

Q. —to cover your overhead? A. To keep our overhead down.

Q. How long have you been making wire drawing machinery? A. About eight years.

Q. And your concern was not in the business of making wire drawing machinery when Igoe Brothers started business about 22 years ago? A. No. We are not that old. We started in 1911.

Q. The wire drawing machinery in which you are interested, is this continuous wire machine? A. We build anything in the wire line, frames, barrels, make designs for strap,—

Q. The stock you keep on hand, is this continuous wire drawing job? A. Yes.

Q. And the other is specially made? A. Yes, because it is simple and easy to put together.

Q. You spoke about tooling up. You said, in one part of your testimony, that you never heard of tooling up. A. No, sir.

Q. That is an expression, I take it, foreign to you. A. No, sir, it is not foreign to me; it is used in regard to automatic machines, tooling automatic machines.

Q. You say you never heard of it— A. (interrupting) Not connected with wire mills.

Q. Not connected with wire mills or wire nail mills. A. No, sir.

Q. These nails that you examined and you said were of unusual type—is that right? A. Some of them.

Q. Most of them are, aren't they? A. They are not the ordinary breed of cats.

Q. They are not common nails, are they? A. No.

Q. The machinery you have in stock and put out for sale is machinery for rough common nails? A. No. Our machines cost a little more than the ordinary machines, and we get a lot of this fancy work.

Q. You say, you make up dies for this fancy work, and it takes sometimes two weeks to get the dies. A. You can't make them in a day.

Q. The ordinary kind of dies take ten days to two weeks to make, you testified on direct examination. A. I must have slipped there somewhere.

Q. You said two weeks. A. Two days to ten days.

Q. You wish to modify it if you made such a statement? A. Yes.

Q. You went over, as I understand it, the list made up by Miller & Maltbie, but you merely referred to the other to get specific data. A. Yes, I took—this was what the insurance was settled at, and it gave me a good line on the equipment.

Q. You did not examine minutely into that report to find out the character of dies there at the time of he fire, did you? A. No, sir. I see a lot of dies listed there on the inventory.

Q. You did not look into it very carefully, did you? A. Just glanced them over in the time available.

Q. You are not prepared to testify from knowledge gained by reference to that paper as to the character of the dies, are you? A. It does not give all the dies.

Q. Would it change your opinion with respect to the time for tooling up—t-o-o-l up—if you knew, or if you learned, that the dies for the wire drawing plates used by Igoe Brothers were not local dies but imported from Europe? A. I used both.

Q. These imported dies you get from Europe,—that would take a considerably longer time for tooling up, wouldn't it? A. No, not necessarily.

Q. If you had a special order for dies of that kind, you would have to send to Europe? A. They might be in New York in stock.

Q. And if they were not in New York in stock, you would have to get them from the concerns that made them? A. Yes.

Q. That would add additional time to your estimate? A. Not necessarily. I have allowed six weeks. You could get them in that time.

Q. But if you did not have a special order for that kind of work, you would have to wait for that order? A. Yes; for ordering the dies.

Q. That is, not common dies but special dies. A. Those are made here.

Q. If the concern found from practical experience that the dies obtained in Europe were the dies with which they could best work, you would add to your time for tooling up? A. No, sir. You could get them.

Q. You say that you could get them in this country? A. Yes.

Q. Even though you felt they were not as good as those from abroad. A. Yes.

Q. If you wanted to get those abroad it would take longer? A. It might take longer.

Q. You did not take that into your estimate, the foreign dies? A. No. If they were coming —

Q. (interrupting) In figuring the time to do the work, did you figure based on the Miller & Maltbie claim for the cost of installing? A. No.

Q. You never referred to that at all? A. No, sir. As a matter of fact, I don't believe that I could find it in this book.

Q. That did not enter into your calculation? A. No, sir.

Q. Well, now, take item 43 from Exhibit D-12, and compare it with Exhibit D-11. You estimated 14 man days, and Mr. Dougherty 12. A. That is the machine—

Q. (interrupting) That is the wire drawing machine 10-22" blocks, 3 pointers, 10 reels. A. Yes.

Q. That was made by Igoe Brothers? A. Yes.

Q. Did you have any further information as to the character of that particular machine? A. No, sir; but I could tell by the size of the block about what it was.

Q. But it was made by Igoe Brothers? A. Yes.

Q. That indicated to you, did it not, that was a special machine made by that company? A. That type of old machine,—they are practically all, the old machines, one machine copied from another.

Q. You have no knowledge to assure you that was the fact? A. I saw the blueprint.

Q. You saw the blueprint? A. Yes.

Q. When? A. Yesterday.

Q. Of that particular machine? A. Not of that particular machine, but wood construction.

Q. Not that particular one? A. No: but I can tell by the diameter of the block.

Q. It might be a peculiar design that you could not replace. A. It might be a peculiar design; it might be driven from below the floor. As Igoe's plant was located near the water, it would be impossible to drive it that way.

Q. Refer to item 45, wire drawing bench, wood frame, Vulcan 10 blocks, 2-22 inches, 8-20 inches, 3 hand pointers, 1 large pointer, 10 reels (rebuilt by Igoe). Mr. Dougherty allowed 16 hours, and you allow 20 for the installation of that—16 man days, and you allow 20 man days. Can you explain why you would allow four more man days than Mr. Dougherty? A. I do not know what he basesd his on. I put mine down there as what I thought it would take, from my experience.

Q. I notice that for item 48, you have allowed 16 man days, on Exhibit D-12, and Mr. Dougherty has allowed 16, after having made an erasure. Did you see that erasure made? A. No.

Q. That was done out of your presence; is that right? A. Yes.

Q. I asked you where this tabulation which is annexed to D-12 was made? A. That was made up in the hotel. Q. Did you have that made up at the hotel? A. Yes.

Q. Was the tabulation made there too, on Mr. Dougherty's report? A. Probably.

Q. Do you know? Was he staying at the same hotel as you? A. Yes, sir.

Q. Who did you have do it at the hotel? A. The public stenographer.

Q. The public stenographer had an adding machine, at the hotel? A. Yes.

Q. Were you in conference with Mr. Dougherty there? A. No, sir.

Q. Are you sure it was not made up by Mr. McCrossen? You can't be mistaken on that. A. The first part of it was, I did some of it at his office.

Q. You did some of it at his office. This one I have made reference to was not done at the hotel? A. No, sir.

Q. Can you point which one was done at the hotel, Mr. Blount? A. No, sir.

Q. It is not there? A. No.

Q. Do you want to correct your statement, then, for the record, Mr. Blount, that that was no done at the hotel? A. Yes, sir.

Q. But you did have some tabulation made at the

hotel; is that correct? A. I changed some things there this morning.

Q. You had the additions— A. No, sir. That was done at Mr. McCrossen's.

Q. What do you mean? A. That was done at Mr. Mc Crossen's.

Q. Can you tell me how you could be so mistaken about this tabulation being made at the hotel, when it could have been done only this morning? What causesd you to be in error on that? A. Only that I worked until two o'clock last night on it.

Q. You got up this morning and had the tabulation made on the adding machine at the hotel? A. Yes. I retracted that.

Q. You did not do it? A. No, sir.

Q. Did you deliberately try to mislead me by telling me that, or was it a slip of the tongue? A. Just a slip of the tongue. You got me rattled.

Q. That was made in Mr. McCrossen's office? A. Yes.

Q. You went in and consulted Mr. McCrossen, didn't you? A. No; I did not go to Mr. McCrossen at all.

Q. Where did you see Mr. McCrossen? A. That was done last night at two o'clock in Mr. McCrossen's office.

Q. You were at Mr. McCrossen's office? A. I worked there until two o'clock.

Q. What time did you go to Mr. McCrossen's office to start work? A. Four o'clock.

Q. Four o'clock in the afternoon? A. Yes.

Q. Did you do any part of this work at the hotel? A. I went over it and checked it up this morning.

Q. Did you tell me in answer to one of my first ques-

tions that you made this tabulation at the hotel, and worked until two o'clock? A. I beg your pardon. I worked until two o'clock at Mr. McCrossen's.

Q. Was Mr. Dougherty working at Mr. McCrossen's office? A. Yes.

Q. He worked with you? A. No.

Q. He was in a separate room? A. Yes.

Q. Mr. McCrossen was not there? A. In and out.

Q. Did you confer with each other during the night? A. No, sir.

Q. You never conferred? A. Yes.

Q. The two of you worked in the same office? A. The same office,—different rooms.

Q. Is there anything else in your testimony that you want to retract before I go further? A. No, sir.

Q. You stand pat on everything else you say. A. Yes, sir.

Q. Did you have any partciular reason for telling me that it was made in the hotel and not in Mr. McCrossen's office? A. No.

Q. Were you trying to shield from me the fact that you were working for Mr McCrossen? A. No, sir. I am not Mr. McCrossen's employe.

Q. Will you please tell me and the Master why you said you did it at the hotel? A. You got me rattled a little bit.

Q. I got you confused, eh? A. Yes.

Q. Now, you said that Igoe Brothers' machinery was obsolete; is that right? A. From what I can see here.

Q. Of course, you never saw the machinery before the fire, did you? A. No.

Q. Are you sure that you do not say it is obsolete by reason of Mr. Lewis' testimony this morning? A. No, sir.

Q. Would you say that all the machinery was obsolete there? A. I would say practically all of it was.

Q. Would you say the 1924 machine— A. (interrupting) I consider wood frame obsolete.

Q. Would you consider the 1924 machine, steel gear, single pulley, Vaughn; was that obsolete? A. No. I think Mr. Igoe showed me that machine.

Q. You testified that what you saw in there was obsolete. A. I did not say it all was obsolete.

Q. Then, how much—what percentage was obsolete? Did you make such a calculation? A. About 75 per cent of it.

Q. Did you actually go over it and put down what was obsolete and what was modern? A. No, sir.

Q. You are only making a guess? A. No. I carried it in my head.

Q. You just carried it in your head. Was it interesting to you to ascertain which was obsolete and which was modern? A. No, sir.

Q. Then, you had no occasion to give that consideration? A. No, sir.

Q. You are positive that your statement that it was obsolete is not based on anything that you heard here today? A. No, sir. I consider all wood frame machinery obsolete.

Q. When you speak of machinery being obsolete, what effect would that have on the running of the wire mill? Would it affect the profits? A. You would not get the production out of it that you would new machinery.

Q. If Igoe Brothers operated this plant at a profit, then, of course, you would say that it would not be necessary to get rid of it, would you? A. No.

Q. You are trying to sell new machinery? A. Yes.

Q. And it is to your advantage to have firms get rid of old machinery and get new machinery? A. Yes.

Q. And if so, when they get new machinery, they are asked to get the type of machinery you put out? A. Yes.

Q. It may be their good judgment might hold them, cause them to stay with the machinery that was in the plant? A. Yes, but it is to the advantage of the plant to change over from wood machinery to modern machinery.

Q. That is a selling argument you use from time to time? A. Yes.

Q. You try to convince them they should change their machinery? A. Yes.

MR. GILHOOLY:—That is all.

MR. VANDERBILT:—That is all.

Q. Did you ever erect or supervise the erection of a wire plant? A. Yes, sir.

Q. Which one? A. Not the whole plant, but the machinery we built for it.

Q. Just your machinery? A. Yes, sir.

Q. You never supervised the erection of a plant with machinery of the character of Igoe Brothers', did you? A. We put all kinds of wire frames in the Thompson Wire Company.

Q. I am talking about the character of machinery that Igoe had. A. No, sir. That machinery is too old for us.

Q. You would not know how long it would take to put it on an operating basis? A. I could make an estimate.

Q. You could make a guess? A. No. I estimate. That is part of my job.

Q. On new machinery? A. Yes.

Q. Modern equipment? A. Yes.

Q. Not the old type? A. No.

Q. You have never had practical experience with machinery of that character? A. No, sir.

MR. GILHOOLY:—That is all.

RE-DIRECT EXAMINATION

By MR. VANDERBILT:

Q. Mr. Blount, is there a difference between setting up the kind of machinery that is down at Igoe Brothers and other machinery of steel frame, not the continuous type, but the ordinary type? A. No. They are ordinary. We put them up that way today, not the benches for wire drawing, but tin and wire, used—the same type of machine that was used 30 years ago.

MR. VANDERBILT:—That is all.

(Witness excused).

MR. VANDERBILT:—I offer the report covering the building and machinery, because it was referred to in the testimony of Mr. Dougherty and Mr. Blount.

(Building and machinery report of Miller & Maltbie marked Exhibit D-13).

Adjourned to Friday, July 26, 10 o'clock A. M.)

Newark, N. J., July 26, 1929. 10.00 a. m.

(Met pursuant to adjournment.)

Same appearances

JOSEPH M. SCHAFFER, called as a witness on behalf of the defendant, being first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. VANDERBILT:

Q. Mr. Schaffer, where do you live? A. Waterbury, Connecticut.

Q. And what is your business, please? A. Salesman and assistant to the chief engineer in charge of cold heading of the Waterbury Foundry & Engineering Company of Waterbury, Connecticut.

Q. And how long have you been in that business? A. 24 years.

Q. Has all your business experience been in that particular line? A. It has.

Q. Are you thoroughly familiar with cold heading and rivet machinery? A. Yes.

Q. The term cold heading refers to rivet machinery, does it not, Mr. Schaffer? A. It does.

Q. Does your firm manufacture an extensive line of rivets and cold heading machinery? A. They do; probably the largest manufacturers in that line in the world.

Q. Over what territory are the machines manufactured by your firm sold? A. All over the world.

Q. Did your company ever sell any machinery to Igoe Brothers? A. They did.

Q. Do you know when these machines were sold to them? A. In 1905.

Q. And what type of machinery were they sold in 1905 by your company, to Igoe Brothers? A. Well, the records—

MR. GILHOOLY:—Well, may I ask this: Are you testifying from your—may I cross examine on those memoranda?

MR. VANDERBILT:—Yes.

By MR. GILHOOLY:

Q. Are you testifying from your own knowledge or from records you have abstracted from the company's files? A. Records and my own knowledge.

Q. And your own knowledge, in 1905? A. In 1905.

Q. Did you sell the machines? A. I did not.

Q. Did you have anything to do with the sale of the machines? A. No, not these machines.

Q. Then you are basing what you are now going to testify to on the records of the company? A. Mainly on the records of the company.

Q. It is all on the records of the company? A. Yes, sir. Put it that way.

MR. GILHOOLY:—I think the records are the best evidence.

By MR. VANDERBILT:

Q. Have you any record of the sale of any machine

to Igoe Brothers by your company? A. I have only here a card—I have here a memorandum card we keep, being a record of sales made.

MR. VANDERBILT:—May I see it?

(The witness hands record to counsel.)

Q. How was this card made up, Mr. Schaffer? A. The moment an order is entered, the transaction is put on those cards, of that type, known as customers' cards, and is filed at the same time the order is written out.

Q. This is a card, then, taken from the customers' card catalogue in the files of your concern? A. It is. It is the original customers' card.

MR. VANDERBILT:—I desire to offer it in evidence.

MR. GILHOOLY:—I object.

THE MASTER:—I will admit it. The objection is noted.

(Card referred to received and marked Exhibit D-14.)

Q. Will you tell us, if you can, what type of machinery is referred to in that card? A. Single stroke rivet heading machines.

Q. Have you personally worked in the factory manufacturing and erecting this type of machine? A. Yes, sir.

Are rivet machines or cold header machines assembled completely, and put through an operating test in the factory before they are shipped to customers? A. They are.

Q. When the machines are shipped from the factory, are they shipped as equipped machines, ready to operate, or are they dismantled so that they require re-assembling and erection upon arrival at the place where they are to be operated?

MR. GILHOOLY:—I object to that. I think that he can testify as to these particular machines, but to testify as to machines in general—we have no interest in that.

THE COURT:—Unless it applies to what was done in this situation—that is all right.

Q. This type of machine—

MR. GILHOOLY:—He can testify about the three machines, that is all he can testify to.

THE MASTER:—What was done with regard to these three?

MR. GILHOOLY:—I don't think I should try to limit Mr. Vanderbilt to that, but this man delivered three machines, and if he is testifying as to what is done in the delivery of machines of this character,—We are only concerned with machines of this type; how they are shipped, not machines in general.

Q. First tell us about machines in general. Are they ready to operate? A. Machinery up to about one-fourth inch wire capacity is usually shipped assembled and ready to operate. Machinery about this diameter or capacity usually has the fly wheel or wheels with friction clutch taken off—friction collar, not friction clutch.

Q. Can you tell us which these three machines are? You may refer to the card. Which classification do they

come under, Mr. Schaffer? A. By classification, what do you mean?

Q. I mean—you differentiated between two classes in your answer; one with the fly wheels— A. (interrupting): Yes; these here would all come assembled.

Q. These would come assembled. Are rivet machines difficult machines to install and put in operation? A. No, sir.

Q. What is required to put them in operation? A. To set them on the foundation, strap them down with bolts, wipe off the grease, connect the power, put in the dies, punches, knives and so forth, oil the machine up and run it.

Q. Can knives, dies and punches for different sizes and types or rivets be furnished with rivet machines at the time they are shipped from the factory? A. They can.

Q. Is that the customary practice? A. It is and is not. Very often with people having new plants erected, or new customers going into this field, the request is made to tool up the entire outfit, which we can do. People versed in the art do not always have tools made up.

Q. And if a purchaser of your rivet machines supplies you with samples or drawings and specifications of rivets they then wanted to produce on your machines, could you supply them with all necessary dies, punches and cutters, to make the rivets? A. We could.

Q. Can special rivets be made on your machines? A. What do you mean by special rivets?

Q. Well, there has been evidence here in this case that Igoe Brothers produces special rivets in their plant. Can such special rivets be made on your machines? A. Any rivets within the capacities of the machines, whether special or otherwise can be made on these machines.

Q. Have you studied the report of the Fletcher-Thompson Company which has been introduced in evidence, wherein they estimate the number of men and number of days necessary to instal the rivet machines in the Igoe Brothers plants? A. I have.

Q. Have you studied also the original claim field by Igoe Brothers describing the rivet and cold header machines in the Igoe Plant at the time of the fire, which also has been introducted in evidence? A. I have.

Q. The proof of claim? A. I have, with respect to the number of items on rivet machines.

Q. I mean, so far as it relates to rivets and cold heading machines? A. Yes.

Q. What, in your opinion—can you tell us how long, in your opinion, it would take to set up and instal this machinery? Have you made any tabulation of that? A. I have.

Q. Have you it with you? A. I have.

Q. The first column on this paper, Mr. Schaffer, refers to the items by number in the Fletcher-Thompson report, and the second is the quantity and the third is the description of it. The fourth, fifth and sixth columns contain what? A. The estimate of time for setting up these machines.

Q. And that, in your opinion, is the reasonable time that would be required? A. I would say so.

MR. VANDERBILT:—I ask to have it marked in evidence.

(Chart referred to marked Exhibit D-15)

Q. You estimate a total of 23½ man days to set up the rivet machines? A. Yes.

Q. The cold header machines? A. Yes.

Q. Are the machines which are listed in your estimate there modern or obsolete machines? A. Most of them appear to be obsolete.

Q. What advantage have modern machines over obsolete machines?

MR. GILHOOLY:—That is objected to on the ground that it is immaterial. We are entitled to have our profit making facilities reproduced.

THE MASTER:—I sustain the objection.

MR. VANDERBILT:—Cross-examine.

CROSS-EXAMINATION

By MR. GILHOOLY:

Q. I am referring now, Mr. Schaffer, to Exhibit D-15, and I ask you if this chart was made up before you made your estimate, the chart actually made up before you made up your estimate, or did you make up the chart— A. (interrupting) I made up the chart itself.

Q. Well, when did you do that? A. I did it yesterday afternoon.

Q. And you were in conference, I take it, with Mr. McCrossen? A. I was.

Q. And did you go through the entire fire loss of Igoe Brothers to find these particular machines? A. Only as they related to the cold heading machinery.

Q. Only as they related to the cold heading machinery. That is the only— A. (interrupting) And the rivet machinery.

Q. You dug that all out, you say; is that correct? A. Not entirely.

Q. Mr. McCrossen pointed it out to you? A. Assisted me.

Q. You did not check the list to make dead sure that you had every thing in that list? A. No.

Q. You accepted Mr. McCrossen's statement as to that? A. Yes, sir.

Q. If there are additional items in there, you are not familiar with them, are you? A. I am not.

Q. You say it takes 23½ man days to instal nine machines? A. Nine machines, except that one that was marked "not installed."

Q. That particular machine, that was one of yours, wasn't it? A. Apparently.

Q. Waterbury Tread Roller? A. Apparently.

Q. That apparently was not installed at the time of the fire but was lying in storage? A. It was so marked on the record.

Q. So that left but two machines that had been furnished by your company; is that correct? A. I do not know whether that two machines furnished by my company are in that list or not.

Q. Can you look at the record, Mr. Schaffer, and tell me whether or not at the time of the fire there were any of your machines actually in operation? A. I can't tell you that.

Q. Why can't you tell me? A. Because this record is not complete enough with serial number and machine number to designate them as the identical machines shipped.

Q. Now, then, the machines that are referred to on the customers' card you have before you, Exhibit D-14, they are open die machines, are they not? A. All of them.

Q. And they make common rivets with open die machines? A. You can.

Q. And that is what they are for? A. Yes.

Q. And if you wanted to make specialties, you would have to have different dies? A. By specialties, do you mean other rivets?

Q. Special rivets, other than common rivets, on special order? A. What I don't quite understand is what you mean by special rivets.

Q. Rivets which are not common rivets, which are made up for an office that has special requirements; as I understand, free from burrs under the head, on solid die machinery? A. You are speaking now of solid die machines?

Q. I am speaking about the machines about which you testify. A. These on the card are open dies.

Q. You can't make rivets on open die machines, of the character I have described, can you? A. You can make rivets on both open and solid die headers.

Q. But how about rivets of the character I have described? Can you make them on open die machinery? A. I do not know that I get your description of the rivets.

Q. Don't all rivets which are made on open dies have a fin where the dies come together, which is objectionable as to the rivets? A. The matter of objection is a matter of opinion. They do, however, have a fin where they meet, the open die headers.

Q. And for that reason they are made on solid die headers? A. To overcome the objectionable fin, where that objection exists.

Q. Examining Exhibit D-15, can you tell me whether or not the machines on there are open dies or solid die machines? A. You have four solid dies and one open die machine left.

Q. That is five, and there are nine there. A. There are not nine headers.

Q. There are not nine headers. Then, four out of five were solid dies? A. Solid dies.

Q. And that would not necessarily indicate to you that they were used for the manufacture of common rivets, would that? A. I would correct that statement. There are four solid dies and two open dies on this list.

Q. None of them are yours, that you refer to, are they? A. I think there are none of them ours, listed here.

Q. Now, did you take into consideration the installation of these machines when you figured 23½ man days? A. You mean by installing, what?

Q. Connecting up with the power transmission? A. I did.

Q. You did not take into consideration, time, for erection of shafting and counter shafting? A. I did.

Q. All that is taken— A. Setting the machines on their foundation, bolting them down, putting up the counter-shafting and applying the belt.

Q. How about the shafting; you would assume that was in? A. The transmission, so-called, that is the main power line, being in.

Q. And you did not take into consideration, the installation of shafting and stringers and other parts of the transmission such as that, did you? A. Not other than counter shafting.

Q. Now, your estimate, of course, is based on the fact that the shafting would all be in before you started to instal the machines, is that right? A. Not necessarily.

Q. Then you would have to erect the shafting, wouldn't you? A. You mean the main line shaft.

Q. The main line shaft, yes. A. You might have to.

Q. You are assuming that is in? A. I am assuming that is in. You would have to assume that was in in order to drive your machines.

Q. Of course, but the location of the main shaft would depend, of course, on the location of your machines, wouldn't it? A. Right.

Q. And you would have to decide on the location of the machine before you put in your main shafting? A. Right.

Q. So, the operation would be taken care of at one time to avoid being compelled to replace the location of the main shafting, if you decided you did not want your machines in the particular place? A. Are you asking me that?

MR. GILHOOLY:—Will you repeat the question?

Q. (The pending question was read by the Reporteer.) A. The main line shafting is usually put up in some convenient place in the plant ,and the counter-shafts are the easier of the two to move. Your counter-shafts can, therefore, be more readily changed.

Q. You have had a vast lot of experience—you have had no experience in the installation of shafting and counter-shafting, have you? A. I have.

Q. Counter-shafting but not main line shafting? A. Not main line shafting.

Q. You are not prepared to testify as an expert as to the installation of that, are you? A. No.

Q. In your opinion, wouldn't it be a more workmanlike job to refrain from installing all of your main line shafting until such time as you would definitely deter-

mine upon the location of the machine? A. Not necessarily.

Q. That is your opinion? A. Yes.

Q. Of course, it would be much better—isn't it often done? A. The main line shafting is determined upon after you know what process you were going to make, and the installation laid out, and plan as to where you are going to set up these machines.

Q. You would want to have the counter-shafting in the most convenient place, too, wouldn't you, as well as the main line shafting? A. Yes, sir.

Q. Keep them in conformity to the location of the machines? A. You usually do it the other way around; the counter-shafting is set up after the main line shafting is in.

Q. Of course, it is, but it is more convenient to have the main line shafting in such a place that you would not have to have any considerable amount of extra counter-shafting, isn't it? A. Yes, that is true.

Q. You say that machines up to one-quarter inch are usually sent assembled? A. At that time.

Q. And above one-quarter they are not? A. The wheels are removed for shipping purposes.

Q. And one of the machines on that card, Exhibit D-14, is a five-sixteenths machine? A. A five-sixteenths machine.

Q. That, of course, would not be shipped thoroughly assembled? A. It might be and it might not.

Q. That five-sixteenths is the only one left on this list that was installed, isn't it? A. Apparently. That is all the record shows.

Q. You say that people skilled in the art do not have your concern tool up before sending the machines; do I understand you correctly? A. Not altogether. Some-

times they will want us to make up dies, punches and so forth, to set up the machines and make sure they are in perfect running order, so they can begin operating the moment the machines are received and set up in the plant.

Q. Now, then, Mr. Schaffer, are you familiar with the character of the Igoe Brothers building? A. I am not.

Q. Well, you do not know the character of the dies which they manufactured, then, do you? A. I do not.

Q. If an order came in for special types of dies, then, of course—special types of rivets, new dies would have to be manufactured, wouldn't they? A. Perhaps so.

Q. There is that possibility? A. There is a possibility, but it may not be necessary to do it.

Q. If it were necessary, then, of course, that die would have to be made up when that order came in, wouldn't it? A. Correct.

Q. That, of course, takes time? A. Some.

Q. In the estimate of 23½ man days, did you take into consideration the length of time necessary to tool up, t-o-o-l, your machinery? A. By tooling up, you mean making punches, dies, and so forth, I did not.

Q. That would take extra time, then, depending on the character of the work? A. It did, if you did not order tools with the machine.

Q. How much time would you allow for tuning up the machines after they are installed? A. None. These machines are all tuned up at our plant. I take it, by tuning up, you mean running in.

Q. Yes. A. And making adjustments.

Q. Yes. A. Correct.

Q. Can you tell us how long you run your machines in the shop before they are shipped? A. It depends on

the size. Small machines run on an average of four to five hours. Large machines, up to and including three-quarters inch sizes, a day; sometimes two days.

Q. Now, when you are running these machines, are they making rivets all of the time? A. No, sir.

Q. So, you do not put them under their full test in the factory, do you? A. Correct.

Q. So, when they are installed and put into operation in the plant, they start to make rivets for the first time? A. They start to make rivets for the first time under production basis.

Q. On production basis. Then, do you find from your experience that you have to make any adjustments after installation? A. Yes, sir.

Q. And that happens very frequently, doesn't it? A. Yes.

Q. And you have given no consideration to that item in your estimate, have you? A. This set-up includes a machine that has been, so-called, tuned up.

Q. In the factory? A. In the factory. And is ready to run with any set of tools.

Q. But not in production? A. Yes, in production.

Q. But you have never tested out any of those machines before they were shipped? A. Yes, we have.

Q. You have tested them out but not making rivets? A. On production basis, no.

Q. On any other basis? A. Yes.

Q. You just run the machines, but you do not make rivets? A. We do run rivets on every machine sent out.

Q. Not on production basis? A. Not on production basis.

Q. And when the extra burden is put on the machines, you find that you have to make other further adjustments? A. Sometimes.

Q. And you have not given an allowance for further adjustment in that? A. That would not take place the first few days you ran the machine.

Q. It would take place later? A. Yes.

Q. That would be part of the tuning up process? A. Yes, sir.

Q. To get the machines to the height of efficiency? A. Yes, sir.

Q. You have not taken that into consideration. A. It is a small amount of time.

Q. You did not take into consideration. That is my question. A. No.

REDIRECT EXAMINATION

By MR. VANDERBILT:

Q. Are these machines you refer to to be had in stock? A. The machines on—

Q. The machines on the exhibit there you last referred to? A. I believe we had practically everything in stock. Small sizes machines, we are very liable to have in stock.

Q. If the dies, and so forth, had been ordered promptly, there twould have been no delay in getting them out, would there? A. None at all.

Q. They could have been supplied long before the building could have been put up to house them? A. That is correct.

Q. And other concerns other than the manufacturers of the machines could supply dies, knives, and so forth? A. They can.

Q. Without delay.

MR. VANDERBILT:—That is all for Mr. Schaffer.

(Witness excused.)

E. N. REILLEY, JR., called as a witness on behalf of the defendant, having been duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. VANDERBILT:

Q. Mr. Reilley, where do you live? A. Elwood City, Pennsylvania.

Q. What is your business? A. Wire and wire products.

Q. How long have you been in that business? A. About eleven or twelve years.

Q. And will you please outline your experience in that line? A. My first experience was with the American Steel Company, in which I started as cost accountant, and about three or four years after, went into the operating departments and worked through all the departments, working up to assistant manager, and then, prior to the liquidation of the American Steel Company, I was in the president's office, assistant to the president.

Q. After that, where did you go? A. I was connected with the Black Hardware Company of Galveston, Texas.

Q. And what position did you hold there? A. As

assistant superintendent and later as superintendent, before I left.

Q. And how long were you with that concern? A. About a year and a half.

Q. Are you familiar with the manufacture of wire and wire nails, rivets, bale ties and wire products generally? A. I am.

Q. Have you personally operated the equipment for making these products? A. I have.

Q. Are you familiar with the machinery and equipment used in the manufacture of these products? A. I am .

Q. Have you ever personally installed, operated or repaired this type of machinery? A. I have.

Q. Have you ever been in the plant of Igoe Brothers in Newark? A. I have.

Q. When was that? A. I can't recall the date.

Q. How many times, do you recall? A. About two, if I recall correctly.

Q. Did you observe the class of equipment and the class of product that were being made there? A. I did.

Q. Have you examined the Fletcher-Thompson Company report or estimate of time to install the equipment in the Igoe Brothers plant? A. I have.

Q. Have you prepared an estimate of the number of men and number of days necessary to install the wire equipment? A. Yes, sir.

Q Mentioned in the Fletcher-Thompson report? A. Yes.

MR. VANDERBILT:—I might explain that this is the same form as we used in connection with the two witnesses at the last session. The first five columns are ex-

actly the same as they were, in typewriting, and the three columns to the right are Mr. Reilley's estimates.

Q. Do the three columns to the right on each of those pages, Mr. Reilley, give your estimate of the reasonable number of men and reasonable number of days and the reasonable number of man days it would take to install and set up the machinery listed in the schedule? A. They do, to the best of my judgment.

MR. VANDERBILT:—I desire to offer this in evidence.

(Estimate referred to marked Exhibit D-16.)

Q. From your knowledge in the field, and also from your inspection of the Igoe plant, how long, in your opinion, would it take to instal and get into production the equipment damaged or destroyed by the fire in the Igoe Brothers plant, as shown on the Fletcher-Thompson report and also on the proof of loss which has been marked in evidence? A. About seven or eight weeks at the most.

Q. Have you ever heard the term "tool-up" used in connection with wire and nail plants? A. No, I have not.

Q. Is it or is it not a fact that wire and wire nail machinery can be manufactured with all the dies furnished, Mr. Reilley, for operating these machines? A. They can.

Q. Is that the customary way of wire and nail machines being supplied by the manufacturers? A. The manufacturer usually furnishes the set of dies that you request for the machinery.

Q. Could dies for special or ordinary products be purchased at the same time the machines were purchased? A. They could.

Q. Being given a sample of a product or description and specifications of a product that was wanted, could dies be bought from outisde die manufacturers? A. They could.

Q. Would it be necessary to delay operations of any wire or nail machines after they are installed on account of the fact that dies or other accessories would have to be made after the machines were installed? A. I don't see it. It is not necessary.

Q. Why not? A. The manufacturer could furnish them, if necessary.

Q. Is any great length of time consumed in changing rivet or nail machines from one product to another? A. No, great amount; it is only a few minutes to a few hours, depending on the change to be made.

Q. And what is the nature of the changes which have to be made that may take from a few minutes to a few hours? A. It may be a change of cutter or dies or headers or a slight adjustment on the nail machines.

Q. Are you familiar with the manufacture both of ordinary nails and special nails? A. I am.

Q. I show you a box of nails, Exhibit C-17, special nails which were introduced in evidence at the last hearing, and ask you if you are familiar with the manufacture of nails of the character of these nails, as well as ordinary nails? A. I am, the greatest majority of them.

Q. Are they made, such nails as that, made in the usual wire mill? A. The usual run of mill.

Q. Would it require special or extraordinarily complicated nail machinery to produce such nails? A. No.

Q. Why not? A. Just means a question of correcting your—changing your dies, cutter or header.

Q. Well, will you just elaborate a little bit and explain that, because we do not know much about the nail business? A. Will you let me look at them? (Witness examines Exhibit C-17) These nails are made in the usual run of nail machines, except, all that is necessary is to make the necessary changes and adjustments in the dies, cutters and headers.

Q. Well, is there anything difficult about manufacturing them, more than the ordinary nails? A. It requires a little more skill than the ordinary common product.

Q. What is your experience in the manufacture of bale ties? A. I have set up bale tie machines and operated them.

Q. Is a bale tie machine more complicated than an ordinary nail machine? A. Not only being more numerous.

Q. What? A. Not only being more numerous types.

Q. Is it more complicated to operate than the ordinary nail machine? A. I would not say any more complicated than a nail machine.

Q. Did you have anything to do with the erection of the Sheffield Steel Company's new wire and nail mill in Kansas City? A. I furnished them a few men on the erection of it.

Q. Do you know how long it took to erect the machinery in that plant?

MR. GILHOOLY:—I object to that as immaterial.

THE MASTER:—Well, I don't see— it may be a preliminary question.

MR. VANDERBILT:—I will withdraw it.

THE MASTER:—It may be preliminary to something that is objectionable.

Q. Will you describe the type of equipment, which was in the Igoe Brothers plant when you saw it before the fire?

MR. GILHOOLY:—May I ask the particular time?

Q. When was it you saw this plant before the fire? A. As I recall, it was around 1924. I can't give the exact date of the last time I was there.

Q. When you saw it in 1924, what was the type of machinery and equipment which you saw? A. There was quite a bit of it old and obsolete equipment, except some additions I seen.

Q. How was the equipment driven, powered? A. It was driven both with Corliss engines and rope drive, and they had some motors around. Possibly there were five or six there, as I recall it.

Q. Is the usual Corliss engine, rope drive, a modern method? A. It is not general practice to use them now.

Q. What is the general practice at the present time? A. Mostly motor driven with line shafts and appurtenances and directly connected.

Q. What kind of wire drawing benches were there in the plant? A. There was iron and steel bull blocks, and the rest of the benches were of old Turner von Taylor wooden type construction. They were not made by him, but were of that general construction.

MR. VANDERBILT:—That is all.

CROSS EXAMINATION

By MR. GILHOOLY:

Q. Mr. Reilley, what concern are you connected with? A. I am connected with my brother in the foundry business, and I am working along on some wire and wire products designs.

Q. But you are not with any wire drawing mill now making wire? A. No, I am not.

Q. And when was the last time that you were so connected—I withdraw the question. How long has it been since you were connected with a wire or nail manufacturing plant? A. Sometime in March.

Q. And that was what company? A. The Black Hardware Company.

Q. Do they manufacture nails and wire? A. They do, through the Texas Nail & Wire.

Q. What? A. They do, through the Texas Nail & Wire.

Q. They did not manufacture; they were jobbers? A. They were jobbers owned this plant.

Q. You were connected with the Black Company? A. With the Black Company.

Q. And not with the people who manufactured the actual product? A. Both concerns, I was, jointly.

Q. Where were you working? A. With the Texas Nail & Wire.

Q. So, you were working for the Texas Nail & Wire? A. And jointly working for the Black Hardware.

Q. They make the common forms of nails, do they not? A. They do, and—

Q. They do not make nails of the character you see before you there, do they? A. They do.

Q. All of them? A. Not all of them, but—

Q. A few of them? A. A few of them, naturally.

Q. When did you make your computation about which you have testified to on Exhibit D-16? A. That was made yesterday.

Q. Where was it made? A. In Mr. McCrossen's office.

Q. Did you discuss with Mr. McCrossen the length of time he testified he would take to instal the machinery? A. I did not.

Q. Did he tell you how long it would take? A. He did not.

Q. Do you think you can instal the whole amount in seven or eight weeks? A. Certain portions of it.

Q. Certain portions of it. A. Certain portions of it shown in that exhibit.

Q. You can instal all shown on that exhibit in seven or eight weeks? A. I can.

Q. Did you include in your estimate the length of time it would take to put in the power transmission? A. I did not.

Q. That would be extra? A. Yes, sir.

Q. So, this estimate which you have now made merely means the time it would take to set up the machines and connect them to the main line shafting; is that right? A. That is right. Certain machines, not all of them.

Q. How about the counter-shafting? A. I did not figure that in.

Q. That would all be extra? Yes.

Q. Well, do you know that Fletcher-Thompson included the power tranmission as well as the installation of the machines in fixing the amount of time that it would take, in their opinion? Did you know that? A. I did not.

Q. So that when you make a comparison—we will take, first, item No. 43. Fletcher-Thompson's estimate is 32 days as against 16 for you?

MR. VANDERBILT:—I object to that question, if the Master please.

MR. GILHOOLY:—I have not finished yet, Mr. Vanderbilt.

MR. VANDERBILT:—I beg your pardon.

Q. Your estimate is based not on anything connected with the installation of transmission, but solely for the setting up of that machinery; is that right? A. That is right; making it go.

MR. VANDERBILT:—I object.

MR. GILHOOLY:—He said "yes."

MR. VANDERBILT:—I think, when I interpose an objection, I am entitled to have it respected.

THE MASTER:—All right.

MR. VANDERBILT:—I object to the question.

THE MASTER:—Read the question.

(The pending question was read by the Reporter.)

MR. VANDERBILT:—I object to the first part of it which contains—

THE MASTER:—Strike it out. Reframe the question, will you please?

Q. When you estimated that it woud take 16 man days to instal the machines, which are the Fletcher-Thompson item No. 43, you have given no consideration, have you, to the installation of power transmission? A. I have not.

Q. And that would be extra? A. Just as the item reads.

Q. Isn't that a part of the installation your equipment? A. Not necessarily.

Q. In equipping a plant, a new plant, you don't think it is a necessary part of the equipment, installation, to take into consideration the shafting, stringers and counter-shafting? A. That is a transmission engineer's work.

Q. You would consider all that was in before you would start to set up your machines; is that right? A. I would.

Q. Now, did you ever examine the estimate made by Mr. Blount and Mr. Dougherty before today? A. I did.

Q. Did you go over it item by item? A. Not altogether.

Q. Now, take item 43 on Mr. Blount's estimate, It is 14 days. Mr. Dougherty's is 12 days, and yours is 16. Is that such a complicated piece of machinery that there would be a variance of four man days between Mr. Dougherty's opinion and yours? A. It is just a question of judgment.

Q. You think you are right, of course? A. I think I am right.

Q. You think he is wrong? A. I don't think he is wrong. I don't think the question is—

Q. Then, do I take it, that each one of you were hazarding a guess as to the length of time it would take? A. I do not know what the others did; I know what I did.

Q. On a small item of that kind, which only would take from 12 to 15 man days, do you think it would be necessary to have such a wide variance as four man days. A. It is possible.

Q. Now, take the next item, No. 44. You allowed eight man days, Mr. Dougherty eight, and Mr. Blount, ten. Do you think Mr. Blount was too liberal—Mr. Blount is too liberal in allowing ten days? A. Let me see that figure again. That is very liberal.

Q. Did you make a tabulation of the total number of man days it would take to do this whole job? A. Referring to these items estimated?

Q. I am referring to your estimate. Did you make one tabulation which included all your man days as set forth particularly in this statement? A. My tabulations were just recapitulated as I went along on the report.

Q. Haven't you got the total number? A. Let me see. No. Each section is totaled.

Q. If you haven't the total number of man days, how did you arrive at seven or eight weeks? A. In my own judgment.

Q. Then you disregard your specific tabulation when you say seven or eight weeks? A. Not necessarily. I foreseen delays that you would possibly run into, from past experience.

O. How could you testify it would take seven or eight weeks when you never added up the particular number of man days Can you explain that? A. The only explanation I could make is my own judgment; I could put it up in seven or eight weeks at the most.

Q. Then, after you got all through going through this report, you made a general estimate? A. A general estimate.

Q. Disregarding the specific items? A. This was just comparative.

Q. Why did you take up each machine and figure the time it would take to install that machine? A. To give an idea of what it would take to install all of the equipment shown.

Q. But you ignored that when you came to make your final estimate, didn't you? A. I did.

Q. So that was of no value to you whatever? A. Not much value.

Q. You only made that, then, for the purpose of drawing a comparison between your opinion as to the length of time and Fletcher-Thompson's, is that right? A. That is my object.

Q. Did you add up the total, then, of man days in the Fletcher-Thompson report? A. I did not.

Q. Did Mr. McClossen tabulate it for you? A. He did not.

Q. Where did you make this tabulation? A. In Mr. McCrossen's office.

Q. And you never added the thing up at all? A. No.

Q. He did not do it in your presence? A. No.

Q. Did he ever tell you what the total was? A. No.

Q. You say you were at Igoe Brothers in 1924; is that right? A. Yes, sir.

Q. Do you remember the month? A. I do not remember the month.

Q. Was it winter or summer? A. During the summer months.

Q. How long were you there? A. Possibly a couple of hours.

Q. What was your purpose in being in the plant? A. Just to familiarize myself with the plant and get acquainted.

Q. Whom did you meet there? A. I met Mr. Huber and Mr. Tom Igoe and Mr. Cooney.

Q. Did they take you through the plant? A. They did.

Q. Explain everything in detail to you? A. Not in detail. I did not expect them to do that.

Q. You were in the nail and wire business at the time, weren't you? A. I was competing with them.

Q. Did you go there for the purpose of finding what method they were using? A. Not necessarily; just to familiarize myself with the art.

Q. I thought that you had had experience before that time? A. What experience do you mean?

Q. In the wire and nail business. A. I had.

Q. You did not need any—you did not need to familiarize yourself with the art, then, did you? A. I could add to it.

Q. Did you find anything in Igoe Brothers that added to your knowledge? A. Not much, but possibly I may have, which I do not recall now.

Q. In figuring up your estimate of time that it would take to install this machinery, you figured on modern equipment, didin't you? A. No. On certain stuff they had there in the plant at the time, depending on that type of equipment.

Q. The exact equipment? A. As exactly as I could recall.

Q. Do you know or do you not know whether Igoe

Brothers had any machines in there which they designed especially for their own use? A. I do.

Q. In estimating the time it would take to install that machinery, did that play a part in your estimate, the fact that it was a special machine? A. It did.

Q. There was some of that machinery in there that you had never seen on this list; is that true? A. Not that I can remember of.

Q. Did you see when you made your visit to Igoe Brothers in 1924 every item on that thing? A. That is a hard question an answer.

Q. Your answer is "no," you did not see it; is that right? A. I could not take a pad and paper and get thrown out of a man's plant.

Q. Doesn't it take longer to set up machines specially designed, than one out of ordinary stock? A. It may take a little longer.

Q. And you would want to see the machine, wouldn't you, and have a pretty accurate description of it before you estimated it? A. I would.

Q. And you did not have the information supplied to you in this case? A. Not all of it.

Q. You did not have any. A. I had some.

Q. From whom did you get that information? A. Well, from general observation.

Q. That you made at the plant in 1924? A. I made what observation I could.

Q. And your recollection is clear as to the types of machines you saw there? A. It is not altogether clear; my memory is rather treacherous over a period of four or five years.

Q. And it is because of the treachery of your memory that you can't remember when it was you saw it; is that right? A. I admit that.

Q. Will you tell me what wire mills you worked in? A. The only wire mill I worked for was two mills in the American Steel Company; the wet and the dry.

Q. The wet and the dry what? A. Wire mills.

Q. They do not make nails there, do they? A. They do.

Q. They are not specialities, are they? A. The line is similar to Igoe's.

Q. Now, when you are at Igoe Brothers plant in 1924, did you go into the new mill? A. Yes.

Q. Did you see any new machinery there? A. I did.

Q. You saw a good deal of new machinery at that time, didn't you, Mr. Reilley?

Q. It was a brand new mill, wasn't it? A. Not altogether, it was not.

Q. How old was it at that time? A. I do not want to hazard a guess as to how old some of it was. How old was Mary Ann?

Q. How old was the machinery? A. How old am I?

Q. You can't answer? A. I can't answer.

Q. You are not familiar with the age of that particular machinery, then, are you? A. Some of it I could possibly judge, it was so old.

Q. Now, where was this so-called obsolete machinery you saw; in the new buildings or in the old buildings? A. They were in the old buildings.

Q. Was any of it in the new buildings? A. No. There was not much of it in there.

Q. That was pretty well stocked with machinery, too, wasn't it, the new building? A. Not a great quantity of machinery.

Q. Can you tell me, Mr. Reilley, from observation made in 1924, just how many new buildings Igoe Brothers had erected at that time? A. I would not call them new buildings. I would call them additions; that is all.

Q. How many new additions were there, do you know? A. There was one I would call an addition—leantos.

Q. You say that was a leanto? A. With leantos, and so forth.

Q. Mr. Reilley, have you visited many wire and nail plants? A. I have.

Q. And do you not find that on many occasions in many of these plants they have equipment similar to that used by Igoe Brothers? A. I have.

Q. That is a fact, isn't it? A. Yes, sir.

Q. And, as a matter of fact, most of them are equipped similar to Igoe Brothers, aren't they? A. Not all of them.

Q. Not all of them, but most of them? A. Well, I have not seen them all.

Q. Well, now, when did you start in this business; about how many years ago? A. About 17½ years ago.

Q. You started to tell me where you worked. You mentioned two of them. How long did you work in the American Steel? A. 15½ years with the American Steel Company; one year and a half with the Texas Steel & Wire and Black Hardware jointly.

Q. Well, did you make any wire yourself; did you ever draw any yourself? A. I did.

Q. That was not your usual experience, was it, though? A. It was part of it.

Q. Well, now, your experience, then, has been limited to those concerns you mentioned? A. It has.

Q. 15½ years in one and 1½ years in the other. The machinery you had there was quite similar to Igoe Brothers, wasn't it? A. Somewhat.

Q. And you found that it worked satisfactorily for your purposes, didn't you? A. I did.

Q. Now, in arriving at this item of 16 man days, in No. 43, how many men did you have working to make up that 16 on your estimate? A. Four men I would use.

Q. Four men. And when you arrived at your total number of man days, you were figuring the maximum number of men that could possibly work, didn't you? A. I did, efficiently.

Q. Efficiently, yes. Did you have them working night and day? A. Not necessarily, as long as I keep within my estimate.

Q. Were you figuring on eight hours a day basis to work your men? A. I was figuring on an eight hour a day basis to work the men, on account of labor conditions

Q. 5½ days a week? A. 5½ days a week.

Q. You did not figure on abnormal speed, but you figured on the usual speed? A. Ordinary usual speed.

Q. And you would have employed the maximum number of men which could be efficiently worked by you? A. I would.

Q. Am I clear on that—in making that calculation, you figure seven to eight weeks? A. Seven to eight weeks at the outside.

MR. GILHOOLY:—That is all.

MR. VANDERBILT:—That is all.

(Witness excused.)

EDWARD F. McCROSSEN, recalled, further testified as follows:

CROSS EXAMINATION

By MR. GILHOOLY:

Q. Mr. McCrossen, you made reference in your direct examination, to a fire loss filed by Miller & Maltbie, on behalf of Igoe Brothers. Can you tell me when you got the copy that you testified from; when you got it from Miller & Maltbie; when it reached you? A. When it reached our office, you mean?

Q. Yes. I mean, when did you get it? A. This particular one that you refer to—

Q. From which you testified? A. Not the previous ones. They did not all come at once. Some would come—sometimes I would get two or three, and at other times I would get five or six of them. I have the dates on the back of each one, if you want it.

Q. The dates are on them for reference? A. The dates we received them. Here is August 4th, August 28th.

Q. That is the exhibit, is it not, Mr. McCrossen? A. That is the exhibit, yes, sir.

Q. That is the one you were testifying about; no mistake about that, is there? A. No, sir.

Q. You are now referring to Exhibit D-13? A. Yes, sir.

Q. You were originally named as an appraiser on the fire loss, weren't you, Mr. McCrossen? A. Not on the fire loss, no.

Q. The machinery loss? A. Now, let me get it clear what you mean by the term "appraiser."

Q. To appraise the loss for the companies? A. No; not that I recall, that I was ever appointed appraiser in the matter.

Q. You were named, though, weren't you? A. Well, I do not think—

Q. Were you an estimator for the companies at that time?

MR. VANDERBILT:—I think there may be a misunderstanding as to appraiser. He is referring to an appraisal agreement under the policies.

Q. Were you in Igoe Brothers' plant taking a physical inventory of the machinery loss? A. I was employed by the General Adjustment Bureau to make a report to them as to what my opinion was as to the value in damages of the machinery and equipment in the Igoe plant which was damaged by that fire.

Q. And that was in 1925? A. 1925, yes.

Q. And you got a list up similar to this schedule, didn't you? A. We made a report to the insurance companies, yes, sir, which paralleled this as near as we could parallel it.

Q. Now, the schedules, were they filed with you by Miller & Maltbie? A. No, indeed.

Q. They were filed with the insurance companies, weren't they? A. I presume so. We got them from the General Adjustment Bureau.

Q. Now, then, you were not interested in the schedule of Igoe Brothers at that time, were you? A. I don't quite understand you.

Q. You had no interest in the schedule which they filed, did you? A. Yes, certainly.

Q. You were making an independent appraisal for the General Adjustment Bureau; is that right? A. Certainly.

Q. And is it not a fact that these schedules were not filed with the General Adjustment Bureau, but were filed with McCrossen? A. Frankly, I do not think so. You see, you must permit me to explain that. In matters of this character, we are generally employed direct by the Adjustment Bureau, and our preliminary negotiations are in the form of an introduction to the owner of the plant or the assured, as they call them, and very frequently the routine procedure of getting papers from the owner of the plant through the various insurance compaines, and then that is dispensed with in order to shorten the work. Our contacts are between the owner and our office. It is possible—I know, for a fact, that some of those came from the General Adjustment Bureau, and I am not certain where the rest of them came from. But those were the ones we worked with, and checked up the claim.

Q. Do you know how long it took you to make the physical inventory?

MR. VANDERBILT:—I object to that as immaterial.

THE MASTER:—I will permit it.

A. It is a rather difficult thing for me to answer that without explaining the whole story.

Q. Can you say you do not know, or do know, how long it took you? A. We did not make a physical inventory, Mr. Gilhooly.

Q. You did, didn't you? A. I made a check of that inventory, plus the information we discovered in the field

with the assured, Igoe's men. Then, when that was done, we made a report to the insurance companies, and that report paralleled the claim—

Q. You were down there and checked up all this machinery you saw, didn't you? A. I did, sir.

Q. And you started right in after the fire, as soon as the debris cooled off, and worked at that continuously, didn't you? A. No. That is not a correct statement of fact.

Q. Did you work off and on? A. We did not get there the day the debris cooled off. As I said in my former testimony, I don't recall how soon we got there after the fire, but I am under the impression it was about two weeks.

Q. Then you started to make your inventory; is that right? A. We received a claim, and what we call in this case, the original claim from Igoe Brothers. That original claim I have here with me. We tried to check up; worked with the Igoe men in order to check up. It was badly confused; meagre in detail.

Q. I think you have misunderstood my question, because I asked you if you could tell how long it took you to make an inventory? A. I am answering you, sir.

Q. Can you tell us the number of months—when you started and about when you finished? A. This report was filed—this copy I have here—I think it is the original—was filed in September, 1925. I told you the day we first started. Then there were many periods in between when we were not able to work because of want of information on the part of Igoe Brothers' staff.

Q. In the meantime, all this machinery was on the ground, wasn't it? As late as September? A. I am not

clear whether some of the debris had been moved then, by the end of the investigation period or not, but I should say, essentially it was there—I am not clear on that.

Q. Essentially it was there? A. That is my recollection, I am not absolutely sure. I don't recall, because all our data was required, and in the early and intermediate stages, and then there was a vast amount of office work And then the report went in. During the time we were working in the office, I don't recall whether the stuff was moved or not.

Q. I notice from the schedules that some were dated as late as August 28th. A. Yes.

Q. That would indicate to you, that would refresh your recollection that machinery was on the site even as late as that? A. Not necessarily.

Q. You had to check it up, didn't you? A. We checked a lot of that before we got those schedules—checked a lot it. In fact, we were working with Mr. Woodward and the young draftsman—I have forgotten his name—frequently; there was very voluminous file and we tried to get an answer on all the stuff, what the details were. A great deal of the stuff was tabulated prior to receiving some of those, and subsequently all of it was checked up.

Q. In your direct examination, Mr. McCrossen, you testified from the proofs of loss as to certain items which were claimed by Igoe Brothers representing the cost of installing certain items. Do you recall that line of testimony? A. In reference to it, yes, sir.

Q. The cost of labor? A. Yes, sir.

Q. Now, will you refer to Building E? A. Building what?

Q. Building E—I withdraw building E. Take Building D first? A. Building D.

Q. Now, will you tell us how much Igoe Brothers claimed for the labor installation in building D? A. Now, will you please get me clear on that? Do you mean how much—what the total is of the labor claimed by Igoe Brothers for all of the equipment in building D?

MR. GILHOOLY:—Will you repeat the question?

Q. (The pending question was read by the Reporter). Referring to transmission. A. Transmission?

Q. Yes. A. Now, let us see if we have that tabulated. Of course, I will have to look all these things over. I do not carry them in my head. They are here somewhere. May I have the question again?

Q. (The question was again read by the Reporter): A. In the final fire loss claim against the cost of material for this actually was $3,745.33, and the claimed amount for labor for installation was $1,632.99. That is my record.

Q. $1,632.99? A. Yes, sir, that is my record, as I recall it.

Q. And you recall that you figured the number of man days by dividing $9 into that; is that right? A. I used an average rate just for a check, probably as a matter of interest, of a team at $10 a day, and $8 a day, or an average daily rate of $9.

Q. You were testifying as to a $9 a day rate? A. $9.

Q. You said so in your testimony? A. Surely, that is right.

Q. And you figured that should take 179 man days. Haven't you that chart you testified from, to facilitate

this examination? A. That is what I am trying to get straight now, because you can readily understand that there is a wealth of papers mixed up in this thing.

179 man days for C and D.

Q. For C and D? A. Yes.

Q. Now, what did you include with respect to power transmission, in figuring out the 179 days? A. I took each shaft, numbered 1, 2, 3, 4, 5, 6, 7, 8, 10, 13, 11 and 12; studied the specifications here in this original claim to refresh my memory as well as I could, of conditions five years ago, and estimated the number of men and number of days it ought to take to install that equipment in place.

Q. Now, did you take into consideration stringers? A. Yes, certainly.

Q. You did? A. I did, sir.

Q. And you included in the figure of $1,632.99 the claim of Igoe Brothers for stringers, too? A. No.

Q. How did you figure that? A. Stringers are entirely separate. You have asked me what my estimate of time was?

Q. Yes. A. I have given you that. You asked me what I included in that.

Q. You did not include stringers? A. I did include stringers in my time estimate.

Q. In your time estimate of 179 days? A. Yes.

Q. Is it merely a coincidence that dividing 9 into 1632.99 gives you 179 days? A. No. As a matter of fact, I did not know that until you mentioned it. Here are the details on it.

Q. Didn't you divide that sum by 9 and so testify on your direct examination? A. I testified, as I recall it, in the last examination that—

Q. Can you answer whether you did that or did not? A. Only by qualifying the answer. I can't answer it direct, because it needs explanation. The purpose of showing these time figures was to show that Igoe Brothers' estimate of time along this line was about normal in many cases. We were expecting this, Mr. Gilhooly, if you will indulge me—

Q. I think that you have answered my question, and I ask that the answer be stricken out. I will read from part of the record, on page 290.

"Q. What would be a reasonable time for installing this material you have just been referring to, Mr. McCrossen? A. The equipment in Section D, I think we are talking about.

"Q. That is right. A. The equipment, power transmission Section D, 179 man days.

"Q. At a cost of what? A. That would run out about $18. We have got a little mixed up there with C and D in the record. That would come out at about 1600 —it would come out exactly at that, 179 days, at the average rate of $9 a day.

"Q. As against the cost of Fletcher-Thompson of— A. Let me see, that is $1967."

Q. You did testify that you divided nine into the cost which Igoe Brothers claimed, isn't that right? A. If that is my testimony, of course I did.

Q. Then it is correct? A. If you say it is. I don't recall all that went on during the last transaction.

Q. You say you took into consideration stringers, as well as everything else in power transmission; you say that now, is that right? A. I took into consideration in my estimate 179 days—made up in detail, as those—how many men and how long a time it would take to put that shafting up in place.

Q. But you based your estimate, then, on Igoe Brothers' claim, and testified there that the claim was a reasonable estimate of the labor item, didn't you? A. I based my estimate of the erection time of this equipment on the details given in here.

Q. The details given in their fire loss? A. Exactly.

Q. And then you divided the amount which they claimed for labor by $9, and that gave you the man days; is that right? A. Do you remember my doing that, sir, standing here—

Q. I am asking you if you did do it? A. I was asked to do it, and as I recall, I made the figures here—

Q. You did it? A. Yes. As a check.

Q. You were asked then if, after arriving at this result, that was a reasonable time to do that particular installation; is that right? A. Perhaps I answered—I don't recall all the details, sir.

Q. Isn't that the way you did it? A. I made up and I gave you, a detailed estimate. I testified as to a detailed estimate as to the length of time it would take to do. The various questions came along—divide this and divide that, and I made a number of pencil computations here; for what purpose, I did not know at the time.

Q. I am going to refer to your testimony, page 290, Mr. McCrossen:

"Q. Referring to Section E on the same page, what is the Fletcher-Thompson estimate? A. The Fletcher-Thompson estimate is 163 man days.

"Q. What is the value of material involved, according to the original Igoe Brothers schedule? A. $2263.53.

"Q. What is the claimed amount of the installation labor in that original claim? A. $981.78.

"Q. What is the proportion of labor to material in that original claim? A. 43 per cent.

"Q. Dividing the $981.78 by the average rate per day,—what was the average rate per day, by the way? A. $9 per man per day.

"Q. Give us your estimate as to how many man days is required for installing this equipment? A. 109.

"Q. And is that a reasonable estimate?"

And your answer was:

"Our estimate made up for that group of shafts was 108 man days, by days for each shaft."

That was just dividing the sum claimed by Igoe Brothers, $981 by 9, wasn't it? A. That is not a complete sentence or question.

Q. That is what you did; you divided $981.78 by $9 per day, and that gave you your man days, 109 days? A. No. It is not a fact.

Q. Is it merely a coincidence? Didn't you say—isn't it a fact— A. As I understand—if I understand your question correctly— I do not want to be technical, but I do not want to be put in a wrong light—it was important to our office to make as careful a check on our estimates of this work as we possibly could make. The Fletcher-Thompson report had been handed to us as a reasonable report. We found errors throughout it, and disagreed—

MR. GILHOOLY:—I move that the answer be stricken out, and the witness be directed to anwer the question.

THE MASTER:—Strike it out. The question was whether that division was merely a coincidence or not.

THE WITNESS:—Yes, of course it was.

Q. Nothing else? A. Certainly not.

Q. Now, you said that dividing $981.78 by the average rate per day of $9 a man—

"Give us your estimate as to how many man days is required for installing this equipment? A. 109."

That is how you arrived at 109, isn't it? A. That is the mathematical or arithmetical computation of the 109.

Q. And you were asked to do that on the stand the last time, and you did, and you arrived at 109 days? A. Yes.

Q. That is how you arrived at it, by dividing it by $9 a day? A. That arithmetic was the way—that was not the basis of my estimate for putting in that shafting, that group of shafting.

Q. I call your attention further to your testimony on pages 291 and 292:

"Q. What is the amount claimed for labor for installation in the original Igoe estimate? A. $189.24.

'Q. Dividing $189.24 by the average rate of $9 a day, gives how many man days? A. 21 man days.

"Q. And is this a reasonable amount? A. Yes, sir.

"Q. What was your estimate on that? A. 21 days for the four shafts in that section."

I ask you now if you want to say that is another mere arithmetical coincidence? A. May I—you are a little fast for me.

Q. Can you say "yes" or "no"? A. Could it be anything but a coincidence? I have the details; I had them at that time, and I have them for you.

Q. Have you your sheets now you testified from? A. Yes, sir.

Q. All right. Turning back to building D, you said that you would take 179 man days to install the transmission? A. Yes, sir.

Q. How much of that time did you allow for the installation of stringers from your record there? A. We disregarded entirely the division between the erection of the shafting and the hangers and stringers, where they may be needed. That is routine, ordinary, common practice in the erection of transmission equipment.

Q. How long a time would it take to install these stringers? A. The stringers shown on this list could be installed at the time this shafting was put in, within the days we have enumerated.

Q. Can you tell me, in answer to my question, how much time it would take to install the stringers; yes or no, can you tell me how long? A. I can compute it but I cannot answer you off hand.

Q. You have never computed it, have you? A. No. I do not compute those things. We did not compute the pulleys, and we did not compute the couplings. We looked at the shafts, the specifications, weight and size, and the things that go with it, and we know how much time it would take and how long it would take to put it in.

Q. That is a very important element in the installation of transmission, the stringers? A. Not necessarily important, by any means.

Q. You have to put stringers in before you put in the shafting? A. Not necessarily. Sometimes you have shafts with no stringers on them.

Q. But they are absolutely necessary? A. What are?

Q. Stringers; they are not absolutely necessary. A. No, they are not absolutely necessary.

Q. Then you did not consider stringers? A. I have considered them.

Q. If they were not necessary, why did you consider them? A. You confused yourself on that. You asked me if stringers were absolutely necessary for the transmission, and I said "no." In this case, we used stringers.

Q. The stringers were there before the fire? A. Yes, sir.

Q. And Igoe Brothers had made an estimate for the installation of stringers? A. That is in the list, in here, yes.

Q. Will you turn to that list? A. I don't recall—

Q. Turn to building D, from which you testified you got your figure of 179. Now, can you refer to building 1, Section D, on that fire loss? A. Yes, I have it.

Q. You have timbers for line shafting, hangers—have you got that? A. Yes.

Q. —Nail machinery—the estimate is $182.64 for that work; is that right? A. That is right.

Q. The labor is set forth there; labor 290 hours at 60 cents an hour? A. Yes.

Q. Is that right? A. Yes, that is right.

Q. That makes a total of $356.64? A. That is right.

Q. Now, when you say that Igoe Brothers put in a claim for installation of transmission of $1,632.98, you did not include in that the amount that they were claiming for the installation of stringers, did you? A. No, sir.

Q. Answer yes or no. A. No.

Q. Then that statement was not entirely correct, that Igoe Brothers asked only for $1,632.98, but, on the contrary, they asked in addition, the cost of installing stringers? A. I disagree entirely with you, sir.

Q. Your statement is wrong when you say they only asked $1,632.99? A. No, my statement stands pat, that is correct. That is the cost of installing the transmission?

Q. The stringers are part of the transmission? A. No; they are not.

Q. Not part of tthe transmission? A. They are not part of the transmission.

Q. What is it a part of; the building? A. It is merely a piece of wood or a piece of material, erected, to which the transmission is affixed.

Q. You would not put stringers in unless you were going to have power transmission, would you? A. You might hang motors up on them; you hang all sorts of things on them.

Q. You put transmission on them? A. Pipes, electrical fixtures and everything.

Q. Igoe Brothers had stringers before the fire? A. Yes, a trifling amount; $100 worth.

Q. They put in a claim for 2140 feet of lumber at— A. What is 2140 feet of lumber?

Q. That had to be installed? A. Certainly it had to be installed.

Q. You have, at no time, taken into consideration the stringers in your estimate? A. I told you this, and I must be permitted to answer your question intelligently—

Q. Did you or not? A. I estimated them in installing the transmission, and in the time we estimated installing the transmission, ample provision is made for putting up a few pieces of wood. Nobody pays any attention to that; it is not even given consideration.

Q. Igoe Brothers put in a claim of 290 hours to install 2141 feet of lumber in building D, of stringers

in building D. A. Let me see if I have that? Yes, here it is.

Q. If you will add $174—may I ask you to make the computation? Would you kindly do that? A. With pleasure.

Q. To that, kindly add $174? A. $174.

Q. To $1,632.99? A. All right.

Q. The figure which you said was transmission cost? A. All right.

Q. How much does that give you? A. $1,806.99.

Q. If you divide that figure by nine, how many man days does it give you? A. 203-1/3.

Q. Now, what was the total estimate of Fletcher-Thompson for that particular building? A. For the shafting in that building?

Q. For the transmission? A. The transmission—let me see. We have a separate transmission schedule in here. Building D, is it?

Q. Yes. A. Now, what is it that you want me to answer?

MR. GILHOOLY:—Will you repeat the question?

Q. (The pending question was read by the Reporter.) A. They have, building C, which only has one shaft in it, and building D, all run together. The total of that, like many other totals in this report, is incorrectly added up—

MR. GILHOOLY:—I move that that be stricken out.

THE MASTER:—Strike it out.

THE WITNESS:—Well, it is incorrect.

Q. What is that? A. They add 218, but 222 is the right way to add it up.

Q. How many days do you say your computation would be after adding those two items which I gave you? A. Will you repeat that?

Q. (The pending question was read by the Reporter.) To-wit, the $1632.99 and the $174. Divide the sum of those figures by nine and how many man days does it give you? A. Going through this arithmetical procedure, you get $1,806.99 divided by nine, which gives 203.3.

Q. And when you divided your $1632, you only got 179; is that right? A. Now, let me see what we did get. Let me see if that is correct arithmetic, if I said that. As I say, a lot of computations were made here at the request of counsel. I don't recall them. $1632.99 divided by $9, gives a total of 181 days; not 179.

Q. Now, do you remember answering this—page 290: "The equipment, power transmission in Section D, 179 man days.

"Q. At a cost of what? A. That would run out about $18. We have got a little mixed up there with C and D in the record. That would come out at about 1611—it would come out exactly at that, 179 days, at the average rate of $9 a day." A. Yes.

Q. That 1611 was as against 1632, your computation. Now, Mr. McCrossen, why did you figure on a basis of $9 a day as the wage scale? A. That was the wage scale prevailing for the machinists and helpers at that time.

Q. $9? A. No. $10 and $8.

Q. $10 and $8, but you used an average of $9. A. Just for—all this computation was solely for the purpose of an engineering back-check on what we had done.

Q. And you figured on a $9 a day basis? A. Yes, sir.

Q. Refer to Igoe Brothers' proof of loss with reference to building 1, Section D? A. Building 1, Section D.

Q. Which you have before you. Igoe Brothers was charging labor, 290 hours at 60 cent an hour? A. Yes, sir.

Q. They used a basis of $4.80 a day? A. Yes, sir.

Q. Now, can you tell us, if you divide $1806.99, the figure you arrived at before, by $4.80 per day, what it would give you. You say $9 per day? A. Let us have that again, will you please?

Q. (The pending question was read by the Reporter.)

A. The division gives a quotient of 376 plus.

Q. 376 plus? A. Yes.

Q. So, if you were using the average rate per day of 60 cents per hour, on an eight hour day basis, as the means of determining the number of man days required to install the machinery, based on the amount asked for by Igoe Brothers, it would give you 376 days plus, in man days. A. I do not understand that question. It is too long.

Q. If you did it that way. A. If anybody wanted to make that calculation and call the result man days that, of course, would be the answer. But bear in mind that this is carpenter labor and we are figuring on machinist labor.

Q. Do you know whether or not Igoe Brothers, in putting in their claim for the installation of transmission,

were figuring on 60 cents an hour—did you know that? A. I haven't any idea what they figured on.

Q. Don't you know that they were paying their men at the time of the fire 60 cents per hour? A. I certainly do not know it.

Q. You knew that when you made up your original appraisal, didn't you? A. We knew what the prevailing rates were for doing that kind of work at that time, and what it would cost to put it in.

Q. You knew that Igoe Brothers contemplated doing this work with their own employes which they paid 60 cents? A. They contemplated doing this work with their own employes?

Q. Yes. Men they were paying 60 cents? A. No. They were not contemplating doing anything of the sort

Q. They had enough men? A. They did not have enough men to do a construction job of that sort.

Q. Doesn't it say, labor 60 cents an hour? A. I don't recall it being specified, that rate, for transmission equipment.

Q. It says so, doesn't it? A. No. It says here 2140 feet of lumber—not a wagon load of lumber, at 60 cents an hour, $174, for putting that up, carpenter labor.

Q. 60 cents an hour? A. Let me answer your question. Don't answer it for me.

Q. I think you have answered. A. No.

MR. VANDERBILT:—I object.

MR. GILHOOLY:—I want a complete answer, but I think that you have answered.

MR. VANDERBILT:—No.

THE MASTER:—Go ahead.

THE WITNESS:—There is 2140 feet of lumber, I repeat, less than a wagonload, of small pieces, upon which they have estimated a cost of erection of $174.

Q. That was notice to you, wasn't it, that they were charging 60 cents an hour for this power transmission? A. No, sir.

Q. Did you not know, when you examined those schedules, originally as filed by Miller & Maltbie, that they were asking 60 cents an hour for the installation of this power transmission? A. They were not asking 60 cents.

Q. Are you sure of that? A. Yes, sir.

Q. You do not know. You were considering $9 per day? A. No. They were not asking 60 cents an hour.

Q. Can you tell me why, in your direct examination, you referred to Igoe Brothers' claim of $1632.98, for installing all the equipment? Why did you make reference to that? A. The transmission, the labor in the transmission.

Q. Why did you pick out that particular item of $1632.99 for labor installing power transmission? A. That happens to be, as I recall it—don't let me go too fast, because there is a whole lot of arithmetic in here. The Building D—the reason for doing that was this: I had been handed the Fletcher-Thompson report, and I was to render a report to parallel it. I followed it, and set it up in the order in which it appears here, in which Section D occurs, with this transmission, and that transmission covers shafts. Section C and D, 1, 2, 3, 4, 5, 6, 7, 8, 10, 13, 11 and 12. I prepared an estimate as to

the amount, in my opinion, the number of men and the number of days it would require to put that in. After that estimate had been completed, as an engineer's check, as we should do, reference was made to the original claim, showing that Igoe Brothers Company had estimated the total amount for installing that transmission equipment listed on those shafts, at $1632. I hope that is clear. If it is not, I will go back over it.

Q. That is very clear, but why didn't you include the real figure submitted by Igoe Brothers, to-wit, the additional figure of $174? Why didn't you include that in addition to the $1632.99? A. I will have to have that question again.

Q. Why did you stop at $1632.99, without adding $174, which appeared in the proof as the cost of installing the power transmission? A. I estimated—I used the figure given in the estimate of transmission. Now, this—

Q. (interrupting) Now, Mr. McCrossen, it expressly states here; timber for line shaft hangers. A. Yes, sir.

Q. That is part of the transmission, isn't it? A. I will have to repeat again, sir, that I do not consider the stringers as part of the transmission; never have, in my years of experience. It would not be put up by machinists —to put up transmission.

Q. And for that reason you leave off the $174 in the cost of that particular item; is that right? A. I did not leave off anything. Now, you must be patient or be fair with me, to this extent—

Q. That is why— A. You must be fair with me to this extent, Mr. Gilhooly,—

Q. Mr. McCrossen, I am certainly fair with every witness that comes on the stand. A. I apologize.

Q. If they are troublesome, it is not because I am unfair. A. I apologize if there was a suggestion of unfairness. I did not mean that; I wanted more time. I told you that I estimated the time and the number of men necessary to install those shafts, and gave no consideration in my time estimate of the shaft to this little handful of timber there to which this shafting was hung, because it would go—be considered with the rest of it, and add no time.

Q. That is why you ignored it. It would not take a longer time— A. It would not take a longer time than I have allowed in my estimate.

Q. Go ahead. A. Then following that I made this computation and this check, which checked out at the prevailing rate, and was merely an engineering check for our office.

Q. Did you consider that check, the $9 check, with your estimate of 179 days? A. Perhaps I do not make myself clear on that.

Q. After you arrived at 179 days— A. (interrupting) On the term "check," when I use the term "check," perhaps it has a double meaning; an inspection of what the other fellow has in detail, rather than to say it proves the figures that we have are correct. We check out every angle. We know how much time it takes to do the work. We are in the business. Then when we came back to the Fletcher-Thompson report, I wanted to see where the figures came from, and we went down the line and checked that out, and checked those figures and made notes and checked the disagreement.

Q. You did arrive at an estimate of 179, then, by an independent estimate of your own? A. Yes.

Q. After you got this independent estimate, you

wanted to check back on what Igoe had, and divided by 9? A. Yes.

Q. That gave you a check, and made you feel that you were pretty near right in your estimate; is that right? A. I did not say it made me feel right about it.

Q. It gave you re-assurance, because somebody else did something the same as you? A. It was a step in our ordinary engineering estimate.

Q. If you had added 174, you would have a different result, 203 man days, and that would have caused you to look a little bit further to see what variance— A. No. I don't think—

Q. You would have ignored Igoe Brothers claim? A. No. I knew when I looked at the 2100 board feet of timber, it would not have an effect on that job at all, one way or the other.

Q. You say you prepared a report which paralleled the Fletcher-Thompson report? A. Estimate, yes, sir.

Q. Didn't you make a chart up from which you testified? A. Yes.

Q. Wasn't that an exhibit? A. They were loose papers; they were not all in the form of this one here.

Q. Weren't they in evidence? A. No. They were all office records, original records, as I recall it.

Q. Now, Fletcher-Thompson set forth specifications in their report, the number of man days they would allow for installing the stringers in buildings C and D, didn't they? A. Yes, sir.

Q. How many is that? A. Let me get straight. It is all balled up here.

Q. Page 6 it is. A. Yes, they have a summary here in front, and it is hard for me to check these things through. They have, at the bottom of the page, at the

bottom of that column, for C and D, eight men, eight days.

Q. Or 64 man days. A. Yes, sir.

Q. And their total number man days for the installation of the power transmission is 218 man days, isn't it? A. That, Mr. Gilhooly is what is written on it, but it adds up 222.

Q. You say it adds up 222? A. Yes.

Q. Will you, for the purpose of the record, subtract 64 man days from 222, and let us know the result? A. That arithmetic leaves a result of 158; 64 subtracted from 222.

Q. Then, the Fletcher-Thompson report, exclusive of the installation of the stringers, would be 158 man days; is that right? A. Exclusive of that item there, yes, sir.

Q. And the amount which you gave, exclusive of the stringers, is 179 man days; that is correct, isn't it? A. That is my estimate of the time, yes, sir.

Q. So that your estimate exceeds the Fletcher-Thompson estimate by the difference between 179 and 158; that is correct, isn't it? A. My estimate is 179, yes, sir; and if their estimate is 158, that merely, of course, by arithmetic, means it is in excess of that.

Q. In addition to that, you are basing your calculation on $9 instead of $4.80? A. I am not basing my report on any calculation at all.

Q. You are basing it on a division of $9 and not $4.80? A. I did that arithmetic here on the stand, and this other memoranda or notation on this average of $9 price, yes, sir.

Q. Turn to Building E. A. Which section?

Q. How many man days do you calculate for the installation of the transmission? A. In Building E?

Q. Yes. A. 108 days.

Q. Isn't it 109, you testified on— A. Maybe it was—I don't know how that error could be. I testified from my memoranda here, 108. There are a number of little errors in the text. I will bring those up at a later date.

Q. I want to get it exact, because it will be important. Page 290 of the testimony:

"Q. Referring to Section E on the same page, what is the Fletcher-Thompson estimate? A. The Fletcher-Thompson estimate is 163 man days.

"Q. What is the claimed amount of the installation labor in that original claim? A. $981.78.

"What is the proportion of labor to material in that original claim? A. 43 per cent.

"Q. Dividing the $981.78 by the average rate per day —what was the average rate per day, by the way? A. $9 per man per day.

'Q. Give us your estimate as to how many man days is required for installing this equipment? A. 109.

"Q. And is that a reasonable estimate?"

Do you remember that testimony, Mr. McCrossen? A. Yes, sir. If you read all the testimony back there— there was a lot of prior questions and answers.

Q. "Is that a reasonable estimate? A. Our estimate made up for that group of shafts was 108 man days, by days for each shaft."

Is that correct? A. That is correct.

Q. Your estimate is 108? A. That is correct.

Q. You said that Igoe Brothers' estimate of $981.78 was a reasonable estimate for the installation; is that right? A. Will you repeat the question?

Q. (The Reporter read the pending question.) Of the transmission in building E. A. You want me—I beg your pardon. I did not know whether you asked me a question or whether you—

MR. GILHOOLY:—Will you repeat that question?

Q. (The Reporter again read the question.)

Are you referring to their fire loss, Mr. McCrossen? A. No. I was looking at a lot of notations we have made on these items.

Q. Are you referring to the proofs that Igoe Brothers submitted to tell me from your own knowledge whether or not that was a fair estimate? A. Of their cost for installing that transmission at that time?

Q. Yes—in building E. A. I think I can answer.

Q. What is that? A. I think it was, but I will have to look it up.

Q. Will you refer to the loss they filed with you? A. Yes. I am going to do that now.

Q. Mr. McCrossen, may I ask you if that is a private memoranda of your own, to which you are referring now? A. It is not private, except in the sense that it represents a lot of data, there is a lot of stuff here.

Q. Mr. McCrossen, you are asked by Mr. Vanderbilt how much Igoe Brothers charged to install the power tansmission in building E, and you answred quite readily the figure I gave you a minute ago, to-wit, $981.78. Where did you get that calculation? A. That came out of the claim.

Q. Refer to that part of the claim—$981.78. A. It is headed "machine totals," all these various totals.

Q. You have it? A. I haven't the heading "machine totals."

Q. Where did you have it to give your testimony to Mr. Vanderbilt on direct examination? A. From these notes. We only summarized it.

Q. Can you find $981.78 as being the cost? A. Yes, I have that figure in the notes here.

Q. Would you say that was a reasonable claim on the part of Igoe Brothers for the installation of the power transmission in Building E? A. Yes, sir.

Q. So, dividing that by $9 gave you 109 days; is that right? A. Yes, sir.

Q. If Igoe Brothers, in preparing their proof of loss had counted a 60 cents per hour basis or $4.80 per day, how much would that have given in man days? Will you work that out for the record? A. We had $981.

Q. $981.78. A. You wanted it divided by what?

Q. $4.80. Can you tell us how many that makes? A. Yes. 204 plus.

Q. 204. Then, if we adopted the theory of dividing $981.78 by 60 cents an hour, or $4.80 a day instead of $9, then we would get 204 as a result? A. Yes.

Q. Now, Mr. McCrossen, did you take into consideration the installation of stringers and line shafts, when you made your estimate of 109 days? A. I took into consideration the erection of that equipment, and any little stringers, or blocks, that would have to go with it, as shown on this list here.

Q. And the line shaft as well. Will you turn to the Igoe Brothers' proof of loss, building, 1, Section E, and tell me how much Igoe Brothers' claim for the installation or putting up of the timbers and counter shafts—A. Wait until I find it. Shaft No. 6?

Q. Have you referred to that? A. Yes, sir.

Q. How much is that? A. It is necessary, sir, to ask for the repetition of the question.

Q. (The question was read by the Reporter.)

THE WITNESS:—They claim 3541 feet of lumber and 476 hours of carpenter labor, specifically stated as carpenter labor.

Q. And what is the amount of labor? A. What is the amount of—in money claimed?

Q. Yes; in money. A. $286.

Q. And at what rate per hour is that? A. That will have to be computed. I am not a very rapid mathematician—65 cents, isn't it?

Q. At 60 cents, it would be $285.60, and the claim is $286. It was 60 cents for all practical purposes. A. It is stated specifically that is carpenter labor.

Q. That is all part of the transmission, isn't it, however? A. The caption of that paper is "This is for all timber and counter shafts."

Q. And that is part of the power transmission, isn't it? A. I again say, sir, that the stringers and blocks of this sort, the timbers and counter-shafts—the counter-shafts from the machines, not on the main transmission, are not what we consider a component part of the transmission.

Q. Do you feel that you are alone in your opinion of that as an expert, or would everybody agree with you on that? A. I think that that is almost universal.

Q. Well, could you have your power transmission completed, so that you could set up your machines without having shafts and stringers? A. Could we have—

Q. You could not operate machines unless you had that in there; there would be nothing to attach them to, attach the pulleys? A. Only occasionally stringers or bolsters or any of those terms used for pieces of timber necessary in installing shafting; it is not always necessary

Q. Igoe Brothers had them in there, didn't they? A. They had some there.

Q. Then we were entitled to put our building back in the way it was, weren't we, with these shafts in? A. There is no question about that.

Q. So that Fletcher-Thompson had a perfect right to figure on the length of time it would take to put the stringers in? A. Fletcher-Thompson is entitled to figure on anything they want to.

Q. They were replacing the building. A. Is it of any importance that is doubled up on this, now?

Q. You consider the installation of that, do you? A. I certainly did, sir.

Q. All right. And you have figured on the basis of $9 per day, didn't you? A. I did not figure any money for installing, per day or per dollar.

Q. Can you tell me the exact number of days you allowed for the installation of the stringers in the tabulation you made? A. The stringers?

THE MASTER:—Separate from the rest?

MR. GILHOOLY:—Yes, separate from the rest.

A. No, on a calculation of that, do you think that I would separate 3500 feet of timber.

Q. You did not do it? A. No. In the time I can put in ten times that much.

Q. 476 hours was taken to install it? A. That is what they say.

Q. In other words, $981.78 was reasonable, according to your present testimony today, for installing the transmission; that is what you said? A. If I said it, yes.

Q. $286, by the same reasoning, is the reasonable cost of the installation of the stringers, isn't it? A. Now, let us see. Wait a minute. Don't go too fast.

Q. Can't you say whether that is reasonable or not, as an expert, Mr. McCrossen? A. We generally figure for this kind of work, ten cents per board measure foot installed; that is the almost universal practice for this kind of work. In that case, that would be $354. When this fire loss claim came along, if we must exhume the old thing—

Q. I am asking you whether that was reasonable or not? A. We passed it at the time.

Q. Would you say $286 was a reasonable figure, if you allow ten cents a foot? A. No, if we held it the way they held it—they have there so many board measure feet lumber—by the thousand, at so many hours, at a certain rate—

Q. According to your statement, you would allow $354? A. A reasonable estimate is ten cents a foot.

Q. That figure is— A. 10 cents a foot installed, labor and material.

Q. That is— A. That is $480.

Q. $480? A. Yes.

Q. Now, Mr. McCrossen, how much did Fletcher-Thompson claim in man days for the installation of the stringers in this building we are speaking about? A. I am sorry that I let that one question go; I could have cleared it up.

They have figured here eight men eight days.

Q. 64 days? A. 64 days.

Q. What is the Fletcher-Thompson total for the installation of the transmission, including the stringers in this building? A. 163 man days.

Q. Deducting 64 from 163 leaves 101; is that right—no, leaves 99 days; is that right? A. Yes.

Q. And your estimate, without specifying stringers in the estimate, by dividing $981.78 by $9 is 109 days; isn't it? That is right, isn't it? A. No. It is not right, with all due respect to you. I did not divide my figure by any. I made an estimate for putting it up.

Q. Your estimate is 109 days, with no specific item in there about stringers; that is correct? A. No, that is not my testimony.

Q. But this is correct; that if you deduct 64 man days from the Fletcher-Thompson report, it will give you 99 days for the installation of the transmission; is that right? A. Yes, sir.

Q. According to your theory, all of this work could be going on while the machines were being installed; is that right—so there wouldn't be any additional time required? A. Let me see, this is a new phase.

Q. Could you be erecting your stringers at the same time you were erecting the machines, setting them up, bolting them to the floor, and so forth? A. Could we be erecting the machines—while putting the machines on the floor?

Q. On the floor. A. Certainly.

Q. And for that reason, you do not make any allowance of time for the installation of stringers and shafts; is that right? A. I don't make any allowance for stringers and shafts—no, I have not made myself clear.

Q. I am afraid that you have not. I will ask you the question, though—I am interested in just one phase at a time: In this building operation, before you set up your machinery, you are going to have your power transmission in perfect condition, aren't you? A. Yes.

Q. Are you or are you not? A. Not necessarily.

Q. You are going to install your shaft and stringers before you set up your machinery? A. Not necessarily.

Q. As a matter of fact, you have to have your main line up before you can start installing your machines, don't you? A. Absolutely not.

Q. That is your opinion? A. That is my knowledge.

Q. Well, will you please explain to us, if it is not necessary to have your main lines up, how you can get your machines in alignment? A. Before you start building a plant, you lay out your equipment; you lay it out carefully, to detail. When you put in your machines, there is always a slack for adjustment back and forth. If a man, a contractor or engineer could not put his machine units at the same time he is putting up his shaft, or put up his machine units first, and then put his line shaft up afterward, and adjust his machine to it, re ought to be fired.

Q. At some point in the procedure, you have to set up the main line? A. You could not run the machines without it.

Q. In the building of this main line, the stringers are a part? A. They are a part of the building.

Q. And it takes time to put them in? A. Of course, it takes time to make any motion, no matter what it is.

Q. You say they are a part of the building. Do you want to stand by that? A. They are affixed to the building.

Q. But you would not consider it a part of the building to the extent that you would have the builder erect them? A. Indeed I would, and I have done it hundreds of times; have builders put up stringers— hundreds of times; it is done every day in the year.

Q. Could the contractor that has the job of erecting this building, instal the main line of this shafting? A. No. I did not say that. I said the stringers, Mr. Gilhooly.

Q. He could instal the stringers? A. If you wanted him to. It is done every day in the year.

Q. It was not contemplated in this case, was it, according to the testimony? A. I do not know what was contemplated, sir.

Q. You figured the stringers would be put in by the party that put the power transmission in? A. Certainly.

Q. It would have to be erected, then, by those who erected the mainline? A. We had better straighten that out by saying—by the gang that is doing the work. We might go down the whole length and put the stringers in and not put the shaft up for two or three days or two weeks, and another man might put it all up the same day.

Q. When you refer to Igoe Brothers' fire loss, and specifically to that item of $981.78, which you divided by 9 on your direct examination, didn't you, as a matter of fact, overlook this little item of stringers when you were making your calculation through inadvertence, didn't you overlook it? A. I am glad you asked that question.

Q. Did you or did you not? A. I did not, and I wish that you would give me a chance to answer it.

Q. You will have plenty of opportunity on redirect examination. A. Please give me a chance to answer it. It was not over-looked.

Q. Why did you state to the Master when Mr. Vanderbilt asked you the question: "What is the claimed amount of the installation labor in that original claim," for the transmission, say, "981.78," and leave off the item of 266 feet? Can you say—why did you leave that item off? A. If you will refer to the top of the claim. perhaps you will see the statement, "This is for putting up timbers and counter-shafting."

Q. Which is part of the transmission. A. Please let me finish my answer. I am doing the answering, with all due respect to you. For putting up timbers and counter-shafting, and you will find at the bottom of the Fletcher-Thompson report the letter "H," where it says, "Millwrights, carpenters, labor." They have shafts and stringers on all machinery, where they estimate a figure of 33 days. You will find in my report and my estimate, the letter "H," covering counter-shafts, where I allow 34 man days for putting up these counter-shafts, stringers for the machines, and putting up counter-shafts.

Q. But Mr. Vanderbilt asked you specifically the question, what was claimed by Igoe Brothers, not what Fletcher-Thompson did, but what was claimed by Igoe Brothers for installing the power transmission, and you answered "$981.78." And in addition to that, Igoe Brothers have a claim of $179. Why did you leave that off? A. Because—I purposely, intentially, with malice aforethought, left it out. It is covered by this group H down below, and it is specifically set up here, for the counter-shafting, it was not the main line shafting.

Q. Igoe Brothers were claiming in Building E, $286 plus $981 for power transmission in that particular building, weren't they? A. No, sir.

Q. The figure is right there. A. No, sir, it does not say power transmission.

Q. It is putting up timber, counter-shafting—that is part of the power transmission, isn't it? A. Six pieces of six by eight—I will read it. Get this.

Q. Do you think there is anything that the stenographer is not getting, Mr. McCrossen? A. I am trying to do two things at once; hurry this up, and give it to you accurately. Two pieces of six by eight by sixteen for the grinder. The grinder is a machine. Two pieces of six by eight by sixteen for the spindle tramp. It reads on down, in detail, over a number of items; one piece of six by eight, and another piece of eight by ten, I see, six feet long, for each individual machine. That has nothing to do with the main transmission. That is counter-shafting that goes on the machine.

Q. And the counter-shafting is part of the transmission, isn't it? A. The counter-shafting, of course, is a piece of transmission, but it is not a component part of the machines and computed with the machines, and not in the transmission. By the same token you could call a shaft a machine, and you could call a steam engine a machine; both are pieces of machinery.

Q. But in this $981.78, that included counter-shafting, didn't it? A. It did not.

Q. That was what, then? A. That was main line shafting.

Q. Didn't Igoe Brothers claim any loss for counter-shafting? A. With the machines?

Q. With the machines, of course. This $981, includes part of that counter shafting? A. It includes the cost of putting up this transmission as shown here.

Q. And that includes counter-shafting as well as direct shafting? A. Let me see what it does do.

Q. I may save time here. A. I will take it all out, if you want it.

Q. I am informed that the $981.78 of the Miller & Maltbie claim was for the direct line. Now, then, the stringers for the counter-shafting are considered part of the transmission, though, however, are they not? A. Most counter-shafting comes erected on blocks. At times, additional blocks are put in to put the counter-shafting up.

Q. You are going to install your shaft and stringers before you set up your machinery? A. Not necessarily.

Q. As a matter of fact, you have to have your main line up before you can start installing your machines, don't you? A. Absolutely not.

Q. That is your opinion? A. That is my knowledge.

Q. Well, will you please explain to us, if it is not necessary to have your main lines up, how you can get your machines in alignment? A. Before you start building a plant, you lay out your equipment; you lay it out carefully, to detail. When you put in your machines, there is always a slack for adjustment back and forth. If a man, a contractor or engineer could not put his machine units at the same time he is putting up his shaft, or put up his machine units first, and then put his line shaft up afterward, and adjust his machines to it, he ought to be fired.

Q. At some point in the procedure, you have to set up the mainline? A. You could not run the machines without it.

Q. In the building of this main line, the stringers are a part? A. They are a part of the building.

Q. As part of the transmission? A. It comes as a unit of the counter-shafting, and that is bolted to the roof or to the ceiling. There are infinite variations of ways to put it up.

Q. Keep to Igoe Brothers' plant. How about this shafting here? That is what we are interested in. You would have to instal the stringers there, wouldn't you? A. Not always, no. There are probably places where they could get by without stringers.

Q. They were put in the claim for $286, for stringers, on both the direct line and the counter-shafting; that is correct, isn't it? A. Let me see if it is. You are going too fast. Let us see how the thing is headed. This estimate I spoke to you about, this figure we have been discussing, timbers and counter-shafting, $498.50 is for the counter shafting only.

Q. None of it for the main line at all? A. No, sir.

Q. That was considered by Igoe Brothers as part of the transmission in that proof? A. If it was, why wasn't it in the transmission figure; it is not in the transmission figure.

Q. But they did put in a claim for $286, in addition to the $981? A. For timber. But between the transmission and the shafting—between the transmission, main transmission and this item here are numerous items of racks and boards, and shelving, and the immediate preceding item on that is brackets and portable fire extinguisher, work bench, shelves and lumber, wire racks, pine benches, pine boards—showing that they conceive of that as ordinary carpenter work to go along with the benches and racks and all the labor. They did not think it was transmission, and they do not now.

Q. You, however, made no specific allowance for stringers in your estimate, did you? A. No. No more than—

Q. You just absorbed it? A. No more than I would make a specific allowance for lag screws, bolts, drop hammers, and so forth. It was not the correct way.

Q. In that item you did not parallel the Fletcher-Thompson report, in the item of stringers? A. We paralleled it until we dropped an item. It was not overlooked.

Q. That is your opinion? A. It is my opinion, sir.

Q. So you have never, in any calculation which you have made, set up a definite item for the installation of stringers? A. Set up a definite item of 3500 feet of timber—of course not.

Q. You treated that as too insignificant? A. Not insignificant, but not necessary, and not considered at all.

Q. As not necessary; is that right? A. As not necessary to go through the operation of making an arithmetical set-up in my estimate.

Q. Despite the fact that Fletcher-Thompson set it forth in their report; is that right? A. The Fletcher-Thompson report— Well, I will let that go—of course not. We dropped it because it is a duplicate calculation. They have the same thing down below that, in the Fletcher-Thompson report.

Recess.

AFTERNOON SESSION.

EDWARD F. McCROSSEN, recalled.

CROSS EXAMINATION (continued)

By MR. GILHOOLY:

Q. Mr. McCrossen, will you turn to the Igoe Brothers proof, Building F. A. Section F we call it. Are you still on transmission?

Q. Yes. I am still on transmission. I call your testimony on your direct examination, given on pages 291 and 292, the question in reference to building F or section F.

"Q. What is the amount claimed for labor for installation in the original Igoe estimate? A. $18.24.

"Q. What was the proportion of labor to material? A. 48 per cent.

"Q. Dividing $189.24 by the average rate of $9 a day, gives how many man days? A. 21 man days.

"Q. And is this a reasonable amount? A. Yes, sir.

"Q. What was your estimate on that? A. 21 days for the four shafts in that section."

Now, will you refer to the Fletcher-Thompson report and tell us how many days they allowed for stringers? A. Section F. Fletcher-Thompson, they have four men five and one-half days, or twenty-two days.

Q. Now, will you turn to Igoe Brothers proof in respect to building F, and let us have the amount claimed by Igoe Brothers for the cost of installing the stringers?

A. There is nothing listed under a heading as in the other sheets, for stringers.

Q. That is for all machines? A. But it is headed "Lumber for all machines."

Q. Now, looking at those items, you will, will you not, find, as a matter of fact, it was stringers? A. Well, let us see whether or not it was. The first item says "Six pieces of timber for counter-shafts."

Q. 13. A. 13—my error. I beg your pardon. It was the one below.

Q. That is stringers, isn't it? A. Counter-shafting.

Q. Stringers for counter-shafts? A. You can't call it stringers. It might be joists or it might be anything, but I assume it was stringers.

Q. The next item, six pieces— A. For counter-shafting.

Q. For counter-shafting. A. For counter-shafting. The next item is six pieces of 6 by 8 timber for— the word is imperfectly written, and I am not going to guess. I am going to let you do that—on four straightening machines.

Q. Isn't that supposed to be cutting? A. I say, I am not going to say, but I assume that is what it is. The total amount of timber is 1600 board measure feet.

Q. And the labor for putting up this lumber— A. And the labor for it is estimated at $144.

Q. For how many hours? A. The list here shows their claim for carpenter labor, 240 hours.

Q. At how much per hour? A. 60 cents per hour for carpenter labor.

Q. Now, will you kindly make this calculation, as you did before, by adding to $189.24 the sum of $144? A. Yes, sir.

Q. Will you please divide that by $4.80? A. 69.

Q. That gives you a figure of 69, and you have allowed 21 man days for the transmission; is that correct, in your direct examination? A. We allowed—let me see. I will check that up again in a second—21 man days. But that figure does not conform with the computation I have just made, in any way.

Q. In arriving at your figure of 21 days, how much of that time, do you allow for the installation of stringers for which Igoe Brothers claim $144? A. That 1600 feet of lumber was considered as a component part of this little transmission equipment, in my estimate of time. There was no designation, as I have answered before.

Q. Then you did not parallel the Fletcher-Thompson report to that extent, because we have an item for stringers? A. I say, they have four men, five and one days, 22 man days to put up 1600 feet of timber. Do you wonder that I dropped it?

Q. Now, while we are on that subject, Mr. McCrossen, do you emphasize that, as indicating that such a statement is incredible? A. I certainly do, sir. I wonder—

Q. Do you consider Fletcher-Thompson a concern of repute and standing in the community? A. I have very little information about Fletcher-Thompson. I would consider any concern that would make an estimate like that, as having let the estimate get out without having careful enough attention, or they did not know what they were doing.

Q. Do you mean to say that Mr. Hamilton, who is with this concern, did not know what he was doing? A. I do not know Mr. Hamilton from anyone else in the firm. I am submitting this thing here, and I am charged with ignoring things in this estimate—I ignored things,

and my explanation is that I am ignoring them because of the futile and extravagant figures that have been used in making up this estimate.

Q. You know that they have done responsible work around Newark, don't you? A. I know very little of them. I have only heard of them occasionally.

Q. You do not know enough about them to criticise? A. I am criticising their work, as you are trying to criticise my work.

Q. I am not criticising your work. That may be your mistake, Mr. McCrossen.

You said in the forenoon that you did not consider stringers as a part of the transmission; is that right? A. In effect, yes, that is what I considered—

Q. Now, what would you fasten the shafting to, if you did not fasten it to the stringers? A. If the joices were there, if the main struts were there, or if there was a wall there, a brick wall, you could hang it up without having stringers at all.

Q. And there were not any of those— A. You could not have a floor without a joice on it.

Q. You have to put up your stringers in order to fasten on your main line shaft, don't you? A. Not always, I am telling you.

Q. What will you hang it to; an imaginary object in the air? A. Don't you know that a floor or a ceiling has joice in it and frequently those joice are boarded over underneath. I do not want to belabor the thing, but I can take a drop hanger and bolt directly on to the joint or on to the ceiling, on the bottom of the joice. They are put in on the side of the building.

Q. Mr. McCrossen, these buildings were truss roof buildings, so you would not have any of these items you mentioned? A. They were not all truss roof building.

This shafting was not all on stringers; some of it was on the floor, under it; some was on the side wall.

Q. You admit that in this building there was 1600 feet? A. Board measure feet.

Q. Board measure feet? A. Yes.

Q. So, we are not concerned with joice or anything else; we are concerned with stringers. A. Certainly.

Q. How much time were you going to allow for the installation of stringers, inasmuch as they were there before the fire? A. There was also there before the fire certain specifications of little shafts —

Q. Mr. McCrossen, can you tell me how much time you would take? A. I am going to do it, if you will let me.

Q. Without other explanation. A. There are specifications for a small amount of shafting, a trifling amount, speaking in terms of transmission, and I took each of those shafts, shaft 26, two men, two days; shaft 27, two men, two days; shaft 19, three men three days; shaft 25, two men, four days—and knowing the specifications and knowing the material that goes in, and knowing there was this stuff here, these 13 piece of six by eight—sixteen, and 6 pieces of six by eight, and six other pieces of six by eight, and I knew very well those three men could instal that shafting in that time with this necessary stuff in between it; there is no question in my mind about it; there is not yet and never will be.

Q. You have not, as yet, answered the question, but have attempted to argued. Will you please tell me how many days you can do it in? A. I beg your pardon.

Q. How many days would it take to instal the stringers? A. To put up this 1600 feet.

Q. Yes. A. I have made no separate segregation and allowed—

Q. Can you tell me as an expert how many days it will take? A. We will work it out.

Q. Have you ever worked it out before? A. No, I do not work out those things.

Q. You have not taken it into consideration? A. Except in a general way, as I explained to you in the other four groups, in the buildings.

Q. You saw in the Fletcher-Thompson report that they asked an allowance of 22 days? A. Surely.

Q. Didn't you go over that figure at that time for the purpose of showing, if necessary, that such time would not be required? A. Why, no, there are a number of things I have omitted from that report, utterly ignored, because they are not worth considering.

Q. That is why you ignored it, because, in your opinion, they are not worth considering? A. Absolutely.

Q. Deducting from 45 man days in the Fletcher-Thompson report, deducting the 22 days, that gives you 23 days for the installation of the power transmission, as against your 21, isn't that right? A. Yes, That would be the arithmetic only. If you take out those figures, that will leave 21 in there.

Q. And the difference in number of man days between your estimate of 21 days and the Fletcher-Thompson estimate of 45 days, results in the time which they allow for the installation of the stringers, that is correct, isn't it? A. If that is the way you look at it. I do not know that I follow that line; there is a lot to it.

Q. If you want to accept the theory that dividing $9 into $189, which gave you the 21 days—if we divide that $189.24 by $4.80, that will give you more man days, if you work it out on that theory of check-up, won't it, naturally? A. I have not worked it out yet. I will if you want me to.

Q. But the figure you did work out by adding $189.24 and the $144, and then dividing by $4.80, gave you 69? A. Yes.

Q. And if you adopted that theory, that would mean 69 man days? A. I am assenting to these arithmetical computations you are going through, but it is quite a bewildering affair. I do not know what you are driving at. If I said, in order to answer the question—

Q. When Mr. Vanderbilt asked you what Igoe Brothers were claiming for the installation of power transmission in building F, you answered $189.24; isn't that correct? A. Yes, sir, I think I did.

Q. And totally ignored the claim they had for the stringers, didn't you? A. The same thing holds true here as in the four buildings we discussed.

Q. If it appears that stringers are an integral part of transmission, that item of $144 should be added to the $189.24, to give a complete answer to the question, shouldn't it? A. I do not agree with that at all.

Q. That is why you said $189.24 rather than the sum total of the two items; is that right? A. That is why I said $189.24?

Q. Was the cost of installing the transmission? A. Because it is the cost of installing the transmission.

Q. Then, do I take it, that you would expect to go into a building for the purpose of installing transmission and find there in that building stringers erected by the party who built the building—would you expect that? A. This is too heavy for me. Will you repeat the question?

Q. (The pending question was read by the Reporter.) A. That is a very extraordinary question, and I am frank to say that I do not understand what you are driving at, but certainly, I would not expect to go into a

building to put up equipment and find equipment already up.

Q. That is part of the equipment, isn't it, the stringers, or something to fasten on your main line, too, isn't it? A. Everything connected with the building and machinery is part of the equipment. Everything connected to the building—that is, connected with the machinery, is all equipment; bolts that hold the shaft up are part of the equipment.

Q. That is just what I am getting at; you expect to put something up there, to which you can fasten your main line shaft? A. I intended to do that when I estimated that number of man days.

Q. Then that is part of the power transmission? A. I disagree with that, and I do not want—will not follow that line of thought at all. I will have to repeat again what I said before, and I will explain, if you will permit it.

Q. That is why you left off the $144 in this particular building, isn't it? A. I left that off because it is not in the transmission; it is nowhere near the transmission estimate.

Q. But it is transmission? A. It is not transmission.

Q. In your opinion. A. Well, it is not. Of course, everything I say, yes or no, is an opinion.

Q. Now, will you turn to Building H— Mr. McCrossen, if you take a building which has girders 15 feet apart, will you please explain to us how you would hang your main line shaft? A. If there were girders—

Q. Spaced 15 feet apart? A. Girders 15 feet apart?

Q. Yes, or trusses. A. Oh, trusses. Why, when you put your trusses up, when you get ready to build

your plant, build your trusses, build your building, you put the trusses up and put the stringers down across the trusses, and you hang pipe on it and hang any kind of chain blocks on the stringers.

Q. On the stringers? A. On the stringers, unless you have it across.

Q. That is the function of stringers? A. To hold up whatever is put on them.

Q. They hold the main shaft and transmission? A. Hold pipe and chain block or any other equipment; whatever you want to put on it.

Q. In this particular building, Igoe Brothers had 16 running feet of stringers, according to this proof, didn't it? A. Let me see. You sent me over to building H, and I have lost my place for the moment. Yes. 13 pieces of six by eight—sixteen.

Q. The total is 1600 feet, isn't it? A. That is 1600 board measure feet, and not 1600 lineal feet. There is a vast difference.

Q. There is 1600 feet? A. Board measure feet.

Q. And that had to be put back, didn't it? A. Of course, it did.

Q. And you say that the time it would take to do that would be inappreciable? A. I did not say that. I said it was not an important figure, but it was absorbed in these figures for putting up this little bunch of shafting.

Q. Now, you put this up as you start to instal your machinery, don't you? A. If I was building the plant, the carpenter would put that stuff up when the building was put up and any other practical man would do it.

Q. You would absolutely disregard the location of your machinery? A. You have your machinery set before you build the building there.

Q. You have not got your machinery in the building? A. You have the entire building, or you have bum engineering, one of the two. You know where you are going to put them.

Q. You know where you are going to put your machinery before the building is completed? A. Before the foundation is started.

Q. The exact position that machinery is going to occupy? A. Certainly you do.

Q. That is you theory? A. That is the theory used in every practical plant construction today.

Q. That is what you are basing your calculation on; you would have prepared just where you would put the machinery before the building was completed? A. Yes. And that man would—

Q. I am asking you. Did you do that? A. Yes, sir, you have plans for the building. You have a floor sheet, and you have your products going through in your plant in an orderly fashion, your process in an orderly fashion; you do not put it in haphazardly.

Q. Now, turn to building H. A. Yes, sir.

Q. Mr. McCrossen, do you know how much Igoe Brothers charged in their proof there for installation of the transmission in that building? A. I will have to check it up. I do not know right offhand. I do not remember now what that figure was. If I testified to it before, it must be in those notes. That is the trouble of splitting up the examination; you lose your notes. I can figure it out, if you want it. I haven't it offhand right here.

Q. I will ask another question; probably I can help you. A. I will have to dig it out.

Q. Now, building 1, section H, in the proof field by Miller & Maltbie, they put in no charge for installing

machinery in that building, did they? A. As a matter of fact, they did not, but we put it in ourselves, when we made the fire loss adjustment.

Q. That was something that was done subsequently, but Miller & Maltbie did not put it in? A. Why, no.

Q. Why, they have charged here $705.88 for material. Can you find that item? A. Yes, sir.

Q. How much of that do you allow for installing? What percentage of that do you allow for the installation? A. Why, our estimate, or the comparative estimate of the fire loss in the replacement cost new of that equipment, instead of $705.88, was $659.08. We estimated a labor installation charge of $150.

Q. Well, now, you say that amounts to about 25 per cent, doesn't it? A. Yes, sir.

Q. A little over 25 per cent—that would be a little less than 25 per cent? A. About that, approximately, —with the explanation that that is 25 per cent of the total amount of that material as I stipulated.

Q. Yes. A. You understand that.

Q. Now, I find upon examining your testimony with respect to the installation charge of power transmission Section E, which appears on page 291, that the proportion of labor to material in the original claim, according to your answer, was 43 per cent.

Q. And referring to page 292 of your testimony with respect to building F, the proportion of labor to material was 48 per cent. Now, will you tell me why in one case, the proportion would be 43 per cent and in another 48, and now you estimate less than 25 per cent as the proportion of the cost of labor to the amount of material? A. The amount of material—good. All right; let us analyze that and see what that consists of. We will take Section D. You brought that up first. Start with Section D.

We will see that shaft No. 3 consists of 5-7/16 shafting, and that virtually the entire list of material is very heavy material. You go to the next shaft, and you will find four and seven-sixteenths shafting. You will find that all the shafting, collars, bolts and sockets, brass drop hammer, bolt, socket, brass drop hammer—I am reading from the claim—split pulley, split pulley, 2/15 shaft. You will find that the proportion of belting to the value of the shafting and other equipment in there is very moderate. You will find that all of the shafts are heavy shafts and many of them—some of them are quite long shafts—here is 79 feet, 77 feet, on the second floor, and 26 feet on the shaft above it, and 15 feet on the one above it, and on the very first shaft, No. 3, you will find rope sheaves, two split rope sheaves, 650 feet, 1¾ manilla rope. Cast iron steel gear, rope guard covering transmission, safety set collar. Going down on the next list, it is all very heavy material. When we come back to this little thing, in Section H, you will find that—let me give the exact figures, so we won't be going over the thing twice. You will find that the transmission equipment—

Q. Are you referring now to section H? A. Section H. You will find, the transmission equipment which is described, replacement cost, value new, $659, consisting of 20 feet of 2 7/16, 4 hangers, 65 feet of one and 15 shaft, 8 hangers, and 6 feet of steel shaft, not described, the size and eight hangers, and fifteen feet of one and 15 shaft. Of the total amount of $659, $165 of that is for a leather belt, upon which we generally use—and it is customary to figure only ten per cent installation cost —up here it is $207, the correct price was $615. We found that if you deduct that value and apply your percentage, you would get this answer. It is not important, in any event. The reason for the 43 per cent was to call

attention, in our organization, check these things out and my office work on it—we made these arithmetical checks to find out the conditions as we went through the claim. When we found the estimate was 43 per cent, or 45 per cent, we knew it was well above the practice that is being used. I merely comment on it in my notes, where this computation was made five years ago on this piece of paper. It just so happens, of course, that the total amount of material there figures 150 to 650 and so far as I can divine, it is utterly significant of nothing.

Q. Mr. McCrossen, as a matter of fact, building H is practically the same as building F in which you allow 43 per cent for installing? A. I did not allow 43 per cent, or 42 per cent or any other percentage.

Q. Igoe Brothers did, though, didn't they? A. Igoe Brothers figures as to the cost of installation, computed out at 42 or 43 per cent, or whatever that came out to be.

Q. You figured that was reasonable at that time, didn't you? A. I figured it was reasonable at that time?

Q. Yes. A. I do not know whether I did or not, without looking at the fire report.

Q. You stated in your direct testimony that it was a reasonable amount? A. I don't remember whether that was reasonable. I remember—

Q. Do you remember this, Mr. McCrossen? A. Yes, sir.

Q. —on page 285:

"Q. Why do you say that? "A. Well, we have worked it all out on a detailed basis of what, in our opinion, is the correct time, the correct amount of time that should be allowed for installing this equipment, putting

the shaft in in accordance with the specifications, and then, after we had completed that, worked those figures out, then I checked back on the original claim—"

Q. Igoe Brothers claim. A. Yes. This one.

Q. "And found the amount of installation, labor claimed for that work, and figured it by dividing by the labor rates, and we found they substantially check."

Do you remember saying that? A. If it is in the testimony, of course, I said it. I do not remember.

Q. And, of course, you were doing your dividing by $9 per day, weren't you? A. If that is what I said there, yes, of course; for machinists' rates, not carpenters' rate.

Q. Do you also remember saying page 287:

"As I stated a few minutes ago, our estimates check out with the claimed amount of labor claimed at the time by Igoe Brothers when that amount of labor is divided by the prevailing rate for labor and mechanics." A. If that is in there, I must have said it, but in justice, what preceded that and what followed that should be brought into this record, and an extract should not be quoted.

Q. Is that statement of correct that I just read? A. If it is what I dictated at that time, of course, it is correct, but, as I say, I do not know what it applies to.

Q. You prefaced your answer with "if it is what I dictated." Do you mean to insinuate that the stenographer might have misquoted you? A. I do not mean that. I do not even intimate that, but I do say, when you read an extract—it is not complete; there is a predicate and no subject in it. You ask me if that is correct. I do not know what it means.

Q. I am going to ask you if this is correct: Your estimate checked out with the claimed amount of labor claimed by Igoe, when that amount is divided by the pre-

vailing rate of $9; is that estimate correct? A. What estimate?

Q. The estimate of labor claimed at the time by Igoe Brothers? A. The estimate—

Q. The labor claimed by Igoe Brothers at the time of the fire, which you refer to here. It that correct? A. I can't answer that question. I can't answer yes or no until I have time to check up what you are talking about.

Q. Mr. McCrossen, you made a statement on direct examination as follows— and I am going to ask you if that is correct, or if you want to change your testimony, I will give you an opportunity. I am quoting from page 287, as follows:

"As I stated a few minutes ago, our estimates check out with the claimed amount of labor claimed at the time by Igoe Brothers when that amount of labor is divided by the prevailing rate for labor and mechanics."

Is that a correct statement? A. The verbiage is correct. Now—

Q. That is my question. Please wait until you get another one.

Isn't it a fact that in estimating on that building H you used 43 per cent for the cost of installation? A. Why, no.

Q. You think that you would reduce it to less than 25 per cent; is that right? A. The estimate for installing the material, and expressing it in terms of dollars, at the time of the fire, was $150 to $659. You can twist it any way it sounds.

Q. How many days do you allow Igoe Brothers to instal the equipment in Section H? A. I have in there two men 17 days or a total of 34 days.

Q. Now, of you were to multiply 35—how many days did you say? A. Two men 17 days, or 34 days.

Q. If you multiply that by nine, how much would that give you? A. 34?

Q. Yes. A. 306.

Q. Now, on your figure of 34 days at $9 a day, you would figure the cost of installing equipment in Section H to be $306, is that right? A. What equipment now, do you refer to?

Q. The transmission equipment in Section H? A. You mean only this on this page?

Q. Yes. A. No.

Q. What did you include when you said transmission in building H, 34 days? A. As I told you before, where we could, we paralleled this claim as near as possible.

Q. Then you allowed 34 days for installing the transmission? A. Please let me finish now—so as to make it comparative for just this purpose here. The Fletcher-Thompson Company have used the letter H here, and they have written "millwrights, carpenter labor covering shaft, stringers, and so forth on all machines, six men, 5½ days, or 33 man days." That covers everything. That is the shaft for the counter-shafting on that machinery, putting them up for this transmission in here.

Q. But they call that transmission, don't they? A. Call what transmission?

Q. For the installation of transmission in building H, Fletcher-Thompson allow 33 days, don't they? A. They have millwrighting, carpentry and labor covering shafts and stringers, and so forth, on all machines 33 days.

Q. And you allow 34? A. I allow two men 17 days to put this stuff up and do the other work as well as the transmission in the 34.

Q. You have 34 days A. Yes.

Q. And you would install in 34 days those items set forth in section H of the proof? A. Yes.

Q. So you would allow them the sum of $306 for it? A. Using your figures?

Q. Yes. A. Yes, sir.

Q. Now, you tell me you allow 34 days at $9 a day for it? A. Using your figures?

Q. Yes. A. Yes, sir.

Q. Now you tell me the percentage you would allow would be less than 25 per cent or $150 to instal? A. That is not connected together, and has no connection at all, not the slightest.

Q. I asked you before, how much you allow for the items set forth in Section H? A. Yes, sir.

Q. You said the total amount of the claim for material was $705, which you figured should be reduced to $659, and of that $659, you would allow $150 for installation. That is what you answered? A. Yes, sir, I did.

Q. Now you tell me you allow 34 days at $9 a day for installing the machinery in section 8, amounting to $306? A. Yes, sir.

Q. So that makes a charge of $115—$116? A. No; no, it would not.

Q. It would not? A. No.

Q. Now, in building H, you were making your computation as to the cost on the basis of $9 a day, weren't you? A. Yes, sir, I did not make any computation on the cost in building H for this hearing.

Q. If you take $306—will you please divide that by $4.80, and give us the result? Have you got that figure? A. Yes, sir.

Q. How much? A. $70.

Q. $70? A. Yes.

Q. Will you turn to the item in the proof, Section H, the proof filed by Igoe Brothers with the item of stringers and labor covering shafts and so forth, on all machines on the second floor. Have you got that place in Section H? A. Yes, sir.

Q. The total there amounts to $276.60, is that right? A. Yes, sir.

Q. Now, that includes $156 for the carpenter labor? A. Yes, sir.

Q. At 60 cents an hour? A. Yes, sir.

Q. Making a total of $156? A. Yes, sir.

Q. I show you what purports to be an estimate which you made, on the stationery of McCrossen Company— A. That is mine. Don't waste any time on that for my sake.

Q. Referring to Section H, stringers, and so forth, for shafts, replacement cost $276.60. A. Sure. I have a copy here.

Q. You agree there with Miller & Maltbie as to their replacement cost of that item? A. $276.60, yes.

Q. Your figures agree with Miller & Maltbie? A. Yes. Now, why? Do you want to know why?

Q. Mr. Vanderbilt will take it up on redirect examination, and let you do all the explaining you want to. A. I beg your pardon.

Q. Of which $156 represents the cost of installing the stringers? A. Yes, sir.

Q. Will you turn to building 1—no. Pass 1 up. Building P. How many days do you allow for the installation of transmission in this building? A. Building P. Just a minute, sir. Two men four days or eight days all told.

Q. And referring to the Igoe Brothers' claim, how much did they claim for the cost of installing? I may

save you time on that? A. I would like to get the item. Here it is. Under that small tool section, shafts 36 and 37, the total claim for material on that was $72, my notes show here.

Q. $72. That is what you testified on direct? A. Yes. That is what the original notes show.

Q. And that, divided by 9 gives 8. What was your estimate? A. Two men, four days, eight days.

Q. How many days did Fletcher-Thompson allow for the stringers in that? A. They have got three men five days or fifteen days.

Q. And their total allowance in building P is 23; is that right? A. Yes, sir.

Q. And 15 from 23 would be eight, of course. Now, how much did Igoe Brothers claim for the labor of installing the center-shafting timbers in Section P? A. Let us find that. There is a list of ten pieces of six by six-sixteen, totaling 544 board measure feet at a cost of $32.70.

Q. I do not want the cost of the material, but your labor? A. The cost of labor to put it in was $67.40.

Q. How many hours? A. The claim here is for 104 hours.

Q. And that is at 60 per hour, is it not? A. No, not that one.

Q. That is almost 65 cents per hour. Now, would you add $67.40 to $72? A. I beg your pardon.

Q. To $72. A. Yes.

Q. And divide that by $4.80. A. 29.

Q. Now, I will refer to your original appraisal? A. Just one moment, and I will check it for you.

Q. Item 11. A. Counter-shaft timber.

Q. Counter-shaft timber. According to your figure, the replacement cost in building P is $100.10? A. Yes, sir.

Q. And I ask you if that is not exactly the same as that claimed by Miller & Maltbie in Section P? A. The specifications, the quantities and the prices were taken right out of Miller & Maltbie's claim, if that suits you.

Q. And you agree on that? A. I had to. It is burned out of sight. What could we see?

Q. That item was taken—

THE MASTER:—Burned out of sight?

THE WITNESS:—This part was burned out of sight, and we had to take their figures.

Q. And the figure which you carried as the replacement cost is exactly the same as Miller & Maltie's? A. Yes. Those specifications and all are in there.

Q. And you made allowance— A. The total loss allowance.

Q. The total loss allowance? A. Yes, sir.

Q. As to counter-shaft timber? A. Yes, sir.

Q. That was, of course, part of the transmission? A. I still deny that it was part of the transmission.

Q. But you made allowance for the installation of that item, putting it back again? A. Yes. And there were other things hooked—there were other things in the plant hooked onto these stringers besides shafting.

Q. Now, Mr. McCrossen, you were asked by Mr. Vanderbilt, on page 320:

"Q. Assuming Mr. Shoemaker's figures as to the length of time it would take to reconstruct the plant, and take your own estimate of the length of time it would take to equip and tool up the plant, how long would it be— taking into consideration what overlapping there

may be in those two things, by reason of their being able to be done concurrently, to some extent—how long would it be after the fire before the plant would be up to the production of the 15 tons per day?"

And your answer to that was: "Five to five and one half months." Do you remember that testimony? How long, in your opinion, would it have taken for Igoe Brothers to build up to the production of 35 tons per day? A. On the same basis of assumptions?

Q. Yes. A. Another two weeks afterwards.

Q. What part did this 15 tons per day play in the formulation of your opinion? A. What part did it play in the formulation of my opinion?

Q. Yes. A. It was a direct question, and the problem was how quick could the plant be put into operation, with that specific limitation of four months, and that was the answer.

Q. But you said it would take from five to five and one-half months to produce 15 tons, and another two weeks to get to the point where they could produce 35 tons per day. Now, why do you take into consideration the production of 15 tons? A. The question was asked.

Q. And what did you do in—well, how was this 15 tons arrived at? What does it mean? A. I do not know what was in the back of his mind, when he asked the question.

Q. You do not know what—about the 15 tons? A. I haven't the faintest idea.

Q. If you do not know what he meant when he asked you how long it would take to get the plant where it would produce 15 tons, why do you now tell us it would take two weeks longer to produce 35 tons? A. Because, with the distinct limitation of four months, mind you, four months there for the building, and all those

limitations—the plant can be built in lot quicker time than that—that limitation was put on my question, and to assume every adverse condition—the plant certainly ought to be up with all trouble, all original troubles, or starting troubles, if there be any, it certainly ought to be up to approximately half production in five and one half months, and in another two weeks for clearing up everything it would be in full production.

Q. Well, what would go into the making up this 15 tons? A. The production of wire and nails.

Q. Could we make everything we were making before the fire? A. I beg your pardon.

Q. Could they make— A. They could make everything they made the day their plant burned down.

Q. Could they do it in five and one-half months A. Do it quicker than that.

Q. Assuming, as preliminary to your estimate, that they take four months to erect the building. A. That is the limitation put on me, yes.

Q. And how long did Mr. Shoemaker estimate it would take to complete this building? A. My recollection of his testimony—I was not paying a great deal of attention—as a matter of fact, I was out.

Q. You did not hear him, did you? A. That was stipulated to me when that question was asked,—four months.

Q. You were not here to hear Mr. Shoemaker's testimony, were you? A. Yes. I was in here part of the time.

Q. You said you were not in. A. Let me clear that. I had two long distance telephone calls on my end of this game when Mr. Shoemaker was testifying. If you will read the record prior to that, you will find that Mr. Vanderbilt, I think, if I recall, said, "Take the fig-

ures most favorable to the assured, or four months."

Q. Did you hear Mr. Shoemaker's testimony as to how long it would take to erect the building? A. Did I hear him testify?

Q. Yes. A. Yes, as I told you, part of it. I saw his chart, I believe.

Q. How many days did he say it would take to complete the building? A. My recollection is four months.

Q. That is your recollection? A. Yes.

Q. And were you basing your calculation, when you said five to five and one-half months, or predicating that opinion on the basis that Mr. Shoemaker would complete the building in four months? A. Let me see if I get it straight, what you are trying to drive at.

Q. I will put it in another way. A. Please do.

Q. Now, if you say four months to complete the building, is it your opinion that the plant could be put in operation so as to produce 15 tons per day in five to five and one-half months—is that your opinion? A. I say that. That is not the limit, but using that assumption, yes.

Q. Why do you say from five to five and one-half months? Why isn't it five months or five and one-half months, one or the other? A. That cannot be definitely stated, and any man that would come in and make a flat statement, with the limitations imposed on him like that, prior to his answer,—how could he make a definite statement. There are also overlapping statements, hypothetical points in that about tooling up, that have not been cleared up in this hearing. That is tied into that, and other concurrent efforts, in there. But I do answer, to clear the matter up, within five and one-half months, under any of those conditions. That brings them up to half production, maybe full production,—without question.

Q. Would you say that you put your estimate at five and one-half months? A. Yes.

Q. You will stick to five and one-half months? A. Yes.

Q. Suppose I tell you that Mr. Shoemaker said four months and seventeen days, that would, of course, add another month onto your estimate, wouldn't it? A. No.

Q. You are predicating your opinion on the fact that it would take only four months to erect the building, to get your five and one-half months; is that right? A. I do not want to be technical at all, and I ask your help in the matter, but as I understood your previous question, you asked if the plant could be put up in full operation—15 ton operation in five and one-half months and I said, "Yes, it could." There were no strings tied to the question when you put it to me. You are tying strings to it.

Q. I asked you if that was the estimate, five and one-half months, that you would stand pat on. A. Yes. I understand there were no strings tied to that. That is my estimate of how long it would take to put the plant up and put it in operation. Is that right?

Q. Didn't you tell me before that you predicated the statement on Mr. Shoemaker's testimony that it would take four months to complete the building, and you would take five and one-half months to put the plant in operation. A. I said that it could be done in from five to five and one-half months.

Q. Then you later said you would stand on five and one-half months. A. Absolutely; without doubt, it could be done quicker.

Q. Were you predicating your opinion on the fact that it would take four months to erect the building, as

Mr. Shoemaker testified? A. Not in this problem, at all. I know very well that the building can be built in quicker time.

Q. I did not ask you how long it would take to build the building. I understand that you are not qualified— A. I am not qualified here as an expert, but we have built a great many buildings, a great many plants.

MR. GILHOOLY:—I move to have that part stricken out.

THE MASTER:—Strike it out.

Q. Wouldn't you add to the total estimate of the length of time to put the building in operation so it could produce 15 tons, if Mr. Shoemaker's estimate was four months and seventeen days? Would that increase your period of time; can you answer yes or no? A. No. I would just answer "No," because you have involved things so. It does not make good sense. Maybe it is my fault. I am not clear as to the drift of all this.

Q. Assuming as a fact, that we accept Mr. Shoemaker's figure as to the length of time it would take to reconstruct the plant, at four months and seventeen days, following Mr. Vanderbilt's question, taking into consideration what overlappings there may be in those two things by reason of their being able to be done concurrently, to some extent—how long would it be after the fire before the plant would be up to the production of 15 tons per day. What is your answer to that? A. It is not over five and one-half months.

Q. Seventeen days more to build the plant would not alter your opinion. A. Not particularly. I have allowed plenty of slack to take all that up.

Q. So your five and one-half months originally contemplated a slack of seventeen days A. Any estimate. That is a very nominal allowance for contingencies.

Q. Mr. Shoemaker did not figure on electricity, painting, or plumbing. Would you allow any additional time for that? A. Mr.—

Q. (interrupting) Would you? A. Now, I must ask a question first. I can't answer the question first unless you allow me to ask, in part of it, what you mean.

Q. Can you answer the question? A. How could the plant produce anything if there was not any electricity in for light or power. Do you mean electricity for light or power?

Q. How much more time would it take to complete this building if you had to take out time for installing electricity, painting, and plumbing—how much time do you add to your five and one-half months, if that had to be done. That is a clear question. A. It may be clear legally, Mr. Gilhooly, but to an engineer—I don't understand what you are talking about. I want to answer it and shorten this thing up. If you will put it clearly, I will be glad to do what I can.

Q. You cannot answer that question? A. No. I cannot answer that question. When you say you would take out, I do not understand what you mean by "time taken out."

Q. I am not asking you about time taken out, but about time to be added. A. You said time to be taken out. That is your own verbiage.

Q. Assuming Mr. Shoemaker testified it would take four months and seventeen days to erect the building, and he did not take into consideration in making that estimate any time for the installation of electricity, plumbing, and painting, I am asking you now if those

elements had to be taken into consideration, would your estimate of five and one-half months have to be changed to a period longer than that, to get this plant up to production of 15 tons per day? A. Of course, I would have to add to the length of time, if there was no power in the plant to run the machines. That is a simple question. You could not produce anything if you did not have electricity.

Q. That would have to be added to the five and one-half months, wouldn't it? A. You could not produce anything at all if you had not power to run it.

Q. That is a very simple question, isn't it? A. Yes.

Q. How long would it take to install the electricity in that plant, in your opinion, so that you could supply every machine in the plant with power and light? A. To install the electrical work in that building—hold that just a minute, please. I was going a little too fast.

Q. I will save you time on the electrical work. Will you turn to page: (reading) "Q. Will you turn to page 8 and 9 dealing with the electrical work?" A. Yes, sir.

"Q. And tell us whether or not in your judgment the Fletcher-Thompson report correctly states the man days for the electrical work. A. No, sir. That is over-estimated by approximately 50 days.

"Q. In your judgment, how long would it take to do the work, in man days A. 146½ man days is my detail on that."

Does that refresh your recollection? A. Yes, but you have not gone far enough with it yet. Do you know what Fletcher-Thompson's electrical estimate consists of? It consists of wiring direct power panel, and other things that have nothing to do—

Q. (interrupting) What did you have in mind, in your testimony, when you said that it was over-estimated? A. I have estimated exactly the same thing that Fletcher-Thompson have estimated and I have computed that at 146½ days.

Q. What did that cover? A. Now you are getting down to brass tacks. That covers electric light wiring, that covers electric power wiring, that covers two horse motors, installation of motors, which are machines and not electricity, which Mr. Shoemaker referred to. That covered a secondary switch board, and it covered a motor circuit, installing motor, back-set to the panel, motor charge set, A. C. set, motor circuit, three horse power, motors, three horse power motors, another 50, another 100, another 10, another motor generator set, which is equipment and not electrical wiring.

Q. How long would it take to install all the electrical equipment? A. That is just what I started to explain when you said that you would refresh my recollection. I want to take out the electrical machinery from this estimate and find out what was the wiring and equipment referred to, or which you referred to.

Q. Let me ask you this question: You have 146 man days to install the electrical work. That includes light and power to the machinery and installation of the motors. I ask you if the installation of these motors is computed by you in the period you allow between the time the building was completed and the time it was in full production. A. Will you repeat that question?

(Question repeated by the reporter).

THE WITNESS:—It is too deep for me, but if I can simplify—help any, I can say that I assumed the in-

stallation of the motors just the same way as the nail machines, wire drawing benches, steam engines, equipment—it was the same general time.

Q. Then, I take it, what you are going to tell me now is the length of time it would take to install the wiring for light, power and transmission, including your high-tension service, but excluding your motors. Now, how long would that take? A. I have got to take these figures out of here. It would take a little while. I can take them—

Q. Can you— A. (interrupting) No. I can't do it any other way.

Q. You can't do it any other way? A. No. High tension, 24 volts—we have all the details here.

Q. Would that be put in by a contractor? A. The Public Service Company.

Q. Did you ascertain how long the Public Service would require to put that in, when you made your computation? A. How long the Public Service would take to furnish those transformers?

Q. And your high tension p— A. I did not especially apply on this one, but I know how long.

Q. How long? A. They would have it in in ten days to two weeks, for you, plenty of them.

Q. That, of course, is a guess. A. Not a guess. I know the Public Service, and we are in this engineering business, and I know that I could get this done in ten days.

Q. Your building would be practically completed before it would be necessary to have it in. A. No, sir. It goes in a little building outside of Building 1. It has nothing to do with the nail machinery and the machinery shop. It is a little brick building. I don't recall whether it was destroyed or not.

Q. Never mind. Can you tell me how long it would take for the electricity? A. I can, if you want me to sit here and make the computation. I won't guess at it.

Q. You have never made the computation before? A. I have made the total computation.

Q. You have not made this computation? A. Separating one from the other?

Q. Yes. A. No.

Q. Then, can you tell me, knowing that Mr. Shoemaker had not included the electricity, painting, and heating, why you undertook to make an estimate of the length of time it would take to get this plant to 15 ton production? A. I can make an estimate without any of that preliminary stuff there, without any of the tails to that kite.

Q. And is that what you were doing in this case? A. No. I followed the question. But you are losing sight entirely of all those concurrent efforts and work in this re-construction period.

Q. I am not losing sight of anything, Mr. McCrossen. Do you know how long it would take to put the plumbing and heating in? A. That is a building item.

Q. Something that you know nothing about? A. I have not computed it, but I can in a very short time.

Q. You are not an expert in building? A. I am not qualified as an expert in building.

Q. If you gave an estimate of the length of time, it would be purely a guess, wouldn't it? A. Mr. Gilhooly, engineers have a singular habit of doing things in construction and equipment without very much regard to the rules of evidence.

Q. I appreciate that, Mr. McCrossen. So have alienists. But I am asking you how you can base your opin-

ion without having knowledge of those facts. I am going to ask you now if you were not merely guessing. A. I was not merely guessing. I was estimating based on my many years' experience.

Q. And now, getting back to the 15 ton production, what kind of tonnage would you be producing, what character of work would you be turning out? A. Turning out the production that was going through that plant the day of the fire.

Q. What was that? A. I haven't any idea.

Q. You haven't any idea of what we were producing, but you could re-produce the same thing; is that right? A. I could prepare that plant to reproduce the exact things that were being produced that day, in that period.

Q. But you do not know what they were. A. Of course, I know what they were in a general way, from the stock claim; wire drawing benches, and dies, equipment, and stuff we saw there in the fire, and the stock of material there; wire—

Q. (interrupting) But you do know what they were producing. A. They were producing wire and nails.

Q. What would you produce in the 15 tons you spoke about? A. The tonnage element is one of capacity, purely capacity, and it was put to me in terms of capacity, not in terms of commodity, or dollars and cents.

Q. You mean 15 tons of common wire. A. 15 tons—or approximately 50% capacity of what that plant was producing, if that plant could produce 35 tons per day, in the period of 5½ months, you could be producing 50%, in my honest opinion, and could produce better than that, without the restrictions put in.

Q. You do not know what production— A. (interrupting) I know they were producing wire and nails and had some rivets.

Q. Do you know what percentage was common nails and what percentage was specialized nails? A. I could not answer that.

Q. You do not know that? A. No, I do not know it.

Q. And you would want to know it before you could recall how long— A. (interrupting) I would give a bonus and penalty contract to put it back in that time.

Q. Wouldn't you want to know that? A. No, certainly not. What difference does it make? The question is as to the loss of equipment and facilities as they were the day of the fire.

Q. From which, it is immaterial to know what they produced, and they could get into full production at the same time they could get into partial production, in your opinion. A. That means, as I understand it, that you are conceding—this statement in the question asked me and the question that I am answering is based on the factory capacity, not the commodity.

Q. I am basing it on the commodity. That is what they produced. A. They produced wire and nails, yes.

Q. You, then, I take it—can you answer my question, if I tell you that I am interested in the commodity and not in the capacity? A. What was the question?

(Question repeated by reporter).

THE WITNESS:—I will make this answer: That that plant of Igoe Brothers—this is eliminating all of these restrictions and legal things I am not familiar with, tails to the kite, as I have expressed it—that that plant of Igoe Brothers could be restored with the same equipment that they had there, and in production, in five and one-half months.

Q. Then, in your opinion, you are not basing anything on the estimate given by Mr. Shoemaker; you are disregarding that entirely. A. I am disregarding it for the moment, to answer your question.

Q. When you answered Mr. Vanderbilt's question, you did not assume that period of time of Mr. Shoemaker's estimate in giving your estimate, did you; you disregarded it, didn't you? A. No; I did not. We will have to stop right now to clear that up.

Q. I thought you said just now, Mr. McCrossen, that you disregarded all of these other things, the tails of the kite, or something like that,—that you would reproduce that plant in five and one-half months. Now, I ask you if you did not, in answer to Mr. Vanderbilt's question, disregard Mr. Shoemaker's estimate entirely? A. No, sir.

Q. Did you take that into consideration? A. I answered the question as it was propounded to me, based on the time, which was four and one-half—four months, whatever the figure was. We won't confuse the records —four months, and with the other stipulations, which I do not recall for the minute, except taking out time for what they call tooling up, and the effect of concurrency of effort,—I believe that was the balance of the question. I read it and I answered it, about five to five and one-half months.

Q. But you did not disregard Mr. Shoemaker's estimate A. No.

Q. You took that into consideration. A. Yes, of course. I answered his question. I did what he asked me to do.

Q. Now, Mr. McCrossen, how many rooms have you got in your office in New York? A. How many rooms have I?

Q. Yes. A. Three on the 14th floor, and two on the 7th floor.

Q. Where was this computation made the night Mr. Blount testified to? A. Up on the 14th floor and on the 7th floor.

Q. Where you have three rooms? A. Three rooms on the seventeenth floor.

Q. Where did Mr. Dougherty make his computation? A. Mr. Blount was in, as I recall it now—I did not pay much attention to it—

Q. (interrupting) You mean, you did not pay much attention to Mr. Blount's testimony. A. I was not here for quite a part of it. I was not in the room. Mr. Blount worked in the stenographers' room and Mr. Dougherty worked—yes, that is it—over in the west room, the west-end of the room.

Q. Were they separate all the time while they were there in the office? A. No, of course not. We came down together, had our supper, running in and out and talking and discussing what this thing was all about, and the details, and I had these blanks written up so they could fill in their estimate. They went out and worked them up.

Q. They each went out and worked in separate rooms; is that right? A. Yes. They worked independently. I say separate—I do not know. I was running back and forth, in and out, running up and down.

Q. You started with them at four o'clock in the afternoon. Mr. Blount testified that he started to make his computation through dinner and up to two o'clock in the morning; is that right? A. He was in the building at that time, yes.

Q. You were there with them too, weren't you? A.

In and out. But, my God, we were swamped that night; nothing to do with this, but an entirely different matter.

Q. Each one consulted with you from time to time. A. As to what these things meant, and why things were marked "Not installed," and data of that sort.

Q. Yet each worked independently. A. They worked up independent estimates.

Q. And they made their estimates from the one proof of loss, didn't they? A. No.

Q. Did you have two proofs of loss? A. I had that proof of loss; then we had this data, and then, we have a list of everything—this was frequently used (indicating). We have all the quotations and drawings from the machines—from the manufacturers, where they are still in the business, as to what this machinery and equipment was, and everything. Then we had a catalog, and this stuff was laid out and the boys could come and get them and work it up. They worked up independent estimates.

Q. And they testified, in answer to a question propounded to them by Mr. Vanderbilt, that they went over this proof of loss in detail, made an examination of the equipment which Igoe Brothers had in the plant at the time of the fire, and made an estimate of how long it would take to re-install the material as set forth in this proof of loss. I ask you if that was a correct statement, from your observation on the night in question—did they do that? A. I don't think there could be any question about the fact that they worked hard on that thing.

Q. Did they refer to this document here also? A. Time and time again.

Q. Time and time again? A. Yes.

Q. Both of them? A. Both of them.

Q. And they referred to the one document? A. Certainly. We did not have but one.

Q. So, they were not working independently when they were both referring to that particular document, were they? A. Why do you frame a question like that? They did not have to look at it at the same time.

Q. They waited until one got away, and then looked at it. A. How could two men look on one page? One man could do it. You work independently. Let us get it straight.

Q. This was in the center of the room— A. (interrupting) Dougherey had it in his room and worked with it, and he would shift over to the catalog to get the weights, and would go to the descriptions to get some other stuff, and Mr. Blount would come and get it and work awhile.

Q. Then, when they referred to the catalog to get the weights, they were not relying on their knowledge of the machinery; they were using some outside evidence; is that right? A. A. Certainly not.

Q. You told me they would refer to the catalog for weights. What did you mean by that? A. Some specifications in this claim are not entirely clear. There are a great many in here entirely inadequate. In order for us to make up our report for the Insurance Companies—

Q. I am asking what they did. A. I am going to try to answer. When we had to give our report to the Insurance Companies, we had to get these catalogs and mark these things up, connected with this claim—

Q. (interrupting) I am asking you what Dougherty and Blount did in arriving at their estimate. Did they

refer, as you testified, to catalogs to get the weights? Did they, or did they not? A. Not necessarily. Of course, they did. Of course, they did; not for the purpose of getting weights, because they did not have the weights, but simply because a large portion of this claim is not clear at all. I told those men to make a thorough, careful, independent estimate and check, and look for anything they wanted. If they did not, they would be mighty poor mechanics and mighty poor engineers.

Q. Mr. McCrossen, was your statement inaccurate, then, when you said that they not only referred to this proof of loss but also to catalogs and letters you received from manufacturers? Is that statement inaccurate? A. No; of course, it was not inaccurate.

Q. So, they did refer to the catalogs and letters from manufacturers to ascertain the type of machinery is that correct? A. They certainly did not, and you have no right to draw that conclusion. They are engineers and you are not.

Q. What did they look at catalogs for? A. An engineer is supposed to check things. That is his job. An engineer is not supposed to take anybody's word for things.

Q. Mr. McCrossen, these men have testified that they were familiar with machinery. A. They are.

Q. As set worth in the proof of loss? A. They certainly are.

Q. If they were familiar with that type of machinery, why was it necessary for them to refer to catalogs and other data to get information about the machines? Can you tell me that? A. I certainly can, yes. If you will just hold on a minute, I will be glad to give it to you.

Q. I will be glad to get that explanation. A. The question before these men is: How long will it take to install a certain machine, and how many men. A machine will be listed in here, and I can sit here and take up your time and the Court's for the next six hours, and point out the machinery that will be listed; item No. 9, one rivet machine and one Waterbury cold header. When one of those men would come to this thing, he would say, "What the devil is a Waterbury cold header; what is the size of it, is it a single stroke or a double stroke, or a solid die, or an open die, or what?" That was the same question that was propounded to me when we made the claim up. Therefore, we went to the manufacturers and asked the manufacturers when they shipped that machine. We went to the greatest amount of trouble. I would tell these men that, and I would say, "If you want more details, I am busy. You can look in the files; they are indexed and cross-indexed as to the machine number."

Q. Then these men could not take this proof of loss and by reference to that alone make an estimate of the time it would take to install the machinery that was set forth there, with nothing else to guide them. A. I think they could, now we have marked it up in lead pencil. It is marked up; you can see yourself, where we worked that night and worked since.

Q. They had to have that additional information? A. No. They did not have to have it. I don't think there is a question but that those men could have hit within ten to fifteen of the amount, with nothing more than a description of the machine and when it was ordered.

Q. They were referring to you constantly? A. No. How could they refer to me constantly?

Q. Was that statement wrong when you said they came to you and said, "What kind of machine is this?" A. That was not, sir.

Q. That was not an accurate statement? A. How could they be constantly with me and working?

Q. You said they were working, and they would run to you from time to time, and you said, "There is the data; I have it indexed and cross-indexed." A. Well, the term "constantly," is, perhaps—

Q. Infrequent? A. No. It is not infrequent—perhaps, a slip of the tongue. They could not work if it was constantly. I should have said continuously.

Q. If it was so easy for them to make this calculation without reference to any other data, couldn't they have done it in the quiet of their hotel, as one of them testified he did? A. You could ask that question of those men, but I can't answer what other men can do. I know they are two darn good men, speaking as an engineer, of course.

Q. But you could not vouch for anything else? A. No, sir. I will have to back off from that.

Q. Can you tell me, since 1925, how much building you have actually done in Newark or in the vicinity of Newark? A. Since 1925?

Q. Yes. A. We have not come over here at all since 1925.

Q. You have not been in here? A. No. That is, when I say, "we," I mean McCrossen & Company taking a contract to do a job.

Q. Have you ever, since 1925, fully equipped a wire nail factory? A. No, sir.

Q. Or at any time before? A. No, sir.

Q. So, you can't tell, of your own personal knowledge, how long it would take, based on the work you supervised, to install a wire nail factory, can you? A. I have never supervised the construction of a wire and nail mill. I stated that to you some time ago.

Q. Can you tell me—did Mr. Blount leave your office at any time between the time he arrived there, which I think he said was four o'clock, and the time he left at two o'clock in the morning? A. I do not know.

Q. Was he there all the time you were in the office? A. I do not know. I do not know that.

Q. If you were there you could see? A. As a man, my work—the office is swarming with work. I have work going on in 19 different states, and this thing was just a side issue. I do not know whether he ran in and out, or down to the other floor, or whether he was in the other room, or not.

Q. Was he there on each occasion that you came into the office, that is what I am asking? A. I could not see through brick walls. He was not in my office.

Q. There were not brick walls in your office? A. We will call them gypsum walls, to conform—

Q. He was not in your room? Not in my room.

Q. You did not have the door closed? A. I did not have the door closed, no, but coming into my office, you can't see where the desks are in the other room unless you go into the doors of either office or both.

Q. Mr. McCrossen, can you refer to your fire loss appraisal, building 1, section d, under the heading "Timber work, replacement cost $154.20"? A. Yes, sir. Let us see what that is all about. That is the second floor stuff, I believe.

Q. Building "D",—that is first floor, isn't it? A. That is the second floor, that stuff is.

Q. The total amount claimed for replacement by Igoe Brothers is $154.20; is that right? A. The total claim cost of that is—yes, sir.

Q. That is for the stringers, is it, or isn't it? A. Let me see what it is for. We marked that timber work that and that was on the second floor, 1,088 feet, per thousand feet, carpenter labor putting up timber, $88. That was for single saw, joiner, grinding stone, grinding machine, tumbling barrel, block, barbed wire mill and—

Q. —That is what I am calling stringers. This is all stuff stored on the second floor, or, was it stored? To tell the truth—that is what I have been characterizing as stringers throughout my examination, isn't it? A. Yes, I suppose so. The question was whether it was all in storage.

Q. That is $154.20 on your appraisal? A. Yes.

Q. And it was $154.20 on the fire loss? A. Yes. We had to take the fire loss. It was absolutely destroyed.

Q. There is another one, and, then, I think I am through; building "e", have you got it? A. I think I can find it. We had that before, didn't we?

Q. We covered all but building "E". A. I don't see that here.

Q. You will find $498.50,—next to the last page on the schedule. A. Building "e", nail machine.

Q. Machine shop and nail department, section "e". A. Let me interrupt a minute because some of these claims are divided up into two. We had that. We were discussing that before. That is already in the testimony today. $498.50.

Q. $498.50? A. Yes. We have been over that.

Q. And that is the amount you set up in your schedule? A. Yes. All the stuff was burned up. What else could we do?

Q. That is timber for counter-shafting which I am referring to as stringers throughout? A. Yes. This is machine counter-shafing. It was not main line stuff, but counter-shafting stuff.

Q. That is stringers for this counter-shafting? A. For those counter-shafts—I suppose so.

Q. Mr. McCrossen, you said that you had to take the word of the assured. You had an itemized list of these machines, didn't you? A. Yes.

Q. And you were on the ground to see that the machines were there? A. Yes.

Q. And you found they were there? A. I certainly did not. I found a lot of them but a lot of them burned up; destroyed or lost.

Q. You found a number of those machines there? A. You are getting on soft ground there.

Q. I am not going on soft ground, because I haven't anything to shield. Your figure of $498.50 agrees with the assured on that item. A. We accepted the specifications in the plans.

Q. Then you accepted Igoe's statement that these stringers were there? A. Certainly we did. There can be no question about that. Why quibble over a statement of that sort?

Q. You accepted their statement that it would take that much labor and that much time to put it up? A. Either we had to or challenge the entire thing. So far as the specifications are concerned, or the length of time, or the method in which they are put in, we could not set up an estimate without—

Q. (interrupting) But I want to get this clear. You did accept the estimate of time, then, that Igoe figured it would take to install these stringers. A. No. We did not. We took that value and did not bother with them; did not give them a thought.

Q. Time went in to make up the figure of $498.50? A. No, it did not, so far as we are concerned.

Q. You accepted the $498.50? A. We accepted a 3541 board measure feet installed at $498, which was 20 or 30% higher than we would have estimated the same class of work, but we had no means of checking, and just passed it up.

Q. You accepted it, didn't you? A. Yes, of course we did. It is in the report. What is the use of arguing about that.

Q. Now, Mr. McCrossen, you said that these machines were burned up; is that right? A. I did not say these machines were burned up.

Q. You said you could not find them. A. I did not say that at all.

Q. You said some of them were not there. A. I did not say that either.

Q. They were there? A. Some of them were there.

Q. They were all there? A. What?

Q. What Igoe Brothers claimed? A. Every machine in this plane?

Q. Every machine on that list I referred to in Building "e". A. I think that there were some small machines we could not check out, but I am not certain of that. I will have to go back to the record. When I spoke before, I was talking about the entire claim, not this one.

Q. You said you had to take the word of the assured. I am asking you if you could not and did not make a check of all the items they claimed to be in the plant at the time of the fire? A. Mr. Gilhooly, the man does not breathe that can check burned up timber. What we are talking about here is checking up the quantity of timber.

Q. I am talking about machines. A. Well, that is getting on to another story.

Q. That is what I am talking about, machines. You said that you could not check up the machines. A. Don't confuse me.

Q. I am talking about machines. You could check, and you did check all the machines that Igoe Brothers claimed in the fire. A. I did not.

Q. You could have? A. If I had found them.

Q. You did? A. No. Not the small machines. We did not check up a lot of dies. They did not check up.

Q. I am talking about machines. A. Of course, if it was not completely burned, we could check the partially destroyed carcass.

Q. That is from your own knowledge, because you would not have to have an extensive technical knowledge to know it would require so much stringers? A. You can take and arrange machinery in 40 different ways. You can use short stringers, long stringers, and you can set it on the ground, hang it by brackets, and do a thousand things with it, sir.

MR. GILHOOLY:—I do not want to go any further, but I find there are a number of questions which I want to go into.

(Hearing adjourned to Monday, July 29th, 1929, at 10 o'clock A. M.)

Newark, N. J., Monday, July 29, 1929.

10.00 o'clock a. m.

(Met pursuant to adjournment.)

Same appearances.

EDWARD F. McCROSSEN, resumed the stand.

CROSS EXAMINATION (Resumed)

By MR. GILHOOLY:

Q. Mr. McCrossen, how much time did you allot for the collection of machinists after the building was complete, for the purpose of installing the machinery, collecting your gang? A. I allowed no time between completion of the building and the collection of the gang for collection of machinists.

Q. Did you expect you would be able to go right out in the market and get all the machinists that you wanted at the particular time that you needed them? A. Yes.

Q. You would not hold any men in readiness awaiting to go to work to install this machinery, would you? A. No, sir.

Q. Do you know whether or not such men were available from your own experience? A. Yes, sir.

Q. In Newark? A. Yes, sir.

Q. Can you tell us the particular plants in which you were interested where you could have gotten those men immediately? A. Do I know them?

Q. Can you tell of the erection of any plant, the installation of any machinery where you could have gone right out and collected a gang of competent men to install the machinery? A. We are the engineers, sir—I am the engineer for the Medart Company in St. Louis; that concern manufactures shafting, pulleys, hangers, gears and all equipment of that sort. In the course of my work for them, it has been necessary for me to go all through this district in these different plants. At that time I would visit numbers of plants; there would be engineering problems in all of them, a great many of which I can enumerate. I know that there were plenty of machinists to be had at that time.

Q. But you don't know the name of any particular plant where they were installing machinery on a large scale of this kind, do you? A. At that particular time?

Q. Yes. A. I don't recall it, four years ago.

Q. Wouldn't it be more practical to have a gang collected ready to go to work on the installation of this machinery as soon as you were ready to do the work? A. There is no other work to be done.

Q. That takes some little time? A. Very little, you do it by stages.

Q. You do it by stages? A. Yes, sir.

Q. Now, you mean to say you would have a few men working at the outset, and then you would supplement your gang with additional men? A. As requirements needed, yes, sir.

Q. Well, did you take that into consideration in saying six to eight weeks? A. Yes, sir.

Q. So you start up with a small gang at first and then increase your gang? A. Not necessarily a small gang, no, sir.

Q. Then I take it, you could go right out and pick up your men overnight, is that right? A. I think that is not exactly correct, overnight isn't the proper word we use.

Q. Well, would you allow yourself a week to collect a gang of competent men? A. I would put men to work on the pillars, I would put men to work on every other job as needed them.

Q. As quickly as you could obtain the men? A. Naturally.

Q. Now, how about men to manufacture the wire and pull the wire for the wire drawing, you say— A. That is, the operation of the plant?

Q. Yes. A. I am not interested in the operation of the plant. I am restoring the plant as of the date of the fire.

Q. Well, you don't know where you could get such men, do you, of your own personal knowledge? A. Why, of course, you could get them in the centers where they were manufacturing wire.

Q. You think you can, that is your opinion? A. Other plants do, it must be a fact.

Q. You could get a gang to put this mill in full operation in how long a time? A. Mr. Gilhooly, I made no estimates as to furnishing an operating staff for that plant.

Q. You said you could get that plant into full opera-

tion so that they could manufacture 15 tons in five and a half months after the fire occurred? A. Exactly.

Q. Then you did not take into consideration in determining that period the collection of men who could manufacture wire nails and who could draw wire?

MR. VANDERBILT:—I object to that question on the ground that it is not within the scope of the contract for the defendant to allow time within which the plaintiff might assemble his workmen. It is the sole duty of the defendant on the contract to make idemnity for restoring the physical facilities and not for the obtaining of such workmen, superintendents, and so forth, as plaintiff may require.

THE COURT:—All right. Without deciding the point, I will permit the testimony, and note an objection at this time. I have not seen any of these contracts yet, and I don't want to interrupt the examination.

A. No.

Q. And then, when you stated that you could have the plant producing 15 tons per day within the time allotted by you, no consideration was given that item, was it? A. No consideration was given to furnishing an operating staff, no sir.

Q. Then you said in two weeks longer, you could have the plant on full capacity? A. Exactly.

Q. And you assumed then as one of the facts that you would have men available to start this work as soon as the equipment was in, didn't you? A. Yes, sir.

Q. Mr. McCrossen, you were present when Mr. Reilley testified on Friday, were you not? A. Part of the time yes, Mr. Gilhooly.

Q. And you had a conference with Mr. Reilley before he testified, is that right? A. Yes, sir.

Q. And did you tell Mr. Reilley to state to the Master that the equipment in Igoe Brothers plant was obsolete? Did you tell him to say that? A. Did I instruct him to say that?

Q. Yes. A. No, I certainly did not.

Q. Never said anything of that character? A. We discussed the character of the equipment, but I did not give him any instructions to say it was obsolete.

Q. Did you not prepare a series of questions and answers and hand them to Mr. Reilley before he testified here? A. Yes, in our office.

Q. I show you seven sheets of papers containing questions and answers, and I am going to ask you to examine them, I will ask you if they were the questions and answers prepared by you and handed to Mr. Reilley? A. Both of us jointly. Mr. Reilley and I prepared those together.

Q. You handed that to Mr. Reilley after you had them typed? A. I don't know whether I handed them to him or whether he took them. I don't recall, but we jointly prepared those.

Q. They were prepared in your office? A. Exactly.

MR. GILHOOLY:—I would like to offer the papers for identification.

(Received and marked Exhibit C-18 for identification.)

Q. Mr. McCrossen, you testified on Friday that you referred to Miller & Maltbie's list as to the fire loss on the machinery, and you assumed that all the things stated

in there were actually in the fire, or words to that effect. You remember that? A. I don't remember making that statement, but it is the claim that came to us, and we assumed that it was in there.

Q. Now, you checked, as a matter of fact, all the items on that inventory? A. No, sir.

Q. All of the machines? A. All of the big machinery that we could identify we checked back. I use the term "check," I mean that we recognized without question that particular machine as described in the claim.

Q. And you actually saw it on the site, didn't you? A. Those that we did check, yes.

Q. And you checked practically the entire list? A. Not the entire list; as I said in my last testimony, I—

Q. I am talking about the machines. A. I checked the large machines that I could identify; some were so badly destroyed that they could not be recognized; a great many, innumerable numbers of the small ones could not be identified.

Q. But you asked for information as to those, didn't you? A. Naturally.

Q. And your information was forthcoming with respect to such machines as you could not completely identify; isn't that correct? A. We got information from Mr. Woodward and Mr. Huber and Mr. Igoe of whatever we could.

Q. Were any of the nail machines so badly damaged that you could not see them? A. That I cannot recall now without going back into the old files. I think we saw them all, but I am not certain.

Q. I don't know whether I asked you, Mr. McCrossen, when you completed this check-up of the items

mentioned in the fire loss. Do you remember when? A. When did we do it?

Q. Yes, when did you complete it? A. When the completion was I don't recall, but our report was dated September 12, 1925.

Q. That is all, Mr. McCrossen.

REDIRECT EXAMINATION

By MR. VANDERBILT:

Q. Mr. McCrossen, with reference to these items of machinery and also stock which were referred to in your cross examination, in some instances, I take it, that you could identify the machinery and stock, and in certain instances you could not? A. Yes, sir.

Q. And in those instances, where you could not identify the machinery or stock you assumed them actually to have been there as indicated in the several inventories filed by Igoe Brothers? A. Yes, sir.

Q. In other words, you assumed the correctness of those inventories? A. Yes, sir.

Q. Were there many items of these inventories which were incapable of physical identification? A. Yes, sir, a great many.

Q. On your cross examination, as I recall it, you were asked if you could tell what was being produced in the plant at the time of the fire, and I believe you replied that you could not except that there was being produced wire and nail products. Is there any evidence from which you can tell in any more detail what was being produced at the time of the fire or identify it in further detail? A.

The only thing offering any accurate information along that line is the stock claim. The stock claim showed that they were making common nails in the nail room, sixpenny and eightpenny nails and fourpenny nails.

MR. GILHOOLY:—I object to any testimony from the stock claim. Is that in?

MR. VANDERBILT:—The stock claim is offered in evidence, I believe.

Q. Is there any stock claim in the nail mill or specialties? A. No, sir.

Q. Now, Mr. McCrossen, we had a good deal of cross-examination last Friday on the subject of stringers. What are stringers? A. Stringers are pieces of wood 2 by 4, 4 by 6, 6 by 8, or any size you want, any length you want.

Q. What is a stringer used for? A. Where stringers are necessary, they are used for mounting motors, power, wire, pipe, blowers, ventilating system, trolleys, joists—I mean hangers, transmission—innumerable things around the mill.

Q. Are they part of the machinery or part of the building? A. Part of the building.

Q. Does all transmission have stringers? A. No, sir, it does not. I have seen transmission erected on concrete, brick, on the floor, under the floor, on posts, on walls, on almost every kind of a foundation you can think of, have even seen it mounted on hard, acid-resisting rubber.

Q. In other words, all of these various kinds of transmission can be erected without stringers that you have

been telling us about? A. That I have just been telling you about, yes, sir, that is correct.

Q. Then stringers are not a peculiar property used incident to transmission? A. No, sir, they are not.

Q. Were stringers used for anything in the Igoe Brothers plant other than transmission? A. Yes, sir, in building D, about which there was a lot of talk Friday, item 44 reads: "Two stringers for wire block water ton capacity I-beam operated overhead traveling cranes 16 feet span." Goes on down with the balance of the description, and then you come to an item of 4 by 6 stringers 150 long. Underneath that is carpenter labor for erecting and controlling. There is also an item in building D-1 100 feet of what is called in the claim London single track carrier 105 feet, adjustable hangers, six steps, merchandise carrier, two steps, one-ton bucket stringers, 6 by 2 by 100 feet. I haven't had an opportunity to go through the claim carefully to see if there are any more, but those are two that are there, and undoubtedly in a plant of that size stringers were used in a great many more instances.

Q. Are stringers put up by machinists or by carpenters? A. By carpenters. They are not put up by the machinists.

Q. Mr. McCrossen, in the original claim filed by Igoe Brothers, were the pieces of lumber and the stringers talked about so much last Friday, listed as transmission equipment? A. No, sir, they were listed, I think, in practically every instance in that part of the claim under the particular section in the neighborhood of benches, racks and miscellaneous small equipment.

Q. Does the claim set forth that they were to be

erected by machinists and mechanics or carpenters? A. Wherever the labor is described, it is described as carpenter labor.

Q. Would carpenters put in a shaft, cross-couplings, drop hangers, and all the transmission machinery? A. Certainly not, no, sir; they don't know anything about that kind of stuff.

Q. Who would that be put in by? A. By the machinist.

Q. I believe you stated in your direct examination that you were an engineer for a transmission manufacturing concern. What was that company? A. Medart Company, St. Louis.

Q. And what are some of the firms that you have done business with in the course of your work as engineer for the Medart Company? A. It would take quite a while to enumerate that but I can name some of the conspicuous ones. New Jersey Zinc Company, we furnished the equipment for all their plants all over the world, have had their annual contract for a number of years. The Erie Railroad, the City of New York, the Robbins Dry Dock, and the—let me look at my list, I made a memorandum coming down this morning of a few that I happened to think of, thinking that it might come up, to refresh my memory on it, because I don't remember. The Atlas Portland Cement Company, General Development Company, New Jersey Zinc; Sintering Engineering Company, Johns Mansville Company, American Smelting & Refining, State of New York, New York Central Railroad, Erie Railroad, Pickatinny Arsenal, F. L. Smith, United Fruit, Welsh-Fairchild, J. G. White Engineering Company, Foundation Company, S. K. F. Bearing Com-

pany, and we recently completed the entire installation of the Agfa-Ansco plant in Binghamton. There are a great many other national and international concerns. I cannot remember them all without going over to the office. I haven't been there since Friday.

Q. Mr. McCrossin, when you were getting up the data for the equipment involved in the report, did Igoe Borthers give you this letter with schedule attached from the Vaughn Machinery Company, dated August 19, 1925? A. Yes, sir.

MR. VANDERBILT:—I offer the letter in evidence.

(Received in evidence and marked Exhibit D-17.)

Q. Is there anything complicated about the installation of any of this transmission or power or nail or wire drawing or riveting machinery? A. No, sir, ordinary engineering construction.

Q. Is it the kind of machinery that ordinary skilled machinists and mechanics put up? A. Yes, sir.

Q. And in an industrial center like Newark, is such labor available? A. The answer is all around you, sir. It is one of the greatest industrial centers in the country, and I have never known of any delay in the erection of all these vast industries here because of the scarcity of machinists.

Q. Can you tell us whether or not the Newark and New York territory is a great wire center? A. This territory?

Q. Yes. A. I would not call it a great wire center, but it is rated as a wire center. This Eastern territory

would be quite a way to describe it as a wire center, Massachusetts and Connecticut, all down through here.

Q. That is all.

RECROSS EXAMINATION

By MR. GILHOOLY:

Q. Mr. McCrossen, you say that Newark is considered to be a wire center? A. I said generally spoken of as a wire center.

Q. By that you mean that it is a wire center, don't you when you say generally? A. You can get anything that you want in the way of wire that you want here.

Q. That is because of the Igoe Brothers plant? A. I wouldn't say that.

Q. Can you name any other wire plants in Newark? A. I cannot offhand name any other wire plants similar to Mr. Igoe's.

Q. Can you name any other plants within a radius of five miles of Mr. Igoe? A. No, sir, not within five miles.

Q. Fifty miles? A. Well, not of the type of Mr. Igoe's plant, no, sir.

Q. Well, of any type of nail manufacturing and wire drawing? A. Not within fifty miles.

Q. So if Mr. Igoe was looking for men to put in his plant, he would have to go to other centers and round them up? A. That is correct.

Q. What would he do, break in a new gang? A. He had his own gang that he had when the plant burned down.

Q. How about the skilled men? A. I haven't any interest speaking technically in the operation of the plant. The job before me was to compute the time to restore the manufacturing facilities.

Q. But you said you could put it in operation in five and a half months. You did not mean what you said then? A. Exactly, sir. It could be restored to operation, to profit-making facilities. The equipment enumerated in this claim could be restored and put in place and in operation in that time.

Q. And that production of 15 tons, of course, is based on having labor there to perform the work? A. That production of 15 tons was explained last time, sir, as in terms of capacity of equipment.

Q. What you mean, then, I take it, is that you would have the machinery and equipment there ready to operate and nothing more; is that right? A. Ready to operate and that it could operate and would operate.

Q. Then you did not mean what you said that within two weeks additional, you could have the plant in full operation? A. In full capacity, yes, sir, up to full capacity. Now, you must please understand that I am differentiating between production and capacity, because I am approaching this from the engineering point of view.

Q. And as I understand, you know nothing about the production end of it? A. I haven't said that, sir.

Q. Well, that is a fact, isn't it? A. I wouldn't say that I know nothing about it, no.

Q. Very little? A. I won't even say that.

Q. You never operated a wire mill? A. No, sir, I never operated it.

Q. And you don't have any technical, skilled knowl-

edge on the operation of such a plant? A. I cannot state first-hand that I have operated a plant.

Q. Now, Mr. Crossen, you say these stringers would be put up by carpenters, is that correct? A. Yes. sir.

Q. And I take it that in those cases where you found the transmission fastened to concrete and fastened to iron, you would then have that done by carpenters, too, is that correct? A. No, sir.

Q. Isn't the cost of carpenter work less expensive than that of millwrights? A. This kind of work, all the stringers are generally put up by the hammer and saw men round the plant who are carpenters, and they are, of course, answering your question, less expensive than the machinists.

Q. Now, if you were to get skilled carpenters they would be more expensive than millwrights, wouldn't they? A. No.

Q. Isn't that a fact? A. It is a fact.

Q. Millwrights are more expensive that first class carpenters? A. I won't use the word "millwright," I use the word "machinist."

Q. Well, I am using the word "millwright." Are millwrights less expensive than first class carpenters, if you know? A. This work is put up by machinists. We are not giving any consideration to millwrights in the term; we consider millwright and machinist as synonymous terms in this territory.

Q. You are not making any differentiation between millwright and machinist? A. Not for this job, you use them indiscriminately.

Q. Is there any difference in the scale of wages paid to a millwright and to a machinist? A. Not here absolutely.

Q. You are sure that was so in 1925? A. Yes, sir.

Q. How about carpenters? What were carpenters being paid in 1925? A. The carpenter rate in 1925, as I recall it, I haven't looked it up and cannot answer right offhand now, but as I recall the carpenter rate paid in 1925, union carpenter rate, was $9 a day, but I am not certain of that without looking it up, or $8. I don't know frankly what it was in 1925, I don't recall it.

Q. What was the machinist rate? A. The machinist rate was $10 for a machinist and $8 for a helper in 1925.

Q. How about millwrights? A. Millwrights and machinists are the same thing.

Q. Can a millwright do all the work that a machinist can do? A. Yes, sir.

Q. Can do everything that a machinist can do? A. Yes, sir, that is millwrights, I am speaking of as a Newark millwright, what is known in Union Hall down here, what they consider a millwright and a machinist.

Q. Can you point out to me the stock list in that proof? A. No, sir, that is not the stock list; that is machinery and equipment.

Q. Where was the stock list? A. It was in evidence here, you all of you handled it; I don't know where it is. It is a little thin paper with Miller & Maltbie's stamp on the back of it. I haven't got it.

Q. You testified in answer to a question put to you by Mr. Vanderbilt that Igoe Brothers at the time of the fire were manufacturing common wire, is that right? A. Common nails in building E.

Q. You did not say building E in your re-direct. Do you want to modify that to cover only building E? A.

Surely, that is the answer to my question, if you will read the answer.

MR. VANDERBILT:—I think he did say that, Mr. Gilhooly.

Q. Were they manufacturing any other nails that were special? A. I told you I did not know all that they were manufacturing in the plant, as I was not there the day of the fire.

Q. Well, did you say that there were not specialties being manufactured at that time? A. I did not say that.

Q. Then you don't mean to create that inference? A. I said in Building E, the nail room, that what we took off the claim showed that they were making fourpenny, sixpenny and eightpenny common nails, and nothing else.

Q. Did you examine the proofs, Mr. McCrossen, to ascertain over the weekend whether or not we were manufacturing any special wire? A. No.

Q. Would you recognize in the proof of claim a special wire, if it had been called to your attention from your own personal knowledge of wire? A. Would I recognize—

Q. Would you recognize the special wire? A. Why, I don't believe I would.

Q. You are not competent to testify from your own knowledge as to that? A. I don't testify on the stock, no, sir; that has been testified about.

Q. Now, how can you tell common nails from special nails? What is there to distinguish them? A. A common fourpenny nail and a common sixpenny and a com-

mon eightpenny nail are common nails; special nails you had a lot of them in a box, extra heads or peculiarities or varieties that you can make of ordinary nails.

Q. Now, what is there in the proof of claim that would lead one to believe that it was a common nail and not a special nail? A. They were marked sixpenny nails; they would have been marked special, if they were special.

Q. That is the only way that you can distinguish? A. Absolutely. If it is marked 15 boxes of fourpenny finishing wire nails, 77-16 nails.

Q. Can you point to anything in that proof of claim where it is stated that the nails are common nails? A. No, of course not.

Q. Mr. Vanderbilt asked you if there was any claim for specialties, and you answered, as I recall, no; is that correct? A. He didn't ask me that question.

Q. If that question were asked to you, what would your answer be? A. What would you mean by specialties?

Q. No, I say, would you tell us whether or not Igoe Brothers did file a claim for special wire and special nails? A. Did they file a claim for special wire and special nails? I don't know what they filed a claim for.

Q. Then if I am erroneous in understanding that there was no claim for specialties, that is not your answer, is it? A. My answer is that the nails in the claim as I took them off in this memorandum shows that they were making in the nail mill common nails only, or inferentially that if they were making specialties, it would be listed in the claim.

Q. But now you tell me you cannot tell the difference

between a special nail and a common nail? A. I did not say that, sir.

Q. Well, can you? A. Of course you can.

Q. From this proof of claim? A. Oh, the proof of claim, the nails listed as sixpenny, fourpenny and eightpenny finishing nails are what is known in the engineering world as common nails.

Q. Well, will you look through this proof of claim and tell me whether or not Igoe Brothers were manufacturing nails which were of a special character, special type? A. As reflected in here?

Q. Yes. A. In other words, nails designated in here?

Q. No, nails designated anyway at all, nails which were special. A. I don't think that is necessary, because I have here already—

Q. Can you answer my question? A. I have a list of all of the nails that are in that claim, and those nails—

Q. (The pending question was read by the Reporter.)

At the date of their fire, according to proof submitted? A. When I say manufacturing, please get me clearly. I mean that in the nail room, the nails that were being made that day as shown in the proof, because they are marked in boxes not in kegs, indicating that these boxes were the boxes around the machines—the boxes held fourpenny finishing wire nails, sixpenny finishing wire nails and eightpenny wire nails. Those, I take it, in ordinary engineering vernacular to be common nails; other than that there were no nails listed as being manufactured in building E, at the time the claim was put in.

Q. How about the other building? A. This is the only building. This is where the nails are.

Q. Can you answer my question and tell me whether Igoe Brothers filed proof of claim for nails which were of a special character anywhere in the building? A. Ah, that is a different story.

Q. My question can be answered yes or no. A. Yes, they did.

Q. How about wire? Was there a claim filed for any wire which was a special type of wire? A. I haven't checked that up.

Q. Then you will not claim that there was no claim for specialties filed by Igoe Brothers, will you? A. Not as a part of the stock loss, no.

Q. Now, you have the proof before you. Will you tell us whether they did file a claim for special type of wire, by examining the proof? A. There is quite a variety of wire here, tin wire, special annealed wire. Of course, the usual quantity of high carbon and low carbon spring wire and wire that might be cast and probably is cast as special wire, but whether he made it or bought it I don't know.

Q. But it is in the proof, isn't it, as special wire? A. It is not marked as special wire, but it would indicate to be wire out of the ordinary wire that I would call special wire, yes.

Q. And you determined that, not because it is marked special wire, but because of the peculiar designation of the wire? A. Peculiar type, flat wires and tin wires, and wires of that description.

Q. And there is a considerable amount of it, is there not, in that proof? A. It would take me a little while to properly correlate it all, but the preponderance—

Q. I will reframe my question and say there is no

small amount? A. I cannot answer it until we go and tabulate the thing all the way through. I am only looking at the quantities and the arithmetic I have not done yet, but the ordinary low carbon and high carbon wires seem to preponderate.

Q. Mr. McCrossen, over the week end, you did examine the proof Igoe Brothers filed, to see whether or not they manufactured common nails? A. No, as a matter of fact, I did not. As a matter of fact last night I was looking it over, and I made this memorandum just as a matter of interest on the nails, to see what was going on in that plant, to try and answer your question that you put to me the other day, as to what they were making when they shut down.

Q. Then you did not mean to convey to the Master that we were manufacturing common nails or common wire exclusively? A. When?

Q. This morning. A. No, I mean at what date?

Q. At the time of the fire? A. I meant to create the inference that at the date of the fire the nail machines were running on copper nails.

Q. How do you know? These nails were in kegs. You don't know whether they were running machines or not.

MR. VANDERBILT:—They testified they were in boxes.

A. Those that are in kegs are in section A and section G.

Q. What does that indicate? A. In the warehouse, finished and packed.

Q. You don't know whether they were manufactured that day or not? A. No, I say it is perfectly obvious

they were in the warehouse and finished, but the nail machine room has in it a certain quantity of nails in the process of manufacture and those nails in the process of manufacture are fourpenny, sixpenny and eightpenny nails as shown by the claim.

Q. Now, Mr. McCrossen, from any information which you get from this proof or from any other source, would you be prepared to swear under oath that Igoe Brothers were not manufacturing as their output not less than 75 per cent of specialties? A. I lost track of the first part of it.

Q. (The pending question was read by the Reporter.)

A. Why, of course not, how can I tell.

Q. Then you don't— A. Certainly not.

Q. That is all.

REDIRECT EXAMINATION

By MR. VANDERBILT:

Q. I take it that there is no question that four and six and eightpenny nails are common nails? A. Not by that designation, no, sir.

Q. And these are the nails which are scheduled as being manufactured on the date of the fire in the machinery building? A. Yes, sir.

Q. And the only nails being made at that building? A. Yes, sir.

Q. And you know they were being manufactured in that building, because they are stated as being in boxes

as they drop from the machines, rather than in kegs which is the way they are placed when they are ready for sale to the trade? A. Yes.

MR. VANDERBILT—That is all.

JAMES J. HASTINGS, called and sworn on behalf of the defendant, testified as follows:

DIRECT EXAMINATION

By MR. VANDERBILT:

MR. VANDERBILT—I take it that you want me to go into my counter-claim next. I have finished with my defense.

THE MASTER—It does not make any difference to me.

MR. VANDERBILT—Unless they want to finish up their rebuttal on this.

THE MASTER—Do you wish to finish up your rebuttal, or is it satisfactory if Mr. Vanderbilt goes into his counter-claim now?

MR. GILHOOLY—Have you closed your case?

MR. VANDERBILT—I have finished my defense to your bill. The question now is whether I shall proceed on

my counter-claim before you put your rebuttal in on your main bill?

MR. GILHOOLY—I figured that Mr. Hastings was going to testify in the direct case, and for that reason—

THE MASTER—You prefer to wait?

MR. GILHOOLY—Yes.

MR. VANDERBILT—Well, it makes no difference to us.

Q. Mr. Hastings, by whom were you employed in connection with this case? A. General Adjustment Bureau.

Q. Did you prepare a report setting forth the net profit and fixed charges per day in connection with the fire at Igoe Brothers plant? A. Yes.

Q. What is the date of that report? A. December 27, 1926.

Q. Have you a copy of the report? A. Yes, sir.

Q. Is this the same report of which both Igoe Brothers and the umpire were each furnished a copy? A. Yes, sir.

(Received in evidence and marked Exhibit D-18).

Q. And did you prepare a supplementary report? A. Yes, sir.

Q. Of what date? A. May 24, 1927.

Q. And were both Igoe Brothers and the Umpire furnished with a copy of this report? A. Yes, sir.

Q. For what purpose was it prepared? A. In answer to the report of the assured's accountants, dated April 29, 1927.

Q. Have you a copy of this report? A. Yes.

(Received in evidence and marked Exhibit D-19.)

Q. Do you make any comparison of the assured's figures with your figures in either of these reports? A. Yes, on page 3 of the supplementary report, dated May 24, 1927, I show the net profits and fixed charges per day by departments as figured by the assured's accountants and myself.

Q. What do you mean by departments? A. Manufacturing department, jobbing department, reinforcing department.

Q. What were the net profits and fixed charges per day as prepared by you and the assured's accountants, respectively, with the difference between them? A.

	Assured's Accountants Figures	Our Findings	Difference
Net Profit per day			
Mfg. Dept.	289.91	153.88	136.03
Jobbing Dept.	91.33	92.33	1.00
Reinforcing Dept.	120.71	120.71	——
Fixed charges per day			
Mfg. Dept.	297.63	193.91	103.72
Jobbing Dept.	76.89	77.15	.26
Reinforcing Dept.	32.15	32.15	——

Q. Have your figures been prepared in accordance with the original arbitration agreement between Igoe Brothers and the insurance companies, dated June 21, 1926 and particularly with regard to paragraphs thereof as set forth on Page 2 of your report, dated December 27, 1926? A. Yes.

Q. Has the assured made any claim for loss of profits and fixed charges in the Jobbing Department and the

Reinforcing Department? A. No. The policy covers the manufacturing operations.

Q. Have you examined the award of the Umpire, Exhibit 14? A. Yes.

Q. What is the net profit loss shown in the Umpire's award? A. $60,290.

Q. How is that amount arrived at? A. Multiplying $301.45 net profit per day by 200 days.

Q. What is the amount of fixed charges loss as shown in the Umpire's award? A. $19,400.

Q. How is that amount arrived at? A. Multiplying $194 per day by 100 days.

Q. Referring to the net profits loss $60,290 as shown in the Umpire's report, is this amount based on the net profit of the year 1924? A. No, it is the net profit per day in the manufacturing department based on the average of the two years, 1924 and 1923.

Q. Are you familiar with Exhibit 15, preliminary report of the Umpire, letter dated September 26, 1927, from the Umpire to the appraisers? A. Yes.

Q. Will you refer to page 3 of Exhibit 15 and read paragraph 2?

MR. GILHOOLY—Well, now, I wonder if the witness is relying on his recollection for this or on a private memorandum which he appears to be reading from?

MR. VANDERBILT—I have no objection to your cross-examining him on that memorandum, if you want to.

MR. GILHOOLY—I would like at this time for the purpose of the record, if the Master please, to state my objection to this line of testimony, on the ground that

the Master having been called upon to determine the profits which the company was making at the time of the fire and the profits which they might reasonably have been expected to make had there been no fire, that the Umpire's award on that ground, having been based on a question of fact is final and conclusive upon the parties to this litigation; the finding by the Master as to those items which were properly characterized as fixed charges having been based on facts taken from the records of the company and elsewhere that his finding on that is also final and conclusive and cannot be impeached in this proceeding. I wanted to get those objections on the record.

THE MASTER—All right; objections noted.

MR. GILHOOLY—I assume that if the Master concludes that I am right in that that the testimony will be ignored and otherwise given consideration.

THE MASTER—Yes, if I decide that point in your favor I will ignore all this testimony.

MR. VANDERBILT—In answer to that, I desire to state for the record that the basis of our attack on that phase of the Master's report is exactly the same as that on which the complainant's entire case has been based, and further than that and in addition thereto we alleged in our counter-claim that the error which we say has arisen is the result of a misapprehension of the rule of law, and that we are simply directing our testimony to meet that point and endeavoring to correct it.

A. In calculating the profits loss, Accountant Hastings based his report on the figures for 1924, one year only,

while Accountant Rhyne went back a period of five years and struck an average. There is a dispute as to which should be adopted. It might not be quite fair to consider only the year previous to the fire in ascertaining an estimate of profits lost. One year could be out of line for many reasons while two or three would furnish more stable information as to the general average of activities and worth of the business.

Q. Will you tell us the net profits as per the books of Igoe Brothers for the years 1924, 1923, 1922, 1921, and 1920?

MR. GILHOOLY—May I interpose here that the witness in reading from paragraph 2 has inadvertently left out the last sentence and if the paragraph is to be quoted, I think it should be at length.

MR. VANDERBILT—I have no objection to that.

THE MASTER—What sentence was left out?

THE WITNESS—Here it is. "I think it would be more reasonable to take a period of two years previous to the fire for the purpose of ascertaining this loss."

Q. Now, Mr. Hastings, will you tell me the net profits as per the books of Igoe Brothers, for the years 1924, 1923, 1922, 1921 and 1920?

A.

1924,	$57,134.16
1923,	197,678.50
1922,	53,066.64
1921,	50,941.27
1920,	286,771.20

Q. Now, will you refer to page 4 of Exhibit 15 and read paragraph No. 5. A. "As to the question wheth-

er the book records for 1924 should be adjusted by capitalizing items previously charged to expenses; I am not so much interested in what the books show as I am interested in ascertaining the facts. If the books do not correctly represent the situation so far as the facts are concerned there is no doubt in my mind that I should ignore the book entries and base my conclusions on the facts as they actually exist or existed. It is well know that income tax investigations ignore book entries in determining the facts for income tax purposes. It is also well known that set-ups in books are constantly changed so that they may be in accord with new and changing facts of a situation. I have no doubt that if the accountant for the insurance companies had found that expense items had been capitalized he would have made the necessary adjustment in the book figures, and he would have been right in so doing. There is no doubt in my mind that during 1924 considerable moneys were expended which could and should have been capitalized. Why it was not done is beside the point. Perhaps the question of income tax had something to do with it. At any rate, an examination of the exhibit furnished in behalf of the assured (Exhibit E) clearly shows that moneys expended in purchases and properly chargeabe to capital, were listed as expenses or repairs. Not only were they listed as such, but they were certified to by the accountants and Mr. Igoe which caused Mr. Hastings to argue that Mr. Igoe cannot now claim the benefits of these items because of his certification. But as I have said, we are not interested in the manner of entries, nor any statement made by anybody in making those entries, if the facts are otherwise. I have gone over these accounts now attempted to be capitalized, and as nearly as I can estimate there is no question that about 75% thereof should be capitalized. There is some doubt

about the remaining 25% and I am allowing 25% of them because of this doubt. It might be noted in passing that for four years prior to the fire the average amount of charges to this particular account of repairs to buildings and machinery was about $8,000 as compared with about $37,000 during 1924."

Q. After making the adjustments mentioned in paragraph 5 of Exhibit 15, what were the net profits for the years 1924, 1923, 1922, 1921 and 1920?

A. Year 1924, $91,123.68
" 1923, 197,678.50
" 1922, 53,066.64
" 1921, 50,941.27
" 1920, 286,771.20

Q. What was the average net profit per day in the manufacturing department based on a one, two, three, four and five year average, using the net profit as shown by the books for the years 1924, 1923, 1922, 1921, 1920?

MR. GILHOOLY:—I take it this evidence is received subject to my objection.

THE MASTER:—Oh, yes.

A. Net profit per day in the manufacturing department based on one year average, year 1924, $119.28; net profit per day in the manufacturing department based on two year average, years 1924 and 1923, $265.94 per day; net profit per day in the manufacturing department, based on three years average, years 1924, 1923, 1922, $214.23 per day; net profit per day in the manufacturing department based on four year average, years 1924, 1923, 1922, 1921, $187.26 per day; net profit per day in the manufacturing department based on five year average, years 1924, 1923, 1922, 1921, 1920, $269.54 per day.

Q. What were the average net profits per day in the manufacturing department based on a one, two, three, four and five year average using the net profits for the years 1924, 1923, 1922, 1921 and 1920, after giving effect to the adjustments set forth in paragraph 5 of Exhibit 15? A. Net profit per day in the manufacturing department based on one year average adjusted, year, 1924 $190.23 per day; net profit per day in manufacturing department based on two year average, adjusted, years, and 1923, $301.45 per day; net profit per day in the manufacturing department based on three years average adjusted, year 1924, 1923, 1922, $237.89 per day; net profit per day in the manufacturing department based on four year average, adjusted, years 1924, 1923, 1922 and 1921, $205.01 per day.

Net profit per day in the manufacturing department based on five year average adjusted, years 1924, 1923, 1922, 1921 and 1920, $283.74 per day.

Q. Did the books of the assured show the profits of the manufacturing department separate from the profits of the jobbing department? A. No.

Q. How were you able to determine the profits of the manufacturing department as distinguished from the profits of the jobbing department? A. By first determining the percentage of sales of the manufacturing and jobbing departments and second by determining the percentage of profits on the sales of each department.

Q. Did the assured's accountants figure the percentage of sales of the manufacturing and jobbing departments? A. Yes.

Q. How did their percentages compare with your percentages? A. I figured that the manufacturing sales were 62½ per cent of the total sales and the jobbing sales 37½ per cent of the total sales as shown on page 6

of my report dated December 27, 1926. The assured's accountants figured the manufacturing sales at 62.28 per cent of the total sales and the jobbing sales 37.372 per cent of the total sales.

Q. You said you figured the percentage of profit on the sales of each department. Where do you show the percentage of profit on sales of each department? A. On pages 6, 7 and 8 of my report dated December 27, 1926.

Q. What percentages of profit did you use in your calculation of profit in the manufacturing and jobbing departments? A. 18 per cent in each department.

Q. How does the 18 per cent profit affect the profits of each department? A. It does not affect the profits of each department at all. First we know the profits as per the books and as adjusted by the Umpire, and second we know that the percentage of profit is the same in each department. Therefore, the application for the sales percentages to the total net profits gives the dollars and cents profits of each department.

Q. What was the production of Igoe Brothers before the fire A. 62,284 pounds or 31 tons per day.

Q. What production per day was necessary to meet all overhead including fixed charges per day? A. 17 tons.

Q. How do you arrive at that figure? A. The umpire finds that the net profit per day in the manufacturin departments is $301.45. The assured's accountant's report Exhibit A shows overhead expenses $31,970 for 83 days, January 1st to April 9, 1925, date of the fire, or $385.18 per day. If production is 31 tons per day, the production for 83 days is 2,573 tons. Assured's—

MR. GILHOOLY:—Just a minute. You are going a little too fast. If production is what? A. (continu-

ing): If production is 31 tons per day the production for 83 days is 2,573 tons. Assured's accountants' report, Exhibit A, shows the gross profit in the manufacturing department as $57,558.08 for 83 days. Therefore, since we know the production for 83 days and we know the total overhead for 83 days, $31,970, which includes the fixed charges, we now must find how many tons per day must be produced at the same margin of gross profit in order to pay the total overhead of $31,970, or $385.18 per day. We determine this by dividing the production of 83 days, 2,573 tons, into the gross profit for 83 days, $57,558.08, which gives a gross profit per ton of $22.37. Having determined the gross profit per ton $22.37 we now divide that amount into the average total overhead per day, $385.18, and arrive at the conclusion that the assured has to produce 17 tons per day to pay all the overhead per day, which includes all the fixed charges.

Q. In your opinion, what was the assured's loss of fixed charges? A. $19,400.

Q. How do you arrive at that figure? A. $194 per day for 100 days.

Q. What do you mean by 100 days? A. I mean that an allowance of 100 days of fixed charges will cover all the loss of fixed charges suffered by the assured.

Q. Explain how you arrive at the 100 days? A. Here is a statement which shows the production by pounds and tons for the eight months or 200 days after the fire.

MR. VANDERBILT:—I ask to have that marked.

(Received in evidence and marked Exhibit D-20.)

A. (continuing): And here is a statement which shows the amount of fixed charges unabsorbed in each month due to the lack of production.

MR. VANDERBILT:—I ask to have that marked.

(Received in evidence and marked Exhibit D-12.)

Q. Do I undersand that your allowance of 100 days of fixed charges would extend practically up to the end of September, 1925, or six months after the fire? A. Yes.

Q. What do you mean by unabsorbed fixed charges in each month? A. That amount of the fixer charges which the assured cannot pass on to his customers due to lack of production, which is the amount the insurance companies agree to pay the assured as lost fixed charges.

Q. Is there anything of importance that must be taken into consideration in examining the production figures of the assured after the fire? A. Yes, the figures represent what was produced while a determination of the use and occupancy loss should take into consideration what could be produced and also the fact that the market prices—

MR. GILHOOLY:—I object to his interpretation of the policy, because the policy speaks for itself.

THE WITNESS:—Strike out the words "policy loss," I will start all over again.

MR. GILHOOLY:—I don't think that differentiates it at all. The policy speaks for itself. If he is to give us figures, the Master is the one to give us the meaning of the policy.

MR. VANDERBILT:—Yes, but he has to do it from evidence.

MR. GILHOOLY:—I don't want his interpretation to be evidence.

THE MASTER:—I won't take his interpretation, unless I agree with it. I don't know what the purpose is, and I don't want to interrupt this line of examination, right in the middle of it. I will permit it. A. Yes. The figures represent what was produced while a determination of the use and occupancy loss should take into consideration what could be produced and also the fact that the market prices were declining.

MR. GILHOOLY:—I object to that, because there is no evidence that the market prices were declining, as the state of the case is now, and if his calculation is based on declining market prices, I think the question is incompetent at this time.

THE MASTER:—Wait till you get the answer in, and then if you move to strike it out, we will have the argument in the regular way.

Q. Finish the answer. A. (continuing): And also the fact that the market prices were reclining which reduced profits and thereby lessened the necessity of production.

MR. GILHOOLY:—Is that finished.

THE WITNESS:—That is the end of that sentence.

MR. GILHOOLY:—Now, I object on the ground that the answer is predicated upon a statement which has no basis of statement in the testimony that prices were reducing.

MR. VANDERBILT:—Now, I desire to refer to page 8 of the exhibit D-18, from which it clearly appears that there is such evidence before the Court at the present time.

THE MASTER:—Objection overruled.

Q. Are your findings, as to the loss of fixed charges and profits figured in accordance with the terms of the policy? A. Yes.

Q. What particular paragraph in the policy covers the matter? A. Paragraph 7.

Q. Well, how does that read? A. It reads as follows: "It is a condition of this insurance that as soon as practicable after any loss the insured shall resume complete or partial operation of the property herein described and shall make use of other property, if obtainable, if by so doing the amount of loss hereunder will be reduced, and in the event of the loss being so reduced such reduction shall be taken into account in arriving at the amount of the loss hereunder. "Q. In calculating the net profits loss, did the umpire make any allowance for the profit made on the tons produced from the date of the fire to September 30, 1925? A. No.

Q. What were the number of tons produced in that period? A. Approximately 525 tons.

Q. What was the average net profit per ton earned before the fire? A. Approximately $10 per ton.

Q. Should there be a reduction in the amount of net profit the umpire allowed? A. Yes, there should be a reduction of approximately $5,000 representing the net profit earned on the 525 tons produced in the six months after the fire.

Q. Have you figured, Mr. Hastings, the percentage

of production in each of the departments of wire nails, rivets and so forth? A. Yes, sir.

Q. Can you give us those respective percentages? A. In order to make an analysis of the sales of the manufacturing and jobbing departments, it was necessary to analyze all the sales between January 1st and the date of the fire, April 9th, covering sales of $410,661.56, covered by approximately 9,000 sales invoices. In making this analysis, it was made by commodities sold as well as price and quantity. In analysis of $410,000 of sales, of which $256,666.49 were manufacturing sales, and $153,998.07 were jobbing sales, we found that of the manufacturing sales approximately 70 per cent represented wire sales, 25 per cent represented nail sales, 4 per cent represented rivet sales, and one per cent represented miscellaneous sales.

Q. Does the loss sustained after the fire measure the amount of profit prevented by the fire? A. No, sir.

Q. In your opinion, would the profit of 1925 have been as great as 1923? A. No, sir.

Q. Why not? A. Because the sales price of rods, wire and nails was declining in 1923, 1924, and 1925, as shown on page 8 on my report, dated December 27, 1926, while there was no material reduction in cost, therefore reducing the margin of profit.

CROSS EXAMINATION

By MR. GILHOOLY:

MR. GILHOOLY:—Well, I must say that I am some-what confused by the mass of figures, and I have not had a chance even to analyze them in the slightest de-

gree, and I was wondering whether I might not take this opportunity of having a recess now, and continue after recess, because Mr. Hastings has had an opportunity of preparing his questionnaire, and I want to expedite the examination—otherwise, I would have to go fishing along here for an hour. May I take that memorandum that he made?

(Counsel hands memorandum to Mr. Gilhooly.)

Recess.

AFTERNOON SESSION

JAMES J. HASTINGS, recalled.

CROSS EXAMINATION

By MR. GILHOOLY:

Q. Mr. Hastings, you testified on direct examination that the assured's accountants' report, Exhibit A, showed overhead expenses $31,970 for 83 days from January 1st, to Apirl 9, 1925, which is the date of the fire, and which amounts to $385.18 per day. Can you tell us how that figure $385.18 per day is made up, or to shorten it, can you refer to any page in the report? A. Well, I have schedule A of the assured's accountants' report, the column, Manufacturing Department, two items showing expense, $15,835.48, administrative expense, $15,134.52. Total $31,970, for a period of 83 days.

Q. Can you tell us what page in the report those figures summarize? A. Well, you have your accountants' report in front of you.

Q. That is the summary. Are those items itemtized? A. They are detailed on schedule 2 and 3 of the assured's accountants' report.

Q. That is what I want to know. Now, you testified that the gross profits for 83 days immediately preceding the fire amounted to $57,558.08, giving a gross profit per ton of $22.37. Mr. Hastings, if the gross profits were less than that amount, would that change the number of tons that had to be produced to meet the overhead or fixed charges? A. You said that I testified that the net profit—

Q. Gross profit. A. That the gross profit in the manufacturing department was $57,558.08 for 83 days. That is the figure of your own accountants' report, Exhibit A. Now, if your own accountants made the profit less and the tons were more than the net profit or the profit per ton naturally would be less.

Q. Well, suppose that the number of tons was the same and the gross profit was less. Would that increase the number of tons which would have to be produced per day to meet the fixed charges? A. Assuming that the fixed charges are the same, you are correct.

Q. You would have to produce more tonnage to meet your fixed charges per day, assuming they were the same? A. Yes, sir.

Q. According to the figures which you have before you, did Igoe Brothers make their fixed charges in 100 days? A. Mr. Gilhooly, I have any number of figures before me. I have your accountants' figures and my figures. Now, if you will get specific about them, I will be able to answer you.

Q. I am asking you if Igoe Brothers actually did make their overhead charges in 100 days after the fire? A. My testimony is that an allowance of 100 days of fixed charges fully compensates Igoe Brothers for their loss of fixed charges.

Q. Did Igoe Brothers ever produce after the fire enough tonnage to meet their overhead charges? A. I am interested in the Igoe tonnage for a period of six months after the fire. The report of your accountant shows exactly the tonnage produced by months and by Igoe Brothers after the fire. It is in the report.

Q. Well, you have not answered my question yet. Did Igoe Brothers ever produce after the fire a sufficient amount of tonnage to pay their overhead expenses? A. If I refer to—

Q. Will you answer that yes or no, Mr. Hastings? I will let you explain. A. Not without qualifying my answer.

Q. Can you answer it yes or no? A. No because it brings out a wrong conclusion.

Q. Well, then, I take it that they did not on any day — A. But it does not—

Q. —manufacture enough wire and nails to make their overhead?

MR. VANDERBILT:—I object to that as not proper and not having any foundation laid for it, and as being a misinterpretation of the witness' answer to a preceding question.

THE MASTER:—Reframe the question. You say you take it.

MR. GILHOOLY:—I will change the question.

Q. Now, you have taken, have you not, Mr. Hastings, the production items from our accountants' statement? A. Yes, sir.

Q. Now, from the amount of production shown on that statement, did Igoe Brothers after the fire produce a sufficient tonnage to meet their overhead expenses? A. Igoe Brothers produced the poundage represented in the third column of Exhibit 1 of the assured's accountants' report, which is less than 17 tons per day, but has no bearing whatsoever on the amount of the loss of fixed charges because we are not introducing what they could have produced.

Q. Then your testimony is based on the amount that Igoe Brothers should have produced, is that right? A. No, sir, my testimony is leading to the conclusion of what Igoe Brothers lost in the way of fixed charges, which is approximately $20,000, and that is all.

Q. Then you do not mean to say that any part of your testimony regarding fixed charges is predicated upon what Igoe Brothers should have produced, is it? A. No, sir, because I should not be qualified to say what they should have produced.

Q. In other words, that would be a building proposition? A. No, sir, that would be an operating problem, but there is nothing to indicate that they could not have produced three times as fuch as they did.

Q. Then your testimony is based on the production that they actually produced? A. My testimony is based upon facts and that is the only thing that an accountant can say.

Q. Now, in determining the manner in which you figured the necessary tonnage to cover overhead, you took the gross profits for a given period, didn't you? A. Yes, sir.

Q. And after taking the gross profits, you divided that by the number of tons which were produced under normal circumstances, didn't you? A. Yes, sir.

Q. And that gave you the number of tons that should have been produced to meet the overhead? A. Which would have to be produced to meet the overhead.

Q. Now, did you take the income figures of Igoe Brothers for the six months after the fire to determine the gross profits which they received after the fire? A. Why, that would be so —

Q. Did you do that? A. No, sir, it would be ridiculous to do it.

Q. Now, you arrived at your formula by taking the gross profits divided by the amount of tonnage, which gives you the figure necessary to produce to meet your overhead? A. Yes, sir.

Q. Now, why didn't you take six months or 200 days after the fire, get the gross profits divided by the tonnage produced, and thereby obtain the amount necessary to meet the fixed charges? A. Because the U and O policy specifically states that the amount of loss is based upon the experiences before the fire and the possibilities after the fire.

Q. And that is why you did not take that formula? A. It would have been wrong if I had.

Q. Well, where would it be wrong exclusive of the policy—we are not concerned with the policy, we are concerned with the number of tons required to meet our fixed charges. I am asking why you did not take the gross profits 200 days after the fire, divide it into the number of tons produced and find out the number of tons which would be required to meet your overhead?

MR. VANDERBILT:—I object to that question as based on a false premise that we are not concerned with

the policy. That, I submit is exactly what we are concerned with, and if it is not based on that, it is immaterial and an irrelevant question.

MR. GILHOOLY:—In answer to that, I have learned on cross-examination the manner in which he arrived at his 17 tons per day, being the amount necessary to meet our fixed charges. Now, I am only asking him if that should not be followed after the fire, to find out how many tons were necessary to be produced in order to meet the fixed charges which we had after the fire. That would mean that he woud have to find out the amount of fixed charges plus the gross income, and he says he has not done it. A. I can answer you very readily. I could not do it, nor could your accountant do it, because we both tried to do it. We could not do it, because there was no inventory figure.

Q. Now, you knew after the fire, did you not, how much we produced? A. Yes, sir.

Q. And you could have found out from our books how much we got from that which we produced, couldn't you? A. No, sir, I couldn't.

Q. Well, you certainly could. If it was there, what was to prevent you? A. Because the records were not up-to-date, were not complete. The cost records were supposed to be destroyed.

Q. That pertains to before the fire, but I am talking now about that which we manufactured after the fire? A. The records were not kept up.

Q. The tonnage records were kept. Now, Mr. Hastings, if the records showed that the company did not have a gross profit, but on the contrary had a loss, then it necessarily follows that they were not meeting their fixed charges, does it not? A. It does no such thing, Mr.

Gilhooly. You did not put your accountants' report in when he was on the stand. How do I know that it might include the fire loss on the merchandise?

Q. I didn't ask you anything at all about that. I asked you a simple question, Mr. Hastings. Your answer is argumentative. I asked you if—will you repeat the question?

(The question was read by the Reporter.)

A. A company that does not have a gross profit is not meeting its fixed charges, but you have not said what period.

Q. That was not in my question. A. But it is absolutely necessary.

Q. If Igoe Brothers, as appears from the testimony of Mr. Priaulx, on page 145, operated at a loss from April 9, 1925, to January 1, 1926, amounting to $172,-722.28, you would say, would you not, Mr. Hastings, that they were not meeting their fixed charges? A. Yes, sir. But I have not examined his report and cannot make a very intelligent answer.

Q. But I am asking that very simple question A. If you are asking me a supposition, the logical deduction is yes.

Q. They have not made their fixed charges. Now, you testified that in your opinion, the assured's loss of fixed charges was $19,400, and Mr. Vanderbilt asked you how you arrived at that figure, and you said $194 per day for 100 days. Is that right? A. Yes, sir.

Q. Now, where did you get the figure of $194? A. From page 3 of Exhibit D-19, my supplementary report, dated May 24, 1927, which shows fixed charges in the manufacturing department of $193.91. I may have been generous and have given the assured 9 cents more per day.

Q. Well, isn't that the figure of the Umpire, $194,18? A. No, I should say the figure of the Umpire is my figure.

Q. Well, then, there may be a coincidence but how is that $194.18 arrived at, what did that include? A. It represents fixed charges per day in the manufacturing department as per the books, $193.91.

Q. What does it include, what particular item? A. Selling administrative expenses, and all the fixed charges.

Q. Now, that $193 and some odd cents, was intended only to cover the fixed charges of Igoe Brothers, not as a going concern, but as a concern standing idle? A. No, sir, the fixed charges are the fixed charges of Igoe Brothers as a manufacturing concern.

Q. Did you take that from your books after they operated their plant after the fire? A. No, sir, it had no bearing on the loss.

Q. Then you don't know that they were the actual fixed charges that they were experiencing after the fire, do you? A. Well, if they were the actual fixed charges that they were experiencing after the fire, then you agree with me in my findings .

Q. I don't say anything at all. I am asking you the question, Mr. Hastings? A. All right, I am answering yes, if they are fixed charges after the fire—$193.91, I am correct.

Q. I didn't say anything of the kind. I asked you if those fixed charges were taken from the books of Igoe Brothers operated after the fire? A. No, sir, they are Igoe Brothers as a manufacturing concern before the fire.

Q. As taken from the books, figures before the fire? A. Figures before the fire.

Q. Now, Igoe Brothers put in a claim for fixed charges amount to $385 per day? A. Yes, sir.

Q. And that $194 is marked fixed charges, which the Umpire allowed after throwing out and disallowing certain items that Igoe Brothers claimed to be fixed charges? A. Yes.

Q. But the $194 does not represent the fixed charges which they had after the fire. You did not go to the books to get it? A. It represented the actual fixed charges that Igoe Brothers had after the fire and all they are entitled to under the law.

Q. You did not go to their books to get that figure? A. Why, yes. You remember, Mr. Gilhooly, I made this examination in November and December of the year of the fire. Now, the fire was in April.

Q. But you only took the figures for before the fire down to the fire A. No, sir, I examined the figures after the fire, because I had to give such weight as is necessary to the figures after the fire.

Q. Now, you say their loss was $19,400? A. Yes, sir.

Q. Now, how do you figure it out? A. 194 times 100 days.

Q. And where do you get your 100 days from? A. 100 days of allowance (handing counsel Exhibit D-12). if you will examine Exhibit D-21, you will see the loss of fixed charges.

Q. As I examine D-21, Mr. Hastings, the total figure, according to your calculation amounts to $21,143, and the number of days total 141. A. Yes, sir.

Q. Well, then, do I take it that they shoud have had, according to your figures an allowance of 141? A. No, sir, they should have an allowance of 100 days fixed charges at $194 a day.

Q. And that is predicated upon these items: 17 tons per day, is that right, for production 17 tons? A. Yes, sir.

Q. And also an item which you figure $194 per day? A. Yes, sir.

Q. So that if either one of those items was changed, that would affect your result, wouldn't it? A. Yes, sir.

Q. Now that 17 tons per day, according to the figures, was based on the output of Igoe Brothers generally before the fire? A. Igoe Brothers before the fire averaged 31 per day.

Q. 33 days production? A. 33 days.

Q. And that was based upon the particular commodities being produced at that time, wasn't it? A. Yes, sir.

Q. That included what has been referred to in this hearing as common products and special products, too, didn't it? Everything they produced. A. Everything they produced. There is no distinction in the books or in the imagination of the Igoe Brothers as between common products and special products. I will read you everything they produced.

Q. Now, Mr. Hastings, if Igoe Brothers could make no profit whatsoever on their common products, but made a profit on their special products ,and after the fire they were unable to produce anything but common products, would that not change the number of tons which they would have had to produce to meet their overhead? A. No, sir.

Q. Is that your opinion that it would not change it in the slightest degree? A. I don't think that I could venture an opinion, or anybody else either.

Q. But it takes more tonnage to meet your overhead, if you are making commodities upon which you make a very little profit, than it does if you are making commodities and merchandise having a greater profit, doesn't it? A. Yes.

Q. That follows as a matter of course. Now, you did not take into consideration in determining the figure of 17 tons as the amount necessary to produce after the fire the character or type or material which Igoe Brothers were producing after the fire, did you? A. As far as I know Igoe Brothers were producing the same materials and commodities after the fire as before the fire.

Q. And you predicated your 17 tons on that, didn't you? A. Yes, sir.

Q. And if it should appear that they were not producing the same type and character of materials, would you change your opinion? A. Yes, sir.

Q. And if they were producing materials which did not gives great a profit after the fire, as they were produring before the fire, you would increase, would you not, the number of 17 tons to a higher figure? A. Yes, if that were predicated entirely upon the books of the company and not upon the guesses of some individuals.

Q. I am not asking you to argue the question; that is something for Mr. Vanderbilt. But you would change your opinion? A. If based on the books.

Q. Did you examine the books of Igoe Brothers to determine the amount that they lost during 1925? A. I wasn't interested in 1925.

Q. Now, Mr. Hastings, if you were interested in getting a real accurate formula to show the number of tons produced or which were required to be produced, rather, in order to carry the overhead of Igoe Bothers, don't you think you could have gone in and examined the books to find out how much their gross profits were, if any? A. No, sir. Because the policy distinctly states that they were compensating you for lost profits, not loss.

Q. You wanted to find out an honest figure as to

the number of tons required to meet overhead, didn't you? A. Yes, sir, and if I had—

Q. And—you said "yes." Now, don't you think that if you wanted to get a real accurate figure, you should have gone to the books to get it? A. No. If I had not been fair and proceeded—

Q. You have answered the question.

MR. VANDERBILT:—Let him finish.

A. No, I have not answered the question. If I had not been fair and proceeded along the lines that you suggest. I would not have shown these people here as entitled to profits of $153.88. I would not today. I would not have shown that. I would have said they lost money and therefore you had no profits.

Q. I am not questioning your fairness in this matter, but I am asking you if that would not have been the accurate way to ascertain the number of tons to produce their overhead? A. No, sir.

Q. Why did you take it before the fire, take the gross profits divided by the number of tonnage ,and get the figure 17 tons, why did you do that? A. Because the loss is always determined upon the experience of the past and the possibilities of the future.

Q. And is that your only answer? A. That is the exact, correct answer.

Q. Well, now, Mr. Hastings, you had actual facts at your command that you could have looked at? A. And that was the basis of my—

Q. Now, did you read that part of the policy too, Mr. Hastings, which says that the assured shall also be entitled to such expense as he shall incur in trying to reduce this loss? A. Yes, sir.

Q. Why didn't you look at our books to find out what it cost us to operate this little mill to find out whether or not we went to any expense to try to reduce the loss? A. I did.

Q. Did you? A. Yes.

Q. And did you find we went to an expense of $171,000 for the year? A. No, sir.

Q. You did not find those figures? A. No, sir.

Q. Did you find that we suffered any loss at all or did you take those figures off? A. Your statement of your accountant, on which you are calculating the loss, is based upon the year following the fire which is predicated upon inventory, December 1, 1928, and I suppose—

MR. VANDERBILT:—Nineteen hundred what?

THE WITNESS:—1926.

A. (continuing) And undoubtedly completed at some later date, three or four months later.

Q. Aren't you wrong in that when you say 1926? A. No.

(The answer was read by the Reporter.)

A. (continuing) I have before me Igoe Brothers' report made by their accountant.

Q. Under date of what? A. For the year ended December 31, 1925; the fire was April 6th. This is the report of the accountants and auditors for the assured. The report shows a loss from operations of $141,079.64. It shows the inventory at the beginning of the year of $160,919.60. It shows the inventory at the close, $63,315.35 on resale stock. It shows the inventory at the opening, $45,683.33. It shows the inventory at the close, $29,229.89. Between those two dates, they had a fire. The report does not show what became of the loss for

which they were compensated by insurance. This report would lead you to believe that the loss was charged against operations.

Q. Mr. Hastings, you say that they had a fire and that the amount that they recovered for the loss of goods in the fire does not appear on that statement? A. Wait a minute. I will see if I can find it . I do not see it.

Q. Will you turn to Exhibit B, Schedule 1 of the paper that you are referring to? A. I have it.

Q. Do you see the first column there, purchases, $460,597.50? Can you tell me whether or not in that item there is not reflected the amount received from the insurance company? A. No, sir, the item is not reflected in the statement of profit and loss or the statement of operations.

Q. Now, this inventory that you refer to as of December 31, 1924. That inventory was the same one that was used by you and the accountants for Igoe Brothers in determining the profits for 1925, wasn't it? A. Yes, we used the book.

Q. So you were satisfied with the inventory that they showed as of that period for that purpose ,weren't you? A. I was satisfied with the inventory at the beginning of the year for the particular purpose, and I was satisfied with the inventory as of the date of the fire, which was the basis of settling the stock loss.

Q. But that was one of the same used by you and our accountants? A. Which was correct.

Q. Now, you answered this morning a question of Mr. Vanderbilt's that the date of your report was December 27, 1926? A. Yes, sir.

Q. That is correct, not 1925, as you mentioned a little while ago? A. I believe it is 1926, yes.

Q. That is the first report you made? A. That is the first report we made.

Q. And you had, of course, access to Igoe Brothers books all over this period, didn't you? A. Yes, sir.

Q. Mr. Hastings, after the Umpire had indicated his views in this case, you submitted a report, didn't you? A. Yes, sir.

Q. Now, I show you what purports to be a report, and ask you if that is your signature on there? A. That is mine.

Q. I read from this report a summary as per Umpire's finding, net profits per day, average of two years, 1924, 1923, 600 days and multiplied by 200 days, gave $297.90 times 200 days, equalling $59,580; fixed charges per day, $193.91, times 200 days, equalling $38,782, making a total as per Umpire's finding of $98,362. Now that was your opinion as reading the Umpire's preliminary report, wasn't it, as per his findings? A. Yes, sir.

Q. And then you subsequently changed your view and argued in your report for an allowance of 100 days? A. I did not change my views. I am just stating what the Umpire found. I did not agree with him.

Q. I say, that was your interpretation of his preliminary report? A. It is simple language; anyone can understand it.

Q. Now, Mr. Hastings, if Igoe Brothers had a loss averaging approximately $525 a day, and they had fixed charges of $194 per day, you would say, would you not, that they did not meet any of their fixed charges? A. If Igoe Brothers had a loss—

Q. Averaging $525, you would say that they did not meet any part of their fixed charges of $194, wouldn't you? A. Surely.

Q. Now, I think further that you took exception to the part of the Umpire's findings, where he allowed cer-

tain items to the assured that were carried on their books as expense, and which were later changed to be carried as capital items? A. Yes, sir.

Q. Well, now, if Igoe Brothers had carried as items of capital, certain items which were admittedly expense, and thereby decreasing their profit, you would have contended that they should have been disallowed wouldn't you? A. Yes, sir.

Q. Now, you said in answer to a question by Mr. Vanderbilt that in the 200 day period Igoe Brothers produced approximately 525 tons, and that their average net profit per ton before the fire was $10 per ton, and therefore $5,000 approximately represented the net profits earned on the 525 produced in the six months after the fire? A. Yes, sir.

Q. Well, do you seriously mean to contend that at that date Igoe Brothers made a profit of approximately $5,000 on the tonnage that they produced after the fire? A. Yes, sir.

Q. Despite the loss that they had during that time? A. That loss they had after that time, I just told you the reason why it is wrong.

Q. You mean there is no such loss? A. Why, it is ridiculous.

Q. But there is a loss there? A. No, sir, I don't think there is any loss.

Q. Well, you haven't gone over the figures to ascertain it, have you? A. I am familiar enough with Igoe Brothers books to konw just about what they are doing, and what they have done in the past.

Q. I mean 1925? A. Yes, I went over it in 1925.

Q. You don't actually contend that they had a profit then the first 200 days after the fire? A. No, and I say that they had a loss and I say that they should be compensated by the insurance company.

Q. Then they had no profit on the 525 tons? A. Yes, sir.

Q. They had a profit? A. Yes, sir.

Q. Well, what is your idea of profit, Mr. Hastings, what do you think is profit? A. Profit is the excess of sale price over the sum of the labor, material and expenses. Now, the insurance company has paid Igoe Brothers for their stock loss, they lost nothing there. The insurance company has—

Q. Now, I am asking you a simple question .What is your idea of profit? A. I am giving you an answer.

Q. That will come later.

MR. VANDERBILT:—Well, now—

THE MASTER:—No, I think that the question was definition of profit, and I think that has been given.

Q. And you say now that Igoe Brothers made a profit of $10 per ton on 525 tons? Yes.

Q. And you are willing to make that as a truthful statement, is that right? A. I am willing to state that as a fact and swear to it. They made $22 a ton before the fire. It is natural to believe the Igoe Brothers would make $10 a ton after the fire.

Q. Are you stating as a fact or just giving an opinion? A. I am stating it as a fact and as a matter of opinion.

Q. Can you show any place in their books to indicate that they made a profit on that tonnage? A. I believe if the books were here we could work it out.

Q. But you never found it? A. No, sir.

Q. Did you state that Igoe Brothers within 200 days

after the fire made a profit? A. No, I said Igoe Brothers had a loss of profit.

Q. For how long a time? A. A loss of profit for a period of 200 days after the fire.

Q. Now, you say that they had a profit of approximately $5,000? A. Yes.

Q. Which is correct? The report that you made to the Umpire or your statement that you made in court here today? A. Both of them. You don't get the point, Mr. Gilhooly.

Q. I should say I don't A. All right, let me explain to you. Here is the Umpire's findings—

Q. I am talking about your report. A. All right. My report—loss of net profits, $595.80. All right. During that period they had manufactured some of their commodities, and on those commodities they made a profit and that profit which they earned and which they got from their customers should not be paid for by the insurance companies, and should come off the claim.

Q. How much was the profit? A. Approximately $5,000 and it is very, very conservative.

Q. Did you set that forth in your report to the Umpire, that they made a profit? A. No.

Q. Well, now, if they had made a profit, why didn't you set that forth in reduction of the alleged loss? A. Because I did not discover it until later.

Q. Oh, you didn't? A. No, sir.

Q. Now, when did you discover that? A. Oh, I don't know, within the past year.

Q. Within the past year? A. Yes.

Q. Now, just about when and where did you get your figures? A. Where did I get the figures?

Q. Yes. A. Oh, I have all kinds of working papers on this job.

Q. You are basing your figures, are you not, on a gross profit of $22 per ton? A. Yes, sir.

Q. And you took $11.40 from that to give your approximately $10 per ton? A. $10 per ton.

Q. Now, that $22 per ton was based on the condition which existed before the fire? A. Yes, sir.

Q. And you have not taken into consideration any of the factors which entered into their production after the fire? A. Yes, sir.

Q. The fact that they had this temporary mill and were making common products? A. Yes.

Q. Now, you say you discovered this during the past year? A. Yes, sir.

Q. What was the occasion of your discovering that? A. I have studied this case a dozen times, been ready about a dozen times, and it suddenly struck me that here we are giving the Igoe Brothers profits, and during that period they manufacturing something. Now, since the insurance companies are compensating them for the fixed charges, they are not losing those, the insurance companies have compensated them for the loss of material, they are not losing that, and the items of labor, which are fixed charges, are compensated under the U and O policy, so the only items are direct labor,-direct labor, material and expense, are the only items. You could not help making a profit.

Q. So you are assuming that they were going to have all these fixed charges. How much did you figure they were going to be allowed by the insurance companies for fixed charges in assuming they made a profit? A. The $194 per day.

Q. For the 200 days? A. For the 200 days. For the 100 days, pardon me.

Q. Why did you say 200? A. Because you misled me by your remark of 200 days.

Q. Then did they lose that additional amount of $194 per day over and above that which you have mentioned before during the first 100 days? A. No, the insured is entitled to the loss of profit which is approximately $59,580, plus the $19,000 loss. About $5,000.

Q. And yet A. That is on the assumption that the period for reconstruction is 200 days.

Q. And that is all based in turn upon $22 gross profit before the fire? A. That is your own figures.

Q. And if conditions had changed after the fire, whereby it cost us more to produce than it did before the fire, that would change the $22 item, wouldn't it? A. I don't see where it would from the standpoint of determining loss.

Q. If we were making articles that produced a profit before the fire, and were making articles that did not produce a profit after the fire, then it would change the $22 item completely? A. Sure, and the insurance company is paying you for it.

Q. Mr. Hastings, Mr. Igoe testified on direct examination that before the fire they were manufacturing merchandise of which 75 per cent was of a special kind upon which they were making a profit; 25 per cent was a product upon which they were making no profit, and that after the fire, they were only able to manufacture the most common of products upon which there was no profit. Would that change your opinion as to whether the $22 item should still be maintained? A. No, sir. With all due respect to Mr. Igoe, I don't think he knows, and I will tell you why.

Q. It wouldn't affect your opinion any, is that your answer? A. No, sir, not his testimony.

MR. GILHOOLY:—That is all.

MR. VANDERBILT:—That is our case.

MR. GILHOOLY:—I will call some of my witnesses in rebuttal.

REBUTTAL PROOFS.

JAMES MITCHELL, called as a witness on behalf of the plaintiff, in rebuttal, having been duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. GILHOOLY:

Q. Mr. Mitchell, what is your business? A. Builder.

Q. And you have been such for now long? A. Six years.

Q. And in addition to being a builder, what other qualifications— A. Engineer.

Q. Have you for building? A. Designer, engineer.

Q. And you have been such for how long? A. Fourteen years, fifteen years.

Q. Now, did you actually do any work on Igoe Brothers building after the fire? A. Yes, sir.

Q. Mr. Robinson has testified here for the defendant insurance company on page 173, with respect to the erection of certain trusses:

"Well, two men would easily average one truss a day which would make 50 man days for the trusses. Consequently, if two men worked on the 25 trusses, they would build the 25 trusses in 25 days."

Did you actually erect any trusses there? A. Yes, sir.

Q. Do you know about how many you put up? A. I believe there were eight.

Q. Will you tell us the length of time it took you to construct the truss? A. First truss, six men, four days, four men four days, thereafter.

Q. For each truss? A. For each truss.

Q. In your opinion, is it possible to manufacture these trusses of the character in the Igoe Brothers building, two men to complete one in one day? A. It is impossible.

Q. And will you please give us some description of the character of the trusses which were in this building? A. The chords—I mean by that, the pieces that run across the bottom and the top—were 10 by 12 timbers, and the webs, that is, the bracing in between those chords, consisted of 4 by 6. Each of those truss members had to be mortised out and beveled and inserted in small slots in the chords. The truss is put together by means of large bolts, an inch, an inch and a quarter,—the bolt holes are, perhaps some of them, a depth of 30 inches, that is where they would go through two of those large timbers, at an angle at the heel of the truss, there were probably eight to ten bolts on either side, an inch or an inch and a quarter. The rods, I believe, consisted of some of the web members which had to be placed.

Q. And the time which you have given us that it took to construct these trusses, was based on your actual experience, is that correct? A. It is.

Q. Have you had much experience in building industrial buildings? A. That's all I have built, essentially, is industrial buildings.

Q. Now, there has been a considerable amount of testimony in this case about stringers. Can you tell us whether or not stringers are part of a building in the sense that we are now dealing with the actual building construction and not with the installation of transmission? A. Stringers are never included as part of the transmission. That is, by the builder.

Q. Who does that work and when is it invariably done? A. It is done by the millwright after the completion of the building.

Q. In other words, do I take it, that when you erect a building, you do not instal stringers? A. Never.

Q. And why don't they do it? A. The location of such stringers is indefinite. You cannot predetermine where they are going to be located.

Q. Why not? A. Where machines are going to be placed is not exactly fixed in a building.

Q. You find, from your practical experience that a person or corporation contemplating the erection of a mill and the installation of machinery decides on the exact location of their machines while the plans are drawn and before the building is completed? A. I have never seen it done.

Q. So that if you were erecting a building today, you would instal your stringers, I take it, after the building was built? A. I would.

Q. What do you do in those cases where you have a concrete building and have to make provision for it? A. You make a provision with inserts in the ceiling of the building, to take the stringers on any portion. In other words, you place those inserts over the entire area,

at probably three foot centers, so that no matter where you place a stringer, you always have an insert to attach your bolt to.

MR. GILHOOLY:—Now, I learned the other day for the first time, if the Master pleases, and it was in all probability due to a mistaken impression which I got —I had thought that Mr. Mitchell had only done work after the fire. But I found that that was my error, that he had made an estimate of the length of time it would take to construct and a detailed chart prior to the time that Fletcher and Thompson did this work. I want permission, if it is not going to be proper rebuttal to open my case to that extent to get his estimate in. I think we have pretty well covered the whole field, but that was somewhat a surprise to me to learn that I was mistaken.

THE MASTER:—If there is no objection, I will permit it.

MR. VANDERBILT:—If the Master please, I don't see how, after we have had our experts come in and testify as to the building on the basis of the length of time stated in the report, I am in any position to get them back here now to controvert any other report put in on rebuttal, especially so, as Mr. Robinson, for example is in the hospital, convalescing from an attack of appendicitis. I don't think it is proper rebuttal.

THE MASTER:—No, it is not.

MR. GILHOOLY:—I will grant it is not proper rebuttal. I thought the Master would indulge me. I will say this, if anything appears that you want to contro-

vert, I am perfectly willing to give the opportunity. I don't want to foreclose the proof on your part, but I do want to get the testimony in, due in part to the fact it is an inadvertence on my part.

MR. VANDERBILT:—Of course, if the Master please, when there are two separate reports, the very thing we want to do is to analyze them and see how they stand up together. Now, that opportunity we have never had and—

THE MASTER:—Well, I will offer you all the opportunity you desire in case this goes in. All right, put it in.

Q. Mr. Mitchell, did you make a—

MR. VANDERBILT:—I will have to ask to let it go over until September until we get Robinson back on his feet.

Q. Did you make a study of the buildings of Igoe Brothers with a view of determining the length of time it would take to reconstruct the buildings which were there before the fire? A. I did.

Q. And that included, what? Your study included what? A. I don't understand your question.

Q. Well, I withdraw that question. I think it is a little off. Did you measure up the site? A. I did.

Q. Could you ascertain the size of the buildings from the rooms that you saw? A. I believe so, yes.

Q. Had you seen the buildings before the fire, Mr. Mitchell? A. Many times.

Q. And were you familiar with the character of the

buildings which were up there before the fire? A. Pretty much so, yes.

Q. Did you go into a detailed consideration of the length of time it would take to reconstruct these buildings? A. I did.

Q. And how long after you made this study, and as a result of what you knew about the buildings, would you say it would take to reconstruct the Igoe Brothers plant, put it back the way it was before the fire? How long a time would it take you to do that work? I am speaking on only the buildings and not the equipment. A. 40.2 weeks of 5½ days each.

Q. And how much does that make the total, 40.2 times 5½, is that it? A. Yes.

Q. Have you given any consideration in that figure to inclement weather, preventing building operations? A. I have.

Q. And is that included in the 40 weeks? A. It is.

Q. By the way, can you describe to the Master the approximate size of these trusses, and also the character of stringers as to size? A. I don't believe I have that data.

Q. How about these trusses, can they be put in there by hand or how do you get them up in place?- A. You have what you call a gin pole, and raise them with block and fall.

Q. Approximately what is the weight? A. Oh, I should judge two tons.

Q. Each? A. Each.

Q. Mr. Mitchell, Mr. Robinson has testified with respect to the laying of brick, that he could build a pillar or a column as high as he wanted to, all depending upon the size that you required, or words to that effect. What

have you got to say about the laying of brick in a pillar or column, about how high can you safely go in a day? A. You should not build an isolated pillar over six or seven feet in one day. If you do, the weight of that is going to cause the green mortar to crush out between the joints, and the pier will slip and go out of plumb, and will be unsafe.

Q. Can you tell us about when you collected your date and made your estimate as to the time it would take you to rebuild, Mr. Mitchell? A. I started in the latter part of December, 1925. I turned in my report January 11, 1926.

Q. By the way, did you ever confer with Fletcher-Thompson as to their report they submitted? A. No.

Q. Your report was made independent of any work of Fletcher-Thompson? A. It was.

MR. GILHOOLY:—That is all.

CROSS EXAMINATION

By MR. VANDERBILT:

Q. Have you ever seen the Fletcher-Thompson report on this plant? A. I did see it.

Q. When? A. I believe in about March of 1926, I saw it on a desk in Igoe's plant. I did not have an opportunity to peruse it.

Q. You appeared to testify as to the length of time that it would take to rebuild before the Umpire and the appraisers in this matter, did you? A. No, I did not.

Q. Have you the details on which your estimate of 40.2 weeks is based? A. I have.

Q. And how is that made up, Mr. Mitchell? A. How?

Q. Yes. A. By survey of the actual quantities which must be incorporated into—

Q. Well, I mean each building separately or the buildings as a group? A. No, the buildings are each taken off separately.

Q. And how many men did you have working? A. That varies greatly.

Q. Are they indicated on the detail which you have prepared? A. They are.

Q. And what are the variations in the working of these men? A. Variations?

Q. Yes, maximum to minimum or minimum to maximum? A. I see 80 at one interval, which roughly looks to be the maximum down to four.

Q. And when did you have the four? A. Over a very short period in the beginning.

Q. I notice you are referring to a progress chart, when was that made up? A. That was made up in January, 1926.

Q. At the same time that your detailed estimate was made up? A. That's right, this is a detailed estimate.

Q. That you have before you, and at whose request did you make up the detailed estimate? A. Mr. Igoe's.

Q. How many days did you allow for inclement weather? A. 23.7.

Q. And how did you arrive at that estimate? A. From an average taken from the Weather Department in the City of New York.

Q. You mean from an average of 1926 or 1925? A. No, not a year; I think we struck that as an average.

Q. Didn't make it by any actual computation of the

number of inclement days in the actual period involved? A. No, sir.

Q. Now, aren't stringers ever put up by the man who is erecting the building? A. I have never seen it.

Q. Aren't they laid out and planned before the building is erected? A. I don't believe they could be.

Q. What do they use stringers for? A. To support shafting.

Q. What do you do with conveyors, for example, that go to more than one floor? A. You seldom use stringers. You place the conveyor in a fixed position, it is true.

Q. What do you do with the ventilating system that runs through more than one floor? A. The same thing.

Q. Don't those things all have to be planned out in advance? A. They do.

Q. Do you use stringers for anything but shafting? A. Oh, you might, yes.

Q. What? A. I cannot think of a thing right at the moment.

Q. Nothing difficult about the erection of stringers? A. No, the location is.

Q. What is difficult about the location? A. Well, the fixing of the location of the machine under the stringer to meet a certain production demand.

Q. What has that got to do with the stringer itself? A. There is a certain relative position of the stringer to the machine.

Q. So as soon as they determine where they want to have the machine, it is a relatively simple job for a carpenter to put a stringer up where it is wanted? A. That is right.

Q. Now, did you ever layout a plant with provision made for the machinery before the actual construction was begun? A. No, sir.

Q. Or don't you attend to the laying out of machinery? A. No, I do not.

Q. Well, you have known of many cases, haven't you, where the exact location of machinery is all definitely determined and fixed before there is any construction work done? A. I don't know of any in any of the metal working trades or in the machinery trades.

Q. In other words, you mean that they put up the building first before they determined where they are going to have their machines? A. I do, that is to a definite location.

Q. That is what I mean? A. Yes, I believe they do.

Q. In other words, the whole building is erected before they know where they are to put particular machines? A. They know approximately where those machines are going.

Q. Why don't they know—any particular reason why they don't know where they are going to put the machines? A. I don't believe it is possible to see how material is handled to and from those machines to make it possible to determine exactly.

Q. You take, for example, in an automobile plant like the Ford plant or the Durant plant down here at Elizabeth. Don't they lay out the machines there before they put the building up? A. No. Durant moved in there after the building was up.

Q. Well, I mean his predecessor? A. No, I described that before. They place inserts in the concrete, if it happens to be a concrete building, that allows the spacing of the stringers promiscuously.

Q. You have never known of any case where an industrial building has been laid out where the machines were definitely located before the building was put up? A. No.

Q. What buildings have you constructed, Mr. Mitchell, around here? A. What buildings?

Q. Yes. A. Sheffinghouse Brothers, Brandes Radio, Quimby Pump, Essex Smelting & Refining, and Automotive Equipment Company.

Q. Can you give us the approximate size of those building structures? A. The Sheffinghouse plant was a one-story brick constructed building 150 wide and 470 feet long.

Q. What did they manufacture? A. Corrugated paper boxes. Brandes was of similar construction, 150 feet wide and 400 feet long. Quimby Pump, I believe, was about 112 feet wide and 200 feet long. We are now putting on another 100 feet on that building. The Automotive Equipment is 90 by 110, three story reinforced concrete.

Q. What did you rebuild down there after the fire in Igoe Brothers plant, Mr. Mitchell? Which building? A. I believe it was H.

Q. That is the little warehouse? A. I am not sure of what they are doing there, or what they label that now.

Q. Was that a repair job or a rebuilding job? A. It was rebuilding, part of the walls had to be removed, and reconstructed, and the trusses placed on and roofed.

Q. How much of the wall came down? A. That varied; part of it was all the way down, as I recall some of it was up as high as ten feet.

Q. Some of it was up as high as ten feet? A. I should judge at points there.

Q. Hadn't that been used prior to the fire as a warehouse? A. Prior to the fire, as a warehouse?

Q. Yes. A. I couldn't answer.

Q. You don't know what it has been used for since the fire? A. No.

Q. Do you know whether there has been any machinery put up to use in it or not? A. I believe that there had been, if my memory don't fail me. I was in there a couple of times and saw a couple of machines.

Q. As far as you know, it was Building H that you repaired and rebuilt? A. I believe that was building H.

Q. Was that work done by you on a contract price or cost plus basis? A. It was contract price.

Q. I understood you to say you had the detailed estimate upon which your statement of how long it would take to rebuild was based? A. Yes.

Q. And your progress chart? A. Yes.

MR. VANDERBILT:—Any objection to my examining these and going over them with our expert?

MR. GILHOOLY:—None whatever.

MR. VANDERBILT:—I would like to suspend, Judge, until we have an opportunity to do that. I am sort of up against it as far as tomorrow is concerned, because Robinson is in the hospital with appendicitis.

THE MASTER:—You have other witnesses?

MR. VANDERBILT:—I am through.

THE MASTER:—Pardon me. Mr. Gilhooly, you have other witnesses for tomorrow?

MR. GILHOOLY:—Yes, I have. I can put on another short witness now.

THE MASTER:—We will sit for ten minutes, while we are here.

PETER IGOE, recalled.

DIRECT EXAMINATION

By MR. GILHOOLY:

Q. Mr. Igoe, there has been some testimony brough out by Mr. Dougherty and Mr. Reilley, Mr. Blount and Mr. McCrossen that the machinery and equipment which you had in your plant before the fire was, for the most part, obsolete. What can you tell us as to the fact of the machinery being obsolete? A. 22 per cent of that machinery was built and put in there in 1924.

Q. Was that modern equipment? A. Modern as well as we could put it in at that time.

Q. And with respect to the balance of the equipment, was that obsolete equipment, or what have you to say to that? A. We had one bench in there about ten years old; another one about twelve. The oldest of the big benches was 22 years old.

Q. And were they in good working order? A. Yes, sir.

Q. And were they serving all practical purposes? A. Yes, sir.

Q. From your experience in the wire and nail business, would you say that they were adequate for the purposes required? A. Yes, sir, absolutely.

Q. Now, how about your nail machines in general? Were they obsolete? A. No, sir, they were not.

Q. There has been quite a distinction made between these wood benches and steel. A. Well, I am glad to answer that. When we started in business 35 years ago, previous to starting in business, twelve years before that, I had been brought up on wooden benches, and naturally we liked them. We started in business and Fallston of Pennsylvania prevailed upon us to put in an iron bench and we did. And I think it was the first iron bench in the East. We had all kinds of trouble with it and threw it out and discarded it in 1913,—in 1914—in 1914.

Q. Mr. Igoe, in your experience in the wire and nail business, have you actively worked in all departments of the business? A. Yes, sir.

Q. From start to finish? A. Yes, sir.

Q. And your experience has been over how long a term of years? A. 47 years, I think.

Q. And in addition to being an executive, you have actually worked in all branches of the company? A. In the mills all around, not as a mechanic, mind you, but I have been all through the mill.

Q. Mr. Louis has testified to a continuous wire-drawing machine. What has your experience been with them? A. 1907, I think it was, a man by the name of

Horton invented a continuous wire-drawing machine. I think it was the first machine of the kind that was used for drawing steel wire rods. He put it in our mill for demonstration. He had one of the large sizes, an intermediate and two smaller ones, I should say, 75 per cent of all the wire manufacturers, or those interested in it in the country examined that machine. He only sold to one of them. He also built a mill up in Buffalo equipped with that style of machines, and the concern failed. I might say that the concern that bought them failed and he concern that built them failed.

Q. Mr. Igoe, the mere fact that a plant does not have this type of machinery in, would you say that they were not up-to-date? A. Well, if it is so, then 85 per cent of the mills in the country are not up-to-date.

Q. In other words, do I take it then, that this is a process which has not been received satisfactorily generally by the community? A. It has not.

Q. I am speaking now of these continuous wire-drawing machines. A. I am talking about continuous wire-drawing machines.

Q. Is that the kind of machine that Mr. Louis is interested in? A. That is the kind he tried to sell us.

Q. Mr. McCrossen has testified, Mr. Igoe, that he could obtain all the necessary tools to go into production, including the manufacture of specialities within a very short time after they were used. What has your experience been in that regard? A. I don't see how any mill could exist and make money by taking orders for special goods and then going outside to get their tools made.

Q. What do you have to do? A. We have to make them ourselves and try them right in the mill. We fre-

quently start our machine on these special nails and then send samples to our customers to see if they are right or not.

Q. Mr. Igoe, Mr. McCrossen testified to the fact that he would have no difficulty in getting men right around in this locality to work in a plant of your kind to make nails and wire? What is your experience in that regard? A. We know it is very hard to get skilled men, especially on the class of work that we were doing, and we know that we kept several men on and do so today, did for two or three years afterwards.

Q. What did you keep them on for? A. So that we could have them when we were ready to use them.

Q. Are you familiar with the character of products that you produced after the fire? A. I was.

Q. Were they of the same character of those produced before the fire? A. They were not.

Q. Where was there any difference? A. They were common products and we could not make any money in common products. If we could, we would have a big mill in the East.

Q. What do you mean by common products? A. I mean base sizes, the commonest wire that is made.

Q. And when you say you have not been able to make any money on common products, do you base that on your experience in the business? A. Certainly.

Q. Can you tell us approximately the percentage of common products and the percentage of specialized products which the company was manufacturing between January 1st and April 9, 1925? A. That would be hard to say, because we did not try to make any common products. We kept away from it, and the only way we

made common products was when somebody around here wanted something in a hurry and we got what we call a long price for it. We could not make common products and make money on it.

Q. But you don't know the approximate percentage? A. I could not tell you. We only made common products when we did not have anything else to do.

Q. Well, in comparison to the specialized products, how did it compare? A. That is a pretty hard matter to say, but I should say 75 to 80 per cent of the specialized and 20 per cent of the other.

Q. You find from your practical experience, you make no profit on the common product? A. Couldn't do it only when we can get the long prices for it.

Q. After the fire did you make any extensive amount of specifications, Mr. Igoe? A. We didn't do it. We had no annealing capacity and you have to have annealing capacity to make good wire.

Q. You didn't have that? A. No, we did not have that.

Q. Mr. Igoe, Mr. Louis testified that he would be horrified if he heard that your company made a profit with the facilities that you had and that there must be something in the figures. What have you got to say to that with respect to the figures? A. I would say it was an insulting remark in the first place, because I think our books show what we made.

Q. And the profits which your books show are beyond a doubt, are they not, the real profits? A. Beyond a question. We are not paying taxes on anything more than we have to report as profits.

Q. Did Mr. Louis ever try to sell you— A. Oh, yes.

Q. Do you know, Mr. Igoe of any cases where the type of machine Louis was selling was tried and later discarded?

MR. VANDERBILT:—I object to that as hearsay, unless Mr. Igoe knows.

Q. Do you know of your own knowledge? A. Mr. Louis came to us and wanted to ship us two of his machines that were tried out in Johnstown, and I assumed they were rejected; they were testing them up there because they were going to put up a big mill at Sparrow's Point. They were trying to see which would be the best equipment to put in.

MR. VANDERBILT:—I move to strike that because it is based on assumption.

Q. Did Louis tell you that? A. I think he did. I won't say he said they were thrown out, because he would hardly tell me that.

Q. If you were to reconstruct your plant tomorrow, Mr. Igoe, in all its details, would you reconstruct it just as you had it before the fire? A. If I wanted to do justice to the insurance company and get into profitable manufacturing at the earliest possible date, I would have to do that, and I would do it for ourselves as well, because we knew that machinery, we knew we could start it up and make money on it, in the quickest possible way of any machines put in there. We did not think of putting in the Morgan continuous machine.

Q. Well, if you were to use the Morgan continuous machine, would you feel that you would be experimenting? A. Absolutely experimenting.

(At this point an adjournment was taken to Tuesday, July 30, 1929, at ten-thirty a. m.)

IGOE BROTHERS, Inc.

and

NATIONAL BEN FRANKLIN FIRE INS. CO.

Newark, N. J., Tuesday, July 30, 1929.

10:30 o'clock a. m.

(Met pursuant to adjournment.)

Same appearances.

MR. VANDERBILT:—If the Master pleases, Mr. B. F. Robinson, who was one of our witnesses on the subject of rebuilding the plant, is in St. Barnabas Hospital, and the other witness we had on the same subject, Mr. Marshall N. Shoemaker, is on his vacation and won't return until August 10th, so counsel have agreed to stipulate that the testimony heretofore given by Mr. Benjamin Robinson and Mr. Marshall N. Shoemaker shall be regarded as addressed not only to the Fletcher-Thompson reports but also to the testimony given yesterday by Mr. James Mitchell and have the same effect as if specifically addressed to his testimony on the length of time it would take to rebuild.

MR. GILHOOLY:—Then I take it that you don't want to cross-examine him further.

MR. VANDERBILT:—No.

PETER IGOE, resumed.

DIRECT EXAMINATION (CONTINUED)

By MR. GILHOOLY:

Q. Mr. Igoe, yesterday Mr. Hastings gave as part of his testimony that business conditions in 1925 after the fire were on the down grade and not as bright as the conditions which existed before the fire. Did you hear him so testify or words to that effect? A. I may have been away; I was out a great deal of the time while he was giving his testimony.

Q. From your experience in the business, what have you to say to that? A. The steel business in 1925 was very much better than in 1924.

Q. You said the steel business? A. The steel business and wire business, I mean.

Q. That includes your own business. There was some testimony pertaining to obsolete machinery. I would like you to explain to the Master the Sleeper-Hartley nail machines. Did you have such machines? A. I think Mr. Blount testified that he had very few of them in operation in this mill. The only mill that I know of that even tried them was the Wickwire Steel Company at Buffalo. I saw about three of their machines in their

plant in 1920 and they could not run them. I should say in 1922 or 1923 Sleeper-Hartley wrote us that they had a new wire nail machine; they would like us to test it out for them. We told them we were not in the market for any nail machines, but if they wanted to send us a machine that we would be glad to put it on the floor and run it and tell them what we though of it. The machine proved a fairly good machine, but had a number of defects in it. We wrote them and told them that we though if they would send their superintendent into our plant for a day to watch the operation of the machine, they could improve it very much. They sent their man and I presume made the changes. I haven't heard anything since from them. I know we shipped the machine back to their plant at Worcester.

Q. You are not using this type of machine? A. Absolutely not.

Q. There has been testimony given by Mr. McCrossen, Mr. Dougherty, Mr. Reilley, I think Mr. Blount, pertaining to tooling up and tuning up wire-drawing and nail machines, and they have testified that the tooling up could be done while the machines were being manufactured. What have you to say to that? A. Now, in tuning up machines or transmission machinery, it is customary to run all of the machinery light without any power on them—I won't say any power on them whatever, just enough to run the light machinery. That is done in order to see that the bearings are working nicely and get them smoothed up as well as they can before they put the actual work on them. Now, then, after you put machines in actual operation by your men working on them, our experience has been that it takes from two to three weeks before we can get full production out of

our men on those machines. Now, that includes the tooling and tuning because you cannot tune the machine up properly until you tool it. You take a wire bench. It is usually built in units of eight blocks. Those eight blocks are run by a motor or a steam drive, whatever you may want to put it. There may be three men or four men working on those eight blocks. If one of those blocks are down, anything happens to one of those gears, those three men are idle while that gear is being fixed, and that is the reason it takes so long to get into full production.

Q. Mr. Igoe, there has been some testimony about wooden frame benches not being economical and that they are far inferior to steel. A. Well, I can answer that in this manner: We built a wooden frame bench in 1925 for drawing wire rods, which is about as heavy a work as you can put on a bench. We did not have one dollar's worth of repair on that bench, on the frame of the bench I am talking about, from the time it was put in there until the fire. We had a bench similar to that only a trifle smaller that we put in in 1920. I can say the same thing about that. We had a bench that was put in there in 1904 when we first started in Newark, that the wooden frame of that bench was practically as good the day of the fire as it was when we put it in there, and we had very little repair work on it, and my opinion is that it would be less repairing for the first ten or fifteen years at least than an iron frame work. There has been some talk here also about its being hard to keep in alignment. It is just as easy to keep in alignment, and in fact easier, if the bench is put in right in the first place, and that is the way we try to put in all our machinery.

Q. Now, Mr. Igoe, in your opinion, was it practicable to use the equipment that you had at that time? A. Mr. Gilhooly, as I testified yesterday, we would not be doing the insurance company justice or we would not be doing ourselves justice if we attempted to build a mill after the fire with any other machinery. We knew that machinery well. We knew how long it would take to get it in profitable operation. We did not know how long it would take to get Mr. Louis' machine in operation nor nobody else does in the country today, and I will go on record and challenge Mr. Louis to refute that statement.

Q. Mr. Igoe, there was some testimony about Buildings F, G, H, and A. Will you tell us what was in those buildings? A. Building F was used entirely for manufacturing and storing of manufactured goods. Building H, a two-story building, the upper floor was used entirely for manufacturing. The lower floor was used for storing wire, for manufacturing, and also storage for manufactured goods. Building G, 25% of this room was used for storage for empty kegs with the manufacturing department and at least 25% was used for storing rivets and nails which were manufactured, making at least 50% of the building used for manufacturing or manufacturing purposes. Building A was used for the office, part of which was for the manufacturing department. We also had the packing machine in this building and some of the manufactured products were also stored in this building. I think it would be safe to say that we at least used 33-1/3% of this building for manufacturing the goods.

Q. Mr. Igoe, I was questioning you about continuous wire-drawing machines at the close of yesterday's testi-

mony, and I think that you had something more that you desired to say. A. Yes, sir. I have. I think I testified yesterday that we used a continuous machine in our mill about 1907. In 1924 we purchased three continuous wire-drawing machines from a man in Worcester, Massachusetts, a patentee by the name of Hobson, with the understanding that he should put one of those machines in our mill and demonstrate it to our satisfaction. He was there for about six months and we had to throw it out. We sent it back to him about three or four months before our fire. It was an absolute failure.

Q. And that is the machine that Louis is advocating; is it not? A. A similar type.

Q. Mr. Igoe, after you have installed your machine and your power transmission is in order, and your machines are in alignment, is there anything else that is necessary before you get your mill going? A. We put our men to work, as I think I explained that question a little while ago, on Louis' continuous machine; his own advertisement, in March, 1929, in the wire magazine of this country, claims that he has 332 of his wire blocks in operation in this country. There is four blocks on a bench. He testified there was 250 wire mills in this country. He has got some of his machines in about 28 of them,—26 of them. That don't represent from 5 to 10% of the machinery that is used in this country for doing that class of work. The real larger mills have none of them.

Q. Will you please tell the Master the different types of nail machines that you had at the time of the fire. A. We had three Tiffin wire nail machines. We had three what are known as the Glader or Ryerson nail machines.

Both of those machines are standard machines and are in most of the mills in the country. We had five Brooklyn machines, which was the first real nail machine that was built in this country and is in many of the mills today. We also had twenty-one what is known as the German or Spring type machine. These machines are in many of the older mills of the country and are considered the best on which to make special nails.

Q. Are they considered obsolete machines, Mr. Igoe? A. I wouldn't call them so.

Q. Did they meet with all of your requirements and necessities before the fire? A. Yes.

Q. Mr. McCrossen has testified to a number of these stringers, Mr. Igoe, as being just in many instances less than a wagon load. What have you to say of the stringers that were in the plant before the fire? A. On a plant constructed as ours was, and which is pretty much the way most of the factories are constructed, with a 15 foot span between trusses or girders, it was absolutely necessary to have stringers just as we had in that mill, and that list of Miller & Maltbie's on the back pages of those different books is the correct list for the stringers for putting up the shafting that was used in that mill.

Q. Mr. Igoe, I don't know whether I asked this yesterday but I am going to ask it because I think it is important and it is my last question. At the time of the fire, could you get millwrights at a wage scale approximating that which was paid to carpenters? A. I think as a usual thing, I would say millwrights are cheaper than carpenters. They usually get steadier work than carpenters.

Q. You have found that from your own experience? A. Well, we used both millwrights and the carpenters.

MR. GILHOOLY:—You may cross-examine.

CROSS-EXAMINATION

By MR. VANDERBILT:

Q. Mr. Igoe, this Morgan Construction Company that Mr. Louis is connected with is the largest manufacturer of wire nail equipment in the United States; is it not? A. They do not manufacture wire nails at all, Mr. Vanderbilt, and I question whether he ever sold any of them.

Q. The largest manufacturer of wire machinery? A. I couldn't say for that. There is another very large machinery builder out in Cuyoga Falls, Ohio. That is a much older concern than he is. I am inclined to believe that other machinery concerns build more machinery than Kenneth Louis' concern.

Q. At any rate, the Morgan Construction Company is one of the largest? A. One of the largest. There is very few of them in the country.

Q. And they build both the continuous machines that you refer to and also the other type, do they not? A. Unless they have discontinued the other type. They did formerly build it but they are talking particularly now on their continuous machine.

Q. Now, the continuous machine that you had, I think you said three of them, was built by a man named Hobson. A. No, I didn't say three; I had one in the place; we ordered three.

Q. Pardon me. I tried hard to get the notes and you were going pretty fast. A. Sorry.

Q. It is all right. It was built by a man named Hobson from Pittsfield? A. No. He was originally a Worcester man, but the Pittsfield party left him to his sorrow.

Q. And he was the typical inventor type. He did not make a go of his proposition. A. I wouldn't say that because he worked for the Wickwire-Spencer Steel Corporation for many years before he went out on his own.

Q. Well, now, weren't you really led into buying that machine and having it placed in your factory due to the fact that he was an old friend of yours? A. No, sir, I never met him before he came into the place there and tried to sell his machine.

Q. Now, that isn't at all the same machine as the Morgan machine; is it? A. I wouldn't testify on that exactly. I don't know what difference in construction there is. I don't think there is very much difference.

Q. Well, there is at least this difference, that the Morgan machine is still being manufactured and sold and put in plants and the Hobson isn't. A. I think you had better qualify that statement about being sold. There is very few of them being sold today.

Q. Well, are you familiar with this plant out West testified to by Mr. Louis? A. Mr. Vanderbilt, that mill was only built the latter part of last year. I could only testify from hearsay and I would not want to do that, but I am going to see it this fall, and I will be better able to tell you then.

Q. You heard Mr. Louis testify that he had installed machinery in that plant. That is a plant, as I think he testified, about three times—the present size is three times the size— A. I think he has six or eight of his machines there.

Q. In your plant? A. No. I say I think he has six or eight of his machines in the mill there; now, if you want, I will testify to my knowledge of what I know about that plant. I know Mr. Sheppard, the general sales manager, and Mr. Allen, the president of that company, either the president or the vice-president but he is the general manager. Do you want me to go ahead?

THE MASTER:—What's this, hearsay?

10

THE WITNESS:—No, sir. It is right direct from these men I am talking about.

Q. You have never seen the plant yourself? A. I haven never seen the plant, no, but I will say that I had something to do with the equipment that is in that plant.

Q. But you are not prepared to say, are you, Mr. Igoe, that Mr. Louis' testimony about the construction
20 of that plant wasn't true? A. I wouldn't say that, but I would say that he has not given a true history of that plant since it started operation, in my opinion. I wish you would let me tell about what I talked to Mr. Louis or Mr. Sheppard and Mr. Allen about.

MR. VANDERBILT:—That is hearsay.

THE WITNESS:—It is not. I talked to them direct.

30 Q. I know, but I have no way of contradicting them, so I am not going to ask those questions. A. Because I had something to do with the machinery that went in that plant and that, by the way, may have something to do with Mr. Louis' testimony.

MR. VANDERBILT:—Now, I have to move to strike out that part of the answer.

THE MASTER:—Strike it out.

Q. Mr. Igoe, you testified yesterday that 22% of the machinery was put in new in 1924? A. Yes, sir.

Q. Is that 22% by cost or by numbers of machines? A. By numbers of machines.

Q. And how did you arrive at that, by taking the total number of all the machines and figuring what part was new which you purchased in 1924? A. Yes, sir.

Q. Can you go through the machinery list, Mr. Igoe, and by referring to the various machines, tell us whether they were purchased new or second-hand, and at what time you purchased them approximately? A. The entire mill, you mean?

Q. Yes, I mean— A. I can pretty nearly tell you that from memory, Mr. Vanderbilt.

Q. Can you? A. Yes. I will start if you want me to.

Q. Well, if it won't take too long I would like to get that if we can. A. In Building S, we had two blocks bull frames purchased from the Vaughn Machinery Company in the latter part of 1923. We also had eight rod blocks built by ourselves in 1923. We also had sixteen inch blocks in that building built by ourselves in 1925 put in the day we had the fire. In building E, we had a nine block bench built by the Vaughn Machinery Company purchased new in 1904, that is, we started to operate it in 1904. We may have purchased it in 1903. We had another bench of ten blocks built by ourselves in 1914 or 1915. We had another bench something

similar only a trifle smaller, as near as I can recall, which we built ourselves in 1911 or 1912. We had a bull block for drawing wide wire. I think we built that ourselves, I would say, in about 1906 or 1907. There was fourteen other blocks that we purchased from Duncan McKenzie in Trenton I should say about 1899. We had another bench that we bought from some concern in 1905—I will say 1904 or 1905—six blocks. By the way, that last six block bench was in Building E. The others were Building D. I think I had better correct that. The last was E; the others were D. That would leave, I should say, about yes, no, wait a minute, 18 more 16 inch blocks in Building D. I am not sure whether we built those ourselves or not.

Q. Do you recall approximately when you got them or built them? A. We got them in 1906, I would say, 1905 or 1906. There were several other blocks, probably 24—16 inch blocks in Building E that we bought from the old Stewart Wire Company in Easton, Pa. They were in operation and running at the time of the fire. I don't know how old they were at the time we got them.

Q. You bought them in 1916? A. 1906. I think it may have been 1905. It was after we came to Newark.

Q. Does that cover the list? A. I think that ocvers it pretty nearly.

Q. Now, what about the age of the nail machines? A. Seventeen of those nail machines were built in 1894; I think it was 1895. We had three Glader machines, I should say. They were built in 1923 or 1924, something around that. The Tiffin machines were probably built about 1900, two of them; one of them was built about 1919. The Brooklyn machines were probably built in

1898 or 1899, but a nail machine, if it is kept in good repair, is as good as new twenty years afterwards as it was the day it was bought.

Q. And were these various nail machines that Mr. Igoe bought new or second-hand? A. We bought three of the German nail machines, I think, second-hand. They had only been in operation three or four years when we bought them. The Tiffin machines, one of them was not operated at all. That was absolutely a new machine. The other two were probably operated a year. The Glader machines, I think, possibly were operated about a year. I think Mr. Smith, who is in the Courtroom now, could tell us better about that than I can.

Q. How old were the Hassall machines? A. The Hassall machines, I should say, were built in about 1898 or 1899, maybe 1900.

Q. Were they new or second-handed? A. They were second-hand when we bought them, but I am telling you when they were built.

Q. When were these German nail machines put in the plant, Mr. Igoe? A. I said we had seventeen of them built when we started the plant. We had them built under our own specifications, built them ourselves.

Q. When was the starting of the plant? A. 1895.

Q. How about the cold rollers; when were they put in? Were they new or second-hand? A. The cold rolling mills, I think most of those were second-hand, but were good machines purchased down in Ashland, Kentucky, I think, or down there somewhere.

Q. When, Mr. Igoe? A. Oh, I should say 1915 or 1916.

Q. When were the cold headers and rivet machines

purchased, Mr. Igoe, and were they new or second-hand? A. We purchased four—let me see—four new machines, I am sure absolutely new. I think possibly the rest of them may have been purchased second-hand, but, mind you, that does not take anything from the value of the machines for valuable operation. They were good machines or we would not have bought them.

Q. When were they bought, do you recall, Mr. Igoe? A. I should say they were bought around 1918 or 1919, somewheres during the War time.

Q. Now, when did you purchase the Shuster straightening or cutting machinery? A. That would be a hard matter for me to say, Mr. Vanderbilt. We purchased them right along; some of them were bought and some were second-hand. I will repeat the same as I did before that when we bought second-hand machinery, we had practical mechanics that could look them over and tell us whether they were a good machine.

Q. But isn't it a fact that most of them were bought second-handed? A. I would not say that, but I don't think it takes one iota from the value of the machine if they were bought second-handed.

Q. Back in 1902 or 1903? A. No, sir. I will say that machines of that class, if kept in good repair,—and that is the way we tried to keep our machinery—are just as good thirty years after as they were the day they were put in there.

Q. Will you look over this letter, Mr. Igoe, and tell me whether or not it is a correct statement of your purchases with reference to those Shuster machines? I think here is another letter from them that bears on it too. A. I assume they are all right. I am surprised we bought so

many new machines, Mr. Vanderbilt. I didn't think we had.

Q. I mean, does that gibe with your recollection as to what you purchased from the Shuster? A. Their records would be better than my recollection, and I should say that I don't think they would write you that letter unless we had purchased those machines.

MR. VANDERBILT:—I ask to have the letters of June 8, 1925, and August 12, 1925, marked.

(Received and marked Exhibits D-22 and D-23).

Q. Now, when were the boilers purchased, Mr. Igoe, and were they new or second-hand? A. Two of them were purchased in 1904, were absolutely new and the best we could buy at the time. The other one was put in, I would say, about 1912. It was a better boiler than we bought new.

Q. How about the engine? A. The engine was absolutely new, built by the Watts-Campbell Company and the best engine we could buy.

Q. When was that bought? A. In 1904, when we started here. The Watts-Campbell engine was the best engine in the market at the time.

Q. Was one of these boilers purchased second-handed? A. Yes, I can testify to that.

Q. Which one was that? A. The Armstrong boiler.

Q. What were the names of the others? A. The Coatesville was the one bought new and the other bought second-hand.

Q. In the engine room there was a Weston engine. When was that purchased, Mr. Igoe? A. That was

used for running electric light, I think, wasn't it? I guess you know more about those things than I do (to Mr. McCrossen).

Q. When was that purchased, do you know? A. That was purchased, I would say, in 1905 or 1906, before we came over here anyway.

Q. Was it new or second-hand? A. Second-hand.

Q. Now, with reference to the machine shop, can you tell us the age of that machinery and whether it was purchased new or second hand? A. Second-hand.

Q. Now, with reference to the machine shop, can you tell us the age of the machinery and whether it was purchased new or second-hand? A. This is taxing a fellow's memory pretty well, I will tell you.

Q. Well, now, referring to the Davis engine lathe. A. What size?

Q. No. 116, 33 inch axial swing, 16 foot bed; 5 step. A. I think we purchased that about 1906.

Q. Was that new or second-hand? A. That was a second-hand machine but had been used very little. I knew just the plant it came out of; in fact, we purchased the plant.

Q. Is that concern W. R. Davis Company still in business, do you? A. I do not know.

Q. Now, how old was the Reed engine lathe in the machine shop? A. We purchased the Reed—let me see, what size was that?

Q. Eighteen inch centers, 20 inch axial swing and 8 foot bed. A. I should say we purchased that about 1907.

Q. Was that new or second-hand? A. No, sir. That was second-hand. We purchased the shop that was in also. Used very little when we got it.

Q. Bickford drill press. A. What size?

Q. Thirty-one inch big gear sliding head hand wheel 30 inch diameter table. A. Well, I am not quite sure about that. We had one big one in there was bought second-hand. That was a radio drill, but we had one Cincinnati drill that we bought new.

Q. How about the William Garden & Son, drill press; when was that purchased? A. What size was that?

Q. Three spindles 14 inch sliding head. A. Well, I don't know when that was purchased, but I will say it was second-hand when we bought it.

Q. What is that? A. I say I could not say when we purchased that, but it was second-hand no doubt when we bought it.

Q. Do you know whether they are still being manufactured? A. I couldn't tell you, Mr. Vanderbilt.

Q. Landis Machine Company bolt threader; when was that purchased? A. That was a new machine and I think would be purchased along in 1917 or 1916, somewheres in there.

Q. Power point press of E. W. Bliss. A. We purchased that from John Hassall in Brooklyn, and I think he had it about a year. I think we got it probably in 1913 or 1914, something like that.

Q. Woodward & Rogers drill press, three spindles size 14 inch sliding head not geared. A. I would have to have time to answer the same as I did on the other one. I don't know when it was purchased.

Q. Was that new or second-hand? A. Probably second-hand.

Q. Garvin double end steel threading machine. A. I think we purchased that new .

Q. About when, Mr. Igoe? A. That would be 1908 or 1909.

Q. And the Reed engine table engine lathe 16 inch axial swing 6 foot bed, 5 step. A. We had two lathes in there, I am sure we bought new; had not been used when we got them.

Q. About when would you say, Mr. Igoe? A. I might say 1910 or 1911, somewheres in there.

Q. Then there is a Waterbury thread roller; was that new or second-hand? A. That was second-hand, I think.

Q. Bought about when? A. 1918 or 1919, or maybe later than that. I think probably that would be 1922 or 1923.

Q. Was practically all of the rest of the machinery in this machine shop aside from what I have enumerated purchased second-hand? A. You have enumerated pretty nearly all of it, Mr. Vanderbilt.

Q. Well, there was a drill press. A. You have said three or four drills. I don't think we could get many more in here. I think you mentioned five drill presses.

Q. Blake & Johnson thread roller, one cylinder grinder, one Nelson power press, one Mansville, No. 3½ thread rolling machine, one Zeh & Hohneman Power press, one Cataract bench lathe, one Kempsmith Milling machine, and one No. 20 Bliss power press. A. I testified on that.

Q. There are two of them, I think, Mr. Igoe, and then there is finally one power press without any name on it. Weren't all of those machines purchased second-hand? A. I would say most of them anyway, Mr. Vanderbilt, were purchased second-hand, but I want to say right now that we have good mechanics at our plant, and they in-

spect and look over all machinery that we purchase before we buy it, and I can say right now that they are many times better than if we bought a new machine, because they are broken in and ready for operation, which new machines are not.

Q. You stated, Mr. Igoe, that the Vaughn Machinery Company were probably the leading manufacturer— A. I am sure they are leading wire machinery builders today because they have got the best machine on the market.

Q. Now, I notice at the end of Exhibit D-17, they make this statement: "The above equipment is priced on construction as we would furnish it today. All iron and steel construction, is quoted on wrought frames, as wood construction has been discontinued for at least 15 years." Is that a correct statement? It is on the last page, Mr. Igoe—"in manufacturing practice to date?" A. That is all a matter of opinion, Mr. Vanderbilt, as to whether iron frame or wooden frame is the best construction, but I will say to you now that we could have got wooden constructed benches built quicker than we could get iron at that time. We are not agreeing to the fact that we consider—there hasn't been any testimony yet brought out that the iron frame is a better construction than the wooden frame. The testimony that has been given by the men on your side have all been sellers of this class of machinery, none of them has been in the practical operation of a mill, never run a machine, never worked on one, so that I believe a man that has been running a mill is better qualified to testify than any of those fellows.

Q. I refer also now to a letter of June 26, 1925, from the Vaughn Machinery Company, and ask you if that is—the last paragraph there—is a correct statement

of fact as to what their manufacturing consists of? A. Yes, but let me tell you when I stated that they were builders of the best machinery in the country today for wire-drawing, it was an entirely different type they are bidding on here, entirely different type. But what I am saying is that the best machine in the country today is the motor block built by them. There is no testimony in here that that has been—in 1924—that was not to a point where anybody would put it in operation, I don't think.

Q. Now, Mr. Igoe, most of these manufacturers of these machines are building with iron and steel frames, aren't they, today? A. Yes, sir, they are. I think for that type of machinery they are.

Q. Now, do you mean to convey the impression that they are flying in the face of the wishes and desires of their customers, the wire manufacturers? A. Not at all, Mr. Vanderbilt, but you know the tendency these past years is to conserve wood all they can, and to use iron all they can, and I believe that is the principal reason why they are using iron. It is not because it is cheaper to operate it or cheaper to set up or cheaper to do anything with. Anything you can do with an iron bench you can do with a wooden bench, and I believe you can do it better and cheaper.

Q. Didn't you put a Vaughn Steel bench in the new building S, bull block? A. Yes.

Q. That was steel construction? A. Yes, because we could not get anything else at that time, and we lived in fear for all the trouble that was going to cause us in years to come.

Q. Have your fears materialized? A. We did not get a chance, the fire came along.

Q. Those were motor driven, weren't they? A. They were not direct motor driven, we had to put a motor ourselves in to drive those blocks.

Q. Weren't they driven by a silent chain with the motor outside the building? A. Yes, we put that all in, that did not go with the block, that was our equipment.

Q. Didn't you use shafting on that? A. There has to be shafting on all wire benches.

Q. Mr. Igoe, what was there that would prevent your company if it started up after the fire from manufacturing specialities? A. Nothing but to get the machinery and tools and everything ready for it.

Q. Well, the same basic machines would be used for the manufacture of the specialities, would they not? A. What was that?

Q. The same basic machines would be used for the manufacture of the specialities with different dies and different accessories, would they not? A. They have to be kept in much better repair than machines for ordinary work.

Q. What I mean, they would be the same machines but with special dies, specially kept and specially maintained? A. You are talking about nail machines?

Q. Yes, about these peculiar nails we had a box of? A. Oh, you couldn't make those special nails on all the machines that we had in the place, then.

Q. Well, that is a nail machine on which they were manufacturing which you had previously bought from various dealers? A. Most of our special machine nails were made on the German or blow machine.

Q. Some of them were made on American machines, were they not? A. Our large nails were made on the Brooklyn press machines.

Q. And couldn't the American machines have been adapted to the making of those specialities, with the use of special dies? A. We could have made some of them, so we did, but some of the nails made on those blow machines could not be made on the press machines made in this country.

Q. Now, with reference to the question of labor, Mr. Igoe, a great percentage of your labor is men who have been down there with you for a very considerable number of years? A. A number of them are, yes.

Q. And aren't there also men skilled in the wire business available from other plants around here? A. In 1925, it was exceedingly hard to get other wire or nail operators.

Q. Well, there are a considerable number of other wire plants? A. We would have had a very hard time to replace some of the men we had working with us for those years. They were used to our work, both in the wire-drawing department and in the nails and specialities.

Q. But there are a considerable number of wire mills around here that might have been drawn on for some labor, are there not, like Driver Harris and others? A. Well, they had a different class of work from ours; they may have one or two men over there that could do our work, but we would have to break them in. They are not accustomed to do the kind of work we do.

Q. Well, would you say that the work which these men do is skilled labor or is it something that an ordinary laborer can be trained to do by proper supervision? A. I would call some of the wire-drawing semi-skilled labor; some we had to have the skilled men to prepare the dies and tools for them.

Q. That is skilled machinists' work really? A. Not machinists' work, no. It is a distinct art in itself, preparing the wire-drawing plates to make the class of work that we do.

Q. That is skilled labor, but the man who stands at the machine, you would not describe as a skilled laborer? A. I would call it semi-skilled, but nail operators are skilled labor.

MR. VANDERBILT:—That is all.

EDWARD W. HAMILTON, recalled in rebuttal, further testified as follows:

DIRECT EXAMINATION

By MR. GILHOOLY:

Q. Mr. Hamilton, Mr. McCrossen testified on page 294, the following question—

"Q. Turn now, if you will to page 10 of the Fletcher-Thompson report of building or section B. What, in your judgment, would be the reasonable time to take for miscellaneous repairs on boilers? A. Two men could go it in about a week—could do it in a week.

"Q. And Fletcher-Thompson charge up how much? A. Two men, two weeks."

Mr. Hamilton, I would like to ask you the character of the miscellaneous repairs on that boiler, which would

require you, in your opinion, to allow two weeks? A. The two boilers had been quite considerably damaged by the fire and burning of the buildings. The fronts and all the equipment on top of the boilers and the settings were seriously damaged to the extent that the fronts would have to be removed and the front half of the setting anyway, completely rebuilt to put in serviceable condition. This, I assumed, would take for the two boilers considered the time allotted.

Q. Two weeks? A. Yes.

Q. Mr. McCrossen further testified, page 295:

"Q. Refer to the next item on page 10, building or section C, what, in your judgment, would be the fair amount in man days and dollars for the work referred to there? A. Building C on page 10—just a moment, sir, until I figure this out. I estimate to repair the—to install the equipment in building C ,a total of 174 man days.

"Q. Fletcher-Thompson's estimate is? A. I do not know what that is; all it says is, "reinstalling two engines would require six weeks' time to complete this work as would customarily be re-erected by the engine builders." That is meaningless.

"Q. It does not tell the number of men, in other words? A. No, sir, it is not a complete sentence.

"Q. What did you give as the estimate on this? A. 174 man days, total."

Now, I ask you if that statement of yours it would take six weeks, is meaningless, or what does that refer to? A. When an engine and power unit is purchased, it is usually contracted for, erected and in running order. The erection and the putting of the machine into running

order is entirely a matter of the builders, and they are specially trained and equipped men, and I have seen many engines erected in my judgment where the time estimated to handle those two engines and put them into running order would be as stated there.

Q. That is six weeks? A. Six weeks. Three weeks at least per engine.

Q. Now, on page 300, referring to page 15 of your report, items 94 and 101, consisting of annealers and mufflers, Mr. McCrossen testified that they were not completely destroyed by the fire, but were only partially damaged, and on page 302, Mr. McCrossen testified that in his opinion, it would only require 92 man days to repair them as against 268 days claimed by Fletcher-Thompson. Now, I ask you what was the condition of those annealers and what did they consist of, and if you can, explain the wide difference between 92 man days given by him, and the 268 given by you?

MR. VANDERBILT:—Now, I object to this line of questioning as not being proper rebuttal. It seems to me it is just going back in a reiteration.

MR. GILHOOLY:—Well, I probably have gone too far in that last part of it.

MR. VANDERBILT—Not that I object to any specific question, but it seems to me, if we are going through the whole thing, we are never going to get through. That is my only objection to it.

MR. GILHOOLY—I think it is rebuttal to this extent: Mr. McCrossen said they are partially damaged

and could be repaired, and apparently there has been an allotment for installation completely.

THE MASTER—I think you should stick pretty close to rebuttal testimony.

MR. GILHOOLY—I will so that I can save time.

A. The time allotted was based on the rebuilding of the furnaces. They are specially designed furnaces for the operation they have to perform, specially designed fire beds. They were damaged to the extent that would probably have to be torn down and rebuilt by special brick masons who understand furnace work.

Q. Would you say they were only partially destroyed? A. They were damaged to the extent that they would have to be rebuilt to be usable, they were not destroyed.

Q. And you were contemplating the complete rebuilding? A. Tearing down and rebuilding to the extent that they would be usable, that applies to the mufflers also.

Q. On page 302, Mr. McCrossen testified, refering to Section P: "how much does the first item, tumbling barrel cost to install? "A. About $15 to $18, two men, one day.

"Q. Is that a complicated piece of machinery to install? "A. No, sir, very simple; about as simple a thing as you can find."

Q. Mr. Hamilton, in giving your estimate of 89 days, did that include merely the installing of a tumbling barrel? A. No, sir.

Q. What did that include? A. Included the entire equipment for the cutting department, building B, which included tinning, galvanizing copper; these machines are very complicated, and require special skilled

mechanics to set up the furnaces and the run off and take off equipment—countershafts, and so forth.

Q. Now, referring to page 303, Mr. McCrossen testified:

"Q. The next item is a tin machine. What was the claimed installation cost of that in the original schedule?
"A. $21.16.

"Q. What is the Fletcher-Thompson estimate in man days and dollars? A. 16 days and $144.

Q. In your opinion, if Miller & Maltbie put in that claim for $21.16, is that a reasonable amount? A. No, sir. I don't think the man who made the survey understood the complication and care required in the tinning business, to the extent that that machine would have to be rebuilt to be in production order.

Q. Mr. McCrossen testified that your report was absurd in allowing the time that you did for the installation of stringers. I ask you, Mr. Hamilton, if that is an operation which in your opinion takes time to install and whether or not it has to be carefully done? A. It surely has, and in this particular specialty shop where machinery has to be set practically individually, it is not customary to install the counter-shafts until the machinery is located definitely, they may or may not be in accord with a predeterminted layout, depending on the operation going through the machine. When the machine is set, then the stringers and counter-shafts are located to the machine, particularly if they are cross belts.

Q. Were they in this case? A. There were; in some of the particular machines it would not be practical to erect counter-shafts and set the machines under them.

Q. From your experience in equipping industrial plants, do you find that the general contractor who erects the building instals these stringers, or do you find that is done as part of the transmission? A. That has been arranged both ways; on standardized equipment, where they know definitely where the stringers are to go, the contractor sometimes instals them; in 75 per cent of the cases, they are put in later by a millwright, it is regularly not carpenter work, it is millwright work.

Q. Now, there had been a considerable amount of testimony as to the length of time in which machines could be procured to replace those destroyed in the fire. I ask you, Mr. Hamilton, if you had in making your time estimate considered that you would have on hand ready for installation the necessary machinery when the buildings were completed? A. In every case we assumed that the machines were delivered at the door to be moved in.

Q. And that would be therefore when the building was finished? A. Yes, sir.

Q. And you made your estimate on that basis? A. No time was allowed for delivery of machinery.

Q. Would you call the machinery that Igoe Brothers had obsolete in your experience in the business? A. No, sir, many wire mills of this country are equipped with parallel machinery today and running.

Q. Would you call this shop of Igoe Brothers a standard shop or would you call it a jobbing shop? A. It would be called a jobbing shop.

Q. Indicating what? A. It is nowhere near large enough to make money on large lines. It would require specialities, the profits on which that would be sold would necessarily be large to make it a profitable plant.

MR. GILHOOLY—That is all.

CROSS EXAMINATION

By MR. VANDERBILT:

Q. Mr. Hamilton, when were you first down to Igoe Brothers plant after the fire? A. I will have to refer to my report on that. It was just before the report was written, it was the latter part of February, 1926.

Q. Practically ten months after the fire? A. Yes, sir.

Q. And can you tell us what steps had been taken in the meantime to protect the machinery and equipment there during the period from the time of the fire to the time that you saw it? A. To protect it?

Q. Yes. A. I could not see that anything had been done to protect the machinery; there had been part of the debris removed, particularly in building S. There was still quite a lot of it lying around in other buildings.

Q. Had the boilers been repaired by the time you got there? A. No, sir, they had not been touched.

Q. Had the boilers been removed from their original location? A. No.

Q. Do you know whether anything had been done to the annealing ovens and mufflers, between the time of the fire and the time you saw them? A. I couldn't say. Frankly they didn't look as though anything had been done.

Q. Whether they had been protected in the meantime? A. Well, there were remnants of buildings lying around there, I could not see that any special protection had been provided.

Q. Then you have no way of telling us, have you, Mr. Hamilton, whether or not the machinery when you saw it, was in the same condition that it was at the time of the fire ten months before? A. Why, no more than as a result of seeing other fires and the general condition of the machinery after the fire.

Q. Well, would you expect that from your experience in this line of business that machinery would look the same when you saw it in Februrary, 1926, as it would when Mr. McCrossen, for example, saw it in the spring of 1925? A. Very much so, yes; a little wear and tear, perhaps.

Q. The wear of a whole summer and a whole winter would not have any effect on it? A. Nothing more than a little rust, perhaps.

Q. You don't mean a little rust, do you? A. It would rust to the extent of being exposed to the weather for that length of time.

Q. And what about water getting into the brickwork and freezing the machinery, and such as that? A. There would be a certain effect, of course, from water getting into any walls and freezing, where there were open buildings.

Q. That would have a very serious effect on brick walls? A. It ordinarily does not enlarge brick walls to the extent of causing any damage, if they have been burned, it will work its way out or not be absorbed.

Q. What is the effect if refractory work is subjected to water and freezes? A. It is liable to be disastrous.

Q. Is that probably what happened here? A. Those furnaces were not entirely exposed. There was still some of the original roofs on them.

Q. Weren't at least part of the roofs exposed? A.

The original roofs of the furnaces—those furnaces have iron roofs with buck stays to hold the sides together.

Q. Side walls and doors exposed? A. Yes, they were.

Q. The tops of the boiler settings? A. Yes.

Q. And the same thing on the mufflers and the annealing ovens? A. Well, they have their own mufflers which would prevent any flooring from ordinary storms.

Q. But they are not waterproof, are they? A. No.

Q. And they are not intended to be waterproof? A. No, sir.

Q. Wouldn't ten months exposure under circumstances we have just referred to in these questions and answers have a very serious effect on all the machinery and equipment? A. I don't think the effect of the weather would be comparable with that of the fire.

Q. No, I don't mean it would be comparable, but wouldn't it be serious? A. The seriousness of it would depend on what shape they were in after the fire. If they were open to the weather by the fire—

Q. Do you know what shape they were in immediately after the fire? A. No, sir, I do not, I did not see them.

REDIRECT EXAMINATION

By MR. GILHOOLY:

Q. From what you saw of the ovens and the general conditions surrounding there at the time you made your

first inspection, would you consider it to have been good engineering judgment to have re-used the furnaces and ovens? A. Postively no. Equipment of that type is necessarily rebuilt from the ground once it is damaged, because it will not stand the heating and cooling, expansion and contraction work that it has to go through and stay in operation, without being rebuilt.

Q. Could you see any evidence of serious damage by fire as distinguished from damage by weather and water? A. Yes, sir, the walls were badly warped and so forth.

RECROSS EXAMNATION

By MR. VANDERBILT:

Q. How often are these annealing ovens rebuilt? A. Depending on the duty they are subject to, and the number of hours they are run.

Q. Well, as used here? A. Annealing ovens practically are rebuilt in five years.

Q. And Mufflers? A. A muffler is rebuilt oftener than that. Every year.

Q. How can you tell how much of the damage is due to normal use, getting towards the period when rebuilding is desired, and how much is due to the fire? A. Well, you can tell—all the external effect, of course, would be due to the external fire.

Q. The internal effect? A. The internal effect, of course, you couldn't see without going into the doors.

Q. Did you go inside the ovens? A. I did not, no, sir. They had fallen down to the extent that it wasn't necessary.

Q. That is all.

GEORGE WOODWARD, called as a witness in behalf of the plaintiff in rebuttal, being first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. GILHOOLY:

Q. Mr. Woodward, I show you two papers, one being apparently a diagram of the building showing certain arches indicated thereon, together with a statement of the power equipment. I ask you if you prepared that? A. I did.

Q. And does that accurately show the power equipment? A. Absolutely, it does. It shows the motor and all the electrical equipment.

Q. That is all.

THE MASTER—Do you want it marked?

MR. GILHOOLY—Yes. I would like to have it marked. Any objection?

MR. VANDERBILT—I am just wondering how it is rebuttal.

THE WITNESS—Just the electric equipment.

CHARLES S. SHOEMAKER, called as a witness in behalf of the plaintiff in rebuttal, being first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. GILHOOLY:

Q. Mr. Shoemaker, what is your business? A. I am in the electrical business.

Q. With what firm are you connected? A. W. L. Schoonover & Company.

Q. How long have you been in the electric business? A. About 22 years.

Q. And had you been in the Igoe Brothers plant before the fire? A. Yes, sir.

Q. And about how many times would you say and in what close proximity to the time of the fire? A. Oh, I probably have been in the plant five or six times altogether.

Q. And were you in the plant shortly before the fire for the purpose of making any test? A. I made some tests on, as I remember it, it was called a continuous wire drawing machine, several months before the fire, probably six months, I don't know just how long.

Q. And were you familiar generally with the electrical equipment in Igoe Brothers' plant? A. More or less familiar, yes. I knew about what they had.

MR. VANDERBILT—I object to this as not being rebuttal at all.

MR. GILHOOLY—It is rebuttal. I am just laying the foundation for it.

THE MASTER—We will wait and see then.

Q. Did you make an estimate of the times you installed the electric equipment? A. For the new plant, you mean?

Q. For a new plant. A. Yes, sir.

MR. VANDERBILT—I object to that as not being rebuttal at all.

MR. GILHOOLY—Now, if the Master please, I think it is proper rebuttal for this reason, that Mr. Shoemaker testified as to the length of time to rebuild and he has given us no estimate as to the time to install electric equipment.

THE MASTER—You mean your witness?

MR. GILHOOLY—Not our witness; Mr. Shoemaker called by the defendant. Now, I feel it is certainly proper for us to supplement his testimony with the length of time to install equipment and have the story complete.

MR. VANDERBILT—I think it is certainly peculiar to supplement the other side's witnesses.

THE MASTER—You mean you are supplying an omission of the other side.

MR. VANDERBILT—Yes.

MR. GILHOOLY—No, I don't say I am trying to supply any omissions on the other side, but they have left a hiatus which should be explained. They have not given any time for the installation of electric equipment.

MR. VANDERBILT—That was covered by Mr. McCrossen.

THE MASTER—On your main case?

MR. VANDERBILT—Fletcher-Thompson.

THE MASTER—Is it in the Fletcher-Thompson reports?

MR. VANDERBILT—Yes.

THE MASTER—Then it is part of your main case.

MR. GILHOOLY—This may be cumulative but there is testimony by Mr. McCrossen on page 293. Mr. McCrossen says as follows:

"And tell us whether or not in your judgment the Fletcher-Thompson report correctly states the man days for the electrical work? A. No, sir, that is over-estimated by approximately 50 days."

Now, having characterized it as being an over-estimation, I think we are now in a position to meet that charge, not that there is a disagreement as to the length of time, but there is a characterization of the length of time, to show, if we can, that it is not an over-estimation of our original witness. It is rebuttal for that reason .

MR. VANDERBILT—If the Master please, the whole point of the Fletcher-Thompson report was to show time. Our whole point was to controvert that allegation of time. It does not seem to me that anything that goes to the question of time, which is cumulative, as Mr. Gilhooly admits it is, is proper rebuttal.

THE MASTER—I doubt very much whether it is rebuttal testimony. It is part of your main case and it is in your main case.

MR. GILHOOLY—That I appreciate, but if he had not so characterized it and if the architect had not left out that important detail—

THE MASTER—Whose architect?

MR. GILHOOLY—The defendant's architect, Mr. Shoemaker.

THE MASTER—Well, they take the consequences if they leave something out ,don't they?

MR. VANDERBILT—We supplied that by Mr. McCrossen.

THE MASTER—Well, assuming you left something out, you take the consequences.

MR. VANDERBILT—We sure do. It leaves us without an opportunity to put on other witnesses.

MR. GILHOOLY—Well, I might add that after making this characterization, Mr. McCrossen said to this

question: 'In your judgment, how long would it take in working man days?" A. 146 man days is my detail on that." And I think I can controvert that.

THE MASTER—I don't think it is rebuttal testimony, but I am not going to have this case sent back to me for the purpose of supplying this. I will let you put it in. I don't think I will pay any attention to it but the upper Court can if it desires to.

MR. GILHOOLY—I don't want to overburden the record more than I have to.

Q. How long did you estimate to install the electric motor equipment? A. I estimated 18 weeks for a man and a helper.

Q. And how many man days does that leave? Is that 5½ days per week? A. That is 5½ days per week.

Q. That would make 198 man days; is that correct? A. Something to that effect, yes.

Q. Isn't that right; isn't that correct? A. I did not actually multiply it by 18 weeks—5½ days.

Q. Two men? A. For a man and a helper.

Q. That would be two men, wouldn't it two man days? A. Practically that.

Q. That is all.

MR. VANDERBILT—I will stand on my objection and also on the quasi promise of the Master; no cross-examination.

THE MASTER—It wasn't an absolute promise.

MR. VANDERBILT—No, quasi promise, I said.

THE MASTER—A quasi promise is subject to change at any time.

CECIL PRIAULX, re-called as a witness, testified as follows:

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DIRECT EXAMINATION

By MR. GILHOOLY:

Q. Mr. Priaulx, on your direct examination, when you were called before, you testified to the losses of Igoe Brothers for the year 1925. A. I did.

Q. That is correct, isn't it? Mr. Hastings testified yesterday that on examining the audit which he made of 20 the company's books for the year 1925, that he could not discover an item of money paid by the insurance companies to Igoe Brothers for their fire losses on the inventory. I ask you, Mr. Priaulx, if your report shows the item which was recovered by Igoe Brothers on account of the fire loss as to their inventory. A. My report does not show it specifically but it is included.

Q. And how is it included? A. It is included by means of reduction of the purchase for that year.

Q. Will you explain that to the Master? A. The 30 purchases for the year were reduced by an amount of approximately $145,000, representing the proceeds that Igoe Brothers received for the merchandise inventory loss. That is to say, I believe there has been put in evi-

dence some figures other than this but the figures which Miller & Maltbie, the appraisers, gave to Igoe Brothers did not separate the amount of the claim received with respect to merchandise, inventory and machinery, so that we arbitrarily took $144,622.76 as being the amount applicable to the merchandise inventory.

Q. You mean that Igoe Brothers received from the insurance company no settlement of a fire loss as to their inventory; in your statement of 1925, do the returns for that year still indicate the losses which you have stated on your direct examination? A. They do.

Q. So that even adding that insurance, the losses were as you indicated; is that correct? A. Yes.

Q. And I am speaking of 1925. A. Exactly.

Q. And including the moneys we received from the insurance company, will you tell the total loss for the year 1925.

MR. VANDERBILT—I object.

MR. GILHOOLY—Well, that is cumulative as long as we have it in. I wanted to make sure.

MR. VANDERBLT—I object as not rebuttal and secondly as not relevant under the policy provision.

THE MASTER—Objection noted.

Q. Will you give those figures A. The net loss of the manufacturing and jobbing departments of Igoe Brothers for the year 1925 was $141,079.64. I would like to qualify that by saying net loss from operations.

Q. And what was the total loss for the year? A. That is what I have just given you.

Q. Well, how was there a profit for any part of that year? A. Well, based upon figures which the accountants for the insurance company submitted and figures which were submitted for the period from January 1, 1925, to April 9, 1925—

Q. That was— A. (continuing.) There was a profit.

Q. How much? A. $31,642.64.

Q. Well, now, in order to determine the actual total loss, is it necessary to add to a hundred and forty-one thousand and some odd dollars, the $31,000 that you now speak of to get your gross loss? A. Per year?

Q. Yes. A. No.

Q. For the nine months? A. For the nine months it is necessary.

Q. Yes, for the nine months following the fire. A. It is.

Q. So what would your total loss be for the nine months following the fire that you have computed? A. $172,722.28.

Q. That is all.

CROSS EXAMINATION

By MR. VANDERBILT:

Q. What was the total payment which the insurance companies made to Igoe Brothers on stock and machinery loss? A. $399,687.16.

Q. And how was this allocation made which you have just described of $144,622.76 out of that total sum? A. That allocation was made in this way, by taking the ratio which the amounts of our claims for

stock and machinery bore to the total claims for stock and machinery and applying that to the $399,687.16.

Q. In other words, a purely arbitrary division was taken. A. We had never obtained from Miller & Maltbie the allocation of those two items.

Q. It might just as well have been $100,000. more or $100,000. less. A. Well, except that while it was arbitrary we had some basis for it; it was the relation of the ratio of our claim for stock and machinery to the amount of loss.

Q. That is all.

REDIRECT EXAMINATION

By MR. GILHOOLY:

Q. You say that while that was arbitrary it had some basis for determining it and do I take it, then, that you took the ratio of the amount which you claimed for stock as against that which you claimed for machinery and used that as the means of determining the amount which was allowed by the insurance companies for your inventory as against that which was allowed for machinery; is that correct? A. Yes.

RECROSS EXAMINATION

By MR. VANDERBILT:

Q. Did you hear testimony given before in these proceedings as to the basis on which that thing was settled and the settlement made up? A. I did hear testimony. I don't remember the amount. As I recall it, it was quite a good deal larger than that.

Q. If that is the fact, you would have to alter your figures to conform to that; wouldn't you? A. Exactly.

Q. And it would be done by a simple application of whatever was paid on the stock claim or merchandise claim being credited really as an item to be taken in the purchaser's account. A. Yes.

Q. That is all.

By MR. GILHOOLY:

Q. But that is the actual amount paid for the stock and machinery loss, isn't it? A. Yes.

MR. VANDERBILT—It is the actual total.

A. (continuing) That is the actual total. Whatever difference there might be between this $144,622.76 and the actual amount paid would affect the profit to that extent or the loss, rather.

Q. That is all.

E. H. BRODEN, called as a witness in behalf of the plaintiff in rebuttal, being first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. GILHOOLY:

Q. Mr. Broden, what is your business? A. I am manager of the Pittsburgh District of the American Steel & Wire Company in Pittsburgh.

Q. And what does that territory cover? A. It covers the entire Pittsburgh District, including plants at Donora, Farrell, Braddock, Allentown, and Rankin.

Q. Are you also familiar with what is known as the Worcester District in the wire industry? A. I have been through all the plants up in Worcester.

Q. Do you make wire nails in some of these mills? A. Yes, sir.

Q. In some of these plants do you manufacture wire nails similar to Igoe Brothers? A. You are speaking of our Pittsburgh District?

Q. Yes. A. In the Pittsburgh District we manufacture wire similar to Igoe but not nails.

Q. How about the Worcester District that you are familiar with? A. They manufacture wire but not nails.

Q. Were you familiar with the output of Igoe Brothers before the fire, Mr. Broden? A. Well, I was never through the plant, but I know just about what they made. It was a specialty mill .

Q. In what manner did you acquire that informa-

tion? A. They were a competitor of ours and we naturally were competing with them.

Q. Are you glad they had a fire? A. No, I wouldn't say that we are; there is plenty of room for everybody.

Q. I suppose competition is healthy in that business as well as everything else? A. Oh yes, it is keen; competition is keen.

Q. Now, these mills of which you have charge, do you have any benches that have wooden frames? A. I would say about 50% of the benches have wooden frames.

Q. How do you find them for practical uses? A. Well, a wire drawer will prefer to draw on a wooden bench, because the weight, the heavy wooden timbers, take up a great deal of the shock, because there is a lot of shock in drawing wires; they will take the wooden benches if they can get them; they prefer wooden benches. Now, there is a lot of misunderstanding on wooden benches compared to steel benches. The only part that is wood is the heavy stringers; there is four heavy stringers about 8 x 10 and on a steel bench they replace those heavy wooden members with either an angle or channel, so that all of the rest of the machinery, gears, blocks and so forth, are the same, both on a wooden bench as on a steel bench. Now, on account of its being hard to get the wooden timbers,—it is hard to get those big wooden timbers, yellow timbers they naturally came to use angles or channels on some of the later benches; but wire drawers, if they can, prefer the old time wooden bench.

Q. Did you have any experience with the old style machine known as the German blower or spring machines? A. We have at our Farrell plant a lot of the German spring machines.

Q. Do you consider them good machines for making special nails? A. We consider them A-1; they cannot be beat.

Q. In your opinion could such machines be purchased out of stock from the ordinary manufacturer in 1925? A. No, I don't think that any manufacturer would have them on hand; they would probably be made special.

Q. Have you any Shuster wire straightening machines in these mills? A. Yes, sir.

Q. Are they standard machines? A. Yes.

Q. And what is generally in operation in the different mills that use machinery of this sort? A. They are generally standard unless they are made specially, I suppose. Shuster makes a lot of special machines for special stuff.

Q. Are they considered a good machine? A. They are considered A-1.

Q. Can machines for making wire nail dies be purchased from machine dealers in the open market? A. No, sir, they cannot; they are all special stuff.

Q. How about bale ties? A. They have to be specially made up.

Q. And machines for making hook ties? A. The same thing.

Q. How about those for making single loop ties? A. Those are all special machines.

Q. In your experience in equipping a mill and in connection with power transmission in putting up shafting in a mill construction, built with trusses 15' centers, do you think it necessary to have frequent stringers? A. I do.

Q. In starting new machines, wire drawing benches, how long do you consider it would take before

a man could do a full day's work on production? A. Probably in two or three weeks he would have a fair production, but it would take him at least a month before he is up to maximum.

Q. To what would you attribute that length of time, Mr. Broden? A. Well, it would take him some time to get adjusted to his new conditions and he would not like—probably not like the grooves on the pull out or he might not like the adjustment of the dies; probably the reels would not be setting right and all the other stuff he works with would take a little time to get adjusted, probably have little changes to make.

Q. Do you find that from your practical experience? A. Yes, absolutely.

Q. Can you tell us whether or not skilled wire drawers or wire nail makers could have been readily procurable in 1925 based on your experience? A. Based on by experience there was a little scarcity of help and the chances are that it would be pretty hard to get skilled men; you probably would have to break them in.

Q. Now, Mr. Broden, it has been testified that dies for making all kinds of work could be procured in the open market; do you think plates for drawing keystone— A. Wait a minute; I haven't answered that question.

Q. I say it has been testified that dies for making all kinds of wire can be procured in the open market— A. Want an answer to that?

Q. Yes. A. You might be able to purchase them in an open market, but you would probably have difficulty in getting dies that could be made right and suitable; it is not practical; you have to have your own tool room in in connection with your shop.

Q. Do you think that plates for drawing keystone shaped wire, square shaped wire or different sizes of oval wire could have been bought in the open market or would they have to be made by skilled wire men? A. You couldn't buy them in the open market finished; you would have to buy them, the raw plates and do all the finishing work yourself by skilled men, skilled die makers.

Q. Could the operation of finishing these plates be done in five minutes or a short time? A. It takes a considerable time to do that.

Q. Why does it take a considerable time to do that? A. If it is a special plate, you have to have it in the annealed state, and you have to punch it and prick it and do all the necessary setting up, so that the fellow can have it and it will probably take him quite a while to do it.

Q. Now, I show you Exhibit C-17 containing a number of nails; do you consider them special nails, Mr. Broden? A. Those are all special nails; there are no common nails there.

Q. Do you think the dies for making this class of nails could be bought from regular die makers? A. No, it would have to be made by special die makers; everyone of them is all special stuff,—a man skilled in his line.

Q. That operation you spoke of, would that apply to those special nails, as well as to wire? A. Yes, sir, all of that stuff, is special stuff. They are not generally made in a common products mill.

Q. I don't know whether I asked you, Mr. Broden, how long you have been in the iron and steel district? A. 34 years.

Q. And how much of that was spent in connection with wire drawing or nail making? A. All of it.

MR. GILHOOLY—You may cross examine.

CROSS EXAMINATION

By MR. VANDERBILT:

Q. Mr. Broden, as wire mills have occasion from time to time to replace their old benches or to buy new benches in an expansion program, do they get wooden benches or steel and iron benches? A. Well, now, I replaced in 1916 a lot of benches and I replaced them with wooden benches.

Q. I am talking about 1925, say? A. Now, it would depend if you built them yourself or whether you had them purchased outside.

Q. I am specifying you are going to purchase them in the market. A. It would depend on what your specifications were; if you submitted specifications to the manufacturers, he would build what you wanted built.

Q. I am supposing you are going out to buy stock which they have on hand. A. You probably would not find any stock on hand of regular wire benches.

Q. You wouldn't? A. You might find some continuous wire machines, but not the regular bench.

Q. You wouldn't be able to get them from the Vaughn Machinery Company? A. I doubt very much whether they have the regular wire drawing benches in stock.

Q. Wouldn't be able to get them from Morgan? A. They may have continuous, but not the regular standard.

Q. Have you personally checked up on that so you have first hand knowledge of what the situation was in the spring of 1925? A. I went through the Morgan place, I should judge around 1925. I saw a lot of the continuous wire machines stocked up, but I didn't see any of the other benches on hand.

Q. Do you know Mr. Kenneth Lewis of that plant? A. Yes, sir.

Q. Would you say that he was mistaken if he said he had such benches on hand at that time, and could deliver them? A. If he made the statement, I am not going to question it; he would know his plant better than I would.

Q. And you would say that if the Vaughn Machinery Company wrote a letter saying they could supply them, that they would be able to do it? A. Well, they don't generally carry that stuff on hand, because they might be stocked with it; they are not going to spend a lot of money to build a lot of machinery and have it on their hands.

Q. Well, I say, if they said that, you would accept it as the fact, wouldn't you? A. Well, they might say that in order to get the business, make a lot of promises in order to get the business.

Q. You wouldn't even believe it if they said it, is that it? A. The chances are if they said that they had them and there was prospective business, it might mean that they were willing to put it in; but it might take longer than that time; they would start their factory, order the castings, order the necessary stuff and slap them in as quickly as they could.

Q. You don't think very highly then of the Vaughn Machinery Company in matters of veracity? A. Well,

I happen to know that they took out patents on some wire machines that they had to retract; they had their fellows swear that—well, I don't know whether they are right or not.

Q. Well, now, if you were going to order benches in the year 1925 would you order wooden benches or steel and iron benches? A. Well, I would give it a whole lot of consideration just what I wanted to draw.

Q. Well, I mean if you were going to draw the things that were drawn in the Igoe Brothers' plant? A. I might and I might not on that proposition, depending on the grade of stuff that I wanted to draw; specialty stuff the chances are I might consider wooden benches.

Q. Well, what effect has a steel or wood bench got on the drawing of the wire, any? A. Nothing. In fact I think it draws a little better with the wood bench.

Q. Why? A. On account of the wood takes up the shock and is sort of—it is a good shock taker.

Q. Then these manufacturers of wire drawing machinery are really going against what the trade want to purchase from them? A. They cannot get the kind of wooden timbers that they used to get and steel probably is easier to get at the present time.

Q. They are not really giving you men in the trade what you want; they are forcing these iron and steel benches on you? A. That is your statement.

Q. I will call your attention to Exhibit D-17, letter from the Vaughn Construction Company to Igoe Brothers in which they say "The above equipment is priced on construction as we would furnish it today or iron and steel construction, is quoted on the wrought frames as wood construction has been discontinued for at least 15

years," not my say-so, the say-so of the Vaughn Machinery Company. Could you go out anywhere today, Mr. Broden and buy without special order wood benches new? A. I don't think you could buy either wood or steel benches.

Q. Well, you don't know on steel, because you have not tried, have you? A. Well, there is no manufacturer of steel benches going to carry in stock two or three hundred thousand dollars' worth of benches when he might build his bench with spindle centers of 4'; the fellow would want 4' 6; the benches wouldn't be suitable; or he might want 5' centers; so it is all special machinery, all built special.

Q. Do you know of any plant which has equipped itself within the last five years with wood benches? A. No, I don't.

Q. Within the last ten years, you cannot think of any, can you? A. I know that some have bought or purchased within the last 5 years wooden benches, occasional benches.

Q. Now, with reference to these Shuster machines; they are standard machines, you say? A. If they are not made special.

Q. I mean there is a standard Shuster machine? A. Well, yes.

Q. They are practically all standard, aren't they? A. What he calls his standard line, yes.

Q. Yes; and all you have to do is to order them and you get them? A. Well, I don't think he carries them in stock; he would probably do like all other machinery manufacturers, order his castings, get his machinists working on them and build the machine.

Q. How long would that take, any standard machine, ordinary order? A. Well, say you get a number O machine, it would probably require two months.

Q. And these German special machines, could they be purchased? A. Nobody makes them unless they made them special.

Q. How long would it take to make them? A. Depending on the number and quantity, it might take a fellow six months to build them or seven months.

Q. Aren' t they obsolete at the present time? A. Well, you wouldn't call them obsolete, when they are in active use. What do you mean by the term obsolete?

Q. Well, is there any American concern building them? A. They are all built to drawings by manufacturers, that you would send out for bids but if you wanted to build some you could get them made.

Q. Do any of the standard nail machine companies in American make them? A. They could if you would give them the drawings to make them.

Q. I mean as a stock item? A. They don't carry them as stock.

Q. Is the idea then that the American manufacturers cannot make as good a machine as those German machines? A. This German machine is especially good on large head nails; it has a long hammer stock, makes a well centered nail.

Q. Do you know why the American manufacturers don't make this type of machine? A. Because they brought out their own machine. Tiffin brought out the Tiffin machine; they later brought out the Glader.

Q. Now, with reference to dies; do you say they could not be purchased? A. You would probably have

difficulty unless you went to some fellow—I personally don't know of any fellow—that furnishes nail dies.

Q. Don't the manufacturers? A. Of nail machines?

Q. Yes. A. They might put in some tools in the machine, but when it is received, you cannot make nails with them because it is not made properly; it takes a skilled man to make those dies.

Q. Don't they equip these nail machines with a set of dies before they ship them? A. Sometimes they do and sometimes they don't; now the dies that come in, you will take them out and put your own dies in, because they are shaped right.

Q. And these dies could be made by the manufacturer, Igoe Brothers, in this case, while the machines were under order and were being sent in from the manufacturers of these wire drawing and nail machines, couldn't they? A. It would depend on the nail that he wants to make; now he has to first of all get his order for special nails; then he has got to make his dies to suit.

Q. Right; and that he doesn't do in the ordinary case until he has his order? A. On special stuff. Now, if he is making stuff he knows he will get orders for, he can make that ahead.

Q. Exactly; and so there need be no waste time waiting for dies? A. It takes time to make dies.

Q. They can be made up if you know what your orders are going to be while you are waiting for your machinery to come in? A. You have to order your steel.

Q. The point I am trying to get at, Mr. Broden, is this: do you have to wait for the machine to come in and be installed before you start to make your dies? A. Not unless he went out and looked at the machine, and

measured up the machine; then you could make up the dies.

Q. And you could find it out from the machine manufacturers without going and looking at it? A. If he would give you the right size.

Q. Is there any reason to think he wouldn't give you the right size or do you doubt everybody? A. You cannot make the dies until you put in a tool room and get it equipped to make the dies.

Q. How long would it take to make a tool room? A. To put up the building, you mean?

Q. No, put up a shed. A. You don't usually do that, putting up sheds and cluttering up the place with sheds.

Q. I am asking how long it takes to equip a tool room. A. It may take to put up the building and put in the machinery, four or five months.

Q. I didn't ask you that; I asked how long it would take to equip a tool shed. A. If you had the building?

Q. Yes. A. Might take two months.

Q. Why would it take that length of time? A. You would have to send out and get bids on your machinery; then you would have to get the machinery in there, and set them on their foundations; put up the shafting.

Q. Wouldn't you get all that machinery within the radius of 100 miles of Newark? A. It would depend on where they might be or where you would want to buy; you would have to send out your bids; there might be a fellow out in Cincinnati to furnish the drill press.

Q. Why does it take two months to get an ordinary lathe or drill press? A. Most of this stuff is made specially for mill tool work.

Q. Look over that list of machine shop tools, will you, and tell me where there is anything special in that? A. How many pages?

Q. About 3 or 4 pages of it. A. That is the machine shop work?

Q. Yes. A. This (indicating) is special. One Waterbury thread rolling machine, special; this Blake and Johnson is probably special. These drill presses I would have to see before I could tell whether it was special or not. Now this engine lathe might be special; I would have to see it before I could tell.

Q. Would it help you in answering if you knew that most of them had been bought second handed many years ago? A. They might have taken it and changed it. This might be special (indicating). I would have to see it before I could tell whether it was or not. This (indicating) might be special; this 16" shaper, it might be classified as a 16" shaper but it might be a special machine.

Q. You can get Gould and Eberhardt shapers in stock, can't you? A. Sometimes you can; sometimes you can't.

Q. Sure about that that you can't get them in stock? A. I have bought a good many; they generally make it up.

Q. Get them to you in a week? A. They don't get it to you in a week; if it goes to the factory if you get it in three or four months you are doing good.

Q. Now, you said it would take men working on this machine to get it up to full production a month; what percentage of production could they achieve in the first week? A. Oh, they might go up to 25%.

Q. In the second week? A. Probably about 50%.

Q. And in the third? A. 75.

Q. And in the fourth? A. They would be up to the maximum.

Q. Do you suppose it would be possible for these workmen to get it in shape in less than four weeks? A. Depends a whole lot on the machinery.

Q. If it comes from the factory all ready to use as the manufacturer claims. A. The manufacturer sends it out generally without trying it; it comes in there and you have to run it, probably have to run it three or four days or a week to get it down to where it is in shape.

Q. You haven't any regard for these manufacturers from any standpoint, on machinery? A. I have been dealing with them for 35 years and I know what their limitations are.

Q. Now, you said that your concern was a competitor of Igoe Brothers; instead of that, aren't you people who sell back and forth to each other? A. I don't sell personally to the Igoes.

Q. I am speaking of the American Steel and Wire Company. A. I suppose the wire company does sell material to the Igoe Brothers.

Q. Isn't Igoe Brothers a big customer of the American Steel and Wire Company? A. They probably are. I wouldn't be able to verify that without going to the Sales Department to find out.

Q. Well, I refer you to copy of a letter of May 8, 1925, and ask you if you recognize what the name is on the bottom there; I haven't the original letter. Does that bear the name of one of the men of your company? A. I don't know him personally.

Q. Do you know whether there is such a man in your company? A. I couldn't tell you whether there is that fellow there or not; you see we have 25,000 employees; it is pretty hard to remember every one of them.

Q. But you do know that Igoe Brothers purchase a great deal from your concern? A. To the extent of what they purchase, I wouldn't be able to give you any figures.

Q. That is all.

Recess.

AFTERNOON SESSION.

THEODORE B. SMITH, called and sworn in rebuttal on behalf of the complainant, testified as follows:

DIRECT EXAMINATION

By MR. GILHOOLY:

Q. Mr. Smith, you are connected with what company? A. John Hassall, Inc., Brooklyn.

Q. And what is your position with that company, Mr. Smith? A. President and General Manager.

Q. And what is the character of the business of that company? A. Making nails and rivets to order.

Q. Do you buy wire too? A. All wire.

Q. And have you purchased wire from Igoe Brothers before the fire? A. Many years.

Q. And does your business parallel that of the Igoe Brothers, or is there a similarity in the business? A. There is a similarity in that we make nails and rivets; they also make nails and rivets but we specialize in the finer and smaller nails and rivets.

Q. And can you tell us whether or not your sales decreased or increased in 1925 over and above 1924?

MR. VANDERBILT:—Objected to as immaterial and incompetent.

MR. GILHOOLY:—This is in answer to the counterclaim where Mr. Hastings testified that there was a falling off in the nail and wire business in 1925 and he predicated an answer on that fact.

THE MASTER:—I will permit it; objection noted.

Q. Will you please answer that? A. We had 11½% greater business in 1925 than in 1924.

Q. And what was the percentage of profit in 1925 as compared to 1924? A. The percentage of profit was eighteen percent greater.

Q. In what year? A. 1925 over 1924.

Q. Now, you spoke of purchasing wire from Igoe Brothers; do you purchase common wire from them or is it a high grade wire? A. We only purchase high grade wire for special nails.

Q. And how do you find the product of Igoe Brothers? A. We find it superior to the other wire mills and for that reason bought from Igoe Brothers exclusively.

Q. Would you call that a common wire or a special wire, Mr. Smith? A. I would call it a special wire.

Q. What kind of machines do you work in your plant? A. Hassal machines.

Q. Do you consider them a good machine, Mr. Smith? A. We consider them the best nail machine made.

Q. Are they similar to the type that Igoe Brothers were using? A. In fact they had some of the same machines.

CROSS EXAMINATION

By MR. VANDERBILT:

Q. Where is your plant located? A. Clay and Oakland Streets, Brooklyn.

Q. And with reference to this kind of machine you say you use, are they still being manufactured, what did you call them,—what make? A. The Hassel machine.

Q. They are still being maufactured? A. They are not being marketed; they are still being manufactured; the patents expired back in 1890.

Q. Do you manufacture nail machines? A. For our own use.

Q. You formerly manufactured them for others? A. Formerly manufactured them for others, before the expiration of the patents.

Q. How many have you made in the last ten years? A. I would say 12.

Q. For your own use? A. For our own use.

Q. So these machines are no longer being manufactured for the trade? A. Not by Hassall.

Q. Well, by whom are they being manufactured? A. Well, the principle involved in that machine is now used by most of the nail machine manufacturers.

Q. The Hassall machine is not being manufactured by any machine company now, is it? A. No.

Q. What do you mean by special wire and common wire? A. Well, special wire compared with common wire is a wire drawn closer to get free of cracks, splits, surface imperfections, &c.

Q. Now, as a matter of fact, isn't your product entirely different from that of Igoe Brothers' plant? A. It is the same in many respects; we make a great many more products than they made.

Q. Aren't all your products practically smaller products? A. Most of them; it all depends on what you mean by small.

Q. Smaller in size, right, smaller in size? A. Smaller in size, that's right.

Q. Now, you consider the Iron Age a fairly reliable paper in your industry, don't you?

MR. GILHOOLY:—Well, I just wondered if that was proper cross examination.

MR. VANDERBILT:—It is going to the question of increase or decrease of business in the year 1925.

THE MASTER:—All right.

A. Yes, of general conditions.

Q. It is a trade journal relied on by everyone in the

iron and steel industry, isn't it? A. Yes, I would say so.

Q. Its statistics are generally accepted in your trade? A. Yes, that is right.

Q. And it is the journal that men in the iron and steel business generally, and in the wire and nail industry as a particular part of that business, go to to get information as to price movements? A. We don't.

Q. Well, I mean in the trade generally? A. Well, it is the journal of the trade or it is used by the trade.

Q. Increase and decrease of sales? A. Yes.

Q. And anything you want to know generally about the movements of iron and steel trades, correct? A. Yes, that's right.

Q. And you are familiar with the charts published from time to time by the Iron Age bearing on production? A. Yes, sir, once a year.

Q. And those charts are generally accepted in your business as representing statistics of the business? A. Of the business in general.

Q. You have never heard of their accuracy being questioned, have you? A. No.

Q. As applied to the business as a general proposition. Now, I show you in Exhibit D-18 the exhibit therein marked F from the Iron Age and ask if you are familiar with that; are you familiar with it? A. Not entirely; I know what it is and what it represents.

Q. Well, I mean that is one of their customary charts? A. That is one of their customary charts issued once a year.

Q. And that represents the aggregate and average experience of the business, does it not? A. Yes, sir.

Q. That is all.

REDIRECT EXAMINATION

By MR. GILHOOLY:

Q. Can you tell me, Mr. Smith, whether or not the chart set forth in what is called here the Iron Age represents special products or common products? A. Represents common products only; our business is not reflected in such a chart.

Q. Would business of the character of Igoe Brothers, be reflected in that type of chart? A. I should say to a slight extent.

Q. How about their special products; would that be reflected there? A. Not in this chart.

Q. That deals with common products alone? A. We are in a special business and these price movements do not affect us.

Q. That is only common products? A. That is only common products, as turned out by the big steel mills.

Q. Then I take it that you have little occasion in your business to pay attention to that chart, is that right? A. We glance at them and pay no more attention to them.

Q. That is all.

MR. GILHOOLY—We will close.

THE MASTER—I suppose you want plenty of time on the briefs?

MR. VANDERBILT—We tentatively agreed that we would each file a brief on our own case, Mr. Gil-

hooly on his bill and I on the counterclaim and submit them to each other within two weeks; answering briefs to each other within two weeks; reply briefs a week after that.

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97 OCT.1.1931

New Jersey Court of Errors and Appeals

Between IGOE BROTHERS, INC., a corporation, Complainant-Respondent, and NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., *et al.*, Defendants-Appellants.	On Appeal from Decree in Chancery.

BRIEF OF COMPLAINANT-RESPONDENT.

Statement of Facts.

In the month of April, 1925, and for many years prior thereto, the complainant, Igoe Brothers, was engaged in the manufacture of wire and wire nails and was also a jobber in nails. The company maintained a plant on Poinier Street and Avenue A, in the City of Newark, New Jersey, and on April 9, 1925, a fire occurred which completely destroyed all of the buildings of the company at that place. At the time of the fire certain policies issued by the defendant companies herein were in effect. These policies are known as use and occupancy policies under which the companies undertook to pay to the assured, in the event of fire, the loss of net profits on the business which was prevented by the fire and the fixed charges and expenses which must necessarily be continued during the period of the suspension of the business. The complainant and its insurers could not agree on the amount of the loss sustained by the com-

plainant and a certain agreement of arbitration was entered into between the complainant and the defendants which is marked Exhibit C-13. Pursuant to the provisions of this agreement the complainant selected and appointed Mr. Clifford McEvoy and the defendants appointed Mr. E. F. McCrossin as their respective appraisers. The appraisers being unable to select an umpire within the time provided in the agreement, application was made to the inferior Court of Common Pleas of the County of Essex for the appointment of an umpire. Charles F. Lynch, Esq., was appointed as Umpire. After certain differences between the appraisers had been submitted to the Umpire, an award was made by the Umpire on November 18, 1927 in the amount of $79,708.00, and under date of November 19, 1927, Mr. McCrossin, the Companies' appraiser joined in the aforesaid award with the Umpire. The complainant feeling aggrieved by said award filed its bill of complaint in the Court of Chancery to reform the same and defendants filed a counterclaim seeking to set aside the award for the reasons therein stated and issue was joined upon both the complaint and the counterclaim. Complainant subsequently amended its bill of complaint, pursuant to leave of court, and it was agreed that the answer theretofore filed by the defendants should stand as an answer to the complaint as amended. The matter was referred to Vice Chancellor Church and on the date fixed for final hearing, and upon an explanation being made to the Vice Chancellor regarding the matters in controversy, the latter referred the matter to Charles F. Lynch, Esq., as a Special Master of the Court of Chancery to take the testimony produced by the complainant and the defendants and to report to the court.

The complainant had not rebuilt its plant and

therefore one of the matters submitted by the appraisers to the Umpire was the length of time within which the profit-making facilities of the complainant could have been restored. The Umpire concluded that the plant could have been rebuilt machinery installed, etc., within 200 working days. In its bill of complaint in the Court of Chancery, complainant sought to have the award modified in this respect but did not press that point at the hearing before the Special Master so that the period of 200 days is no longer in controversy between the respective parties.

Inasmuch as the policies provided that as part of the actual loss sustained by the assured that loss consisted in part of the fixed charges as must necessarily continue during the total or partial suspension of the business and this item being in controversy the Umpire concluded that inasmuch as the assured had engaged in manufacturing after the fire that an allowance of $194.18 per day should be allowed for a period of 100 days. For the reasons which will be argued herein, the complainant felt aggrieved at this part of the award and contended that it should have been entitled to $194.18 per day for the full term of 200 days.

On the part of the defendants it was contended that the Umpire and their appraiser erred in allowing the assured loss of profits based on the average of profits earned during the two years proceeding the fire.

The next point raised by the defendant was that the Umpire and appraiser erred in allowing 75 per cent of certain items listed on complainant's books as operating expenses as capital instead of expenses, thereby increasing the net profits of complainant for the year 1924.

By the decree in Chancery, the counterclaim of the defendants was dismissed and it was held that

the amount of fixed charges to which the assured was entitled be increased from $19,418.00 to $30,-563.22.

Each of the foregoing points are raised on this appeal, and our arguments will be directed to the foregoing in the order in which they have been set forth herein.

ARGUMENT.

POINT ONE.

The complainant should be allowed its fixed charges for the full period of 200 days.

For the purpose of the present argument both parties are concluded by the finding that the profit making facilities of the complainant could have been restored in 200 days after the fire. The fire occurred in April and the assured set up a temporary mill and in the latter part of June following commenced minor operations. It is not disputed that between the time complainant started these temporary operations and a date 200 days after the fire it did, on the average, manufacture, by working night and day, 21.3019 per cent of its normal production. The Special Master reported that the period of 100 days allowed to the assured for its loss of fixed charges was only an estimate and that an estimate was not justified in the premises because actual calculations were available. He found that the operations partially continued in the temporary plant actually absorbed 21.3019 per cent of the fixed charges. An examination of the umpire's preliminary finding and his final award will clearly disclose that the fixing of 100

days during which the fixed charges could be absorbed was arbitrary. It was, and is, the contention of the complainant-respondent here, that it should have been allowed a loss of fixed charges in the amount of $194.18 for the full period of 200 days. In arriving at the amount of $194.18 the Umpire examined into all of the factors of complainant's business and the amount of the assured's daily fixed charges, and, although the assured contended for a much greater sum, the difference having been submitted to the Umpire, by the appraisers, his finding in that particular is final. Consequently both parties are obliged to accept this figure of $194.18 as the amount of the assured's daily fixed charges.

Mr. Cecil N. Priaulx, a certified public accountant, gave testimony concerning the results of the operations by the assured subsequent to the fire. (S. C. pg. 99) He testified that the profits in the manufacturing and jobbing department between January 1, 1925 and April 9, 1925, the date of the fire, were $31,642.64. He testified that the loss of the company from operations in the year 1925 was $141,079.64 and, that inasmuch as a profit had been made for the period above set forth in the amount of $31,642.64, the net loss for the period between April 9, 1925 and December 31, 1925 was $172,722.28.

It is respectfully submitted that under the terms of the policies carried by the complainant it became entitled to (1) its loss of profits, (2) its fixed charges, and (3) such expenses as it incurred in order to reduce the loss under the policies. Inasmuch as no issue was raised as to the expense incurred by complainant in erecting its temporary mill we are only concerned in this argument with the first two, viz, the complainant's loss of profits and its fixed charges. It is submitted that before

an award could be made there would have to be a finding as to

1. The amount of the *actual loss sustained.*

2. The length of time required to rebuild, and the amount of the award must be the product of the first and second figures.

The policies in question contained a provision that the company shall be liable for

> "*The actual loss sustained,* * * * * as must necessarily continue during a total or partial suspension of business and such expenses as are necessarily incurred for the purpose of reducing the loss under this policy, for not exceeding the length of time as shall be required with the exercise of due diligence and dispatch, to rebuild, repair or replace such part of such building and machinery and equipment, and/or stock as may be destroyed or damaged."

The assured, as above stated, thus became entitled to the *actual loss sustained.* The next question which presents itself is to determine the actual loss sustained as fixed by the policy. Now the policy expressly provided what the actual loss was to be and it is defined by the policy as follows:

> "Consisting of *net profits* on the business which is thereby prevented, such *fixed charges and expenses pertaining thereto* as must necessarily continue during the total or partial suspension of business, and such expenses as are necessarily incurred for the purpose of reducing the loss under this policy."

It will be observed that the policies contain absolutely no reference to the absorption of fixed charges.

The umpire has concluded that it would have

taken 200 manufacturing days to restore the profit making facilities and to this extent he was acting within his jurisdiction and his finding is conclusive. Having determined the period of suspension it became necessary then to determine the amount of *actual loss sustained.* The actual loss sustained (loss of net profits and fixed charges) was determined because the Umpire found that the loss of profits was $301.45 per day and the fixed charges were $194.18 per day, making a total of $495.63 per day as the actual loss sustained. To the foregoing extent the Umpire followed the requirements of the policies and had he correctly made his calculations, the amount of his award would necessarily have to be the product of the amount of the actual loss sustained and the length of time required to rebuild, or in brief, the sum of $99,126.00.

We submit that the foregoing manner of determining a loss under a policy of the kind in question is the only possible one. A search of the authorities will disclose very few precedents but in our opinion the case of *Hartford Fire Insurance Co.* vs. *Wilson and Toomer Fertilizer Co.,* (C. C. of A. 5th Circuit, March 21, 1925), Vol. 4 (2d S) Federal Reporter, 835, is directly in point with the case at bar. In this last mentioned case certiorari in the United States Supreme Court was denied. 45 S. Ct. 639, 69 L. Ed. In this case suit was brought to recover the face value of an insurance policy whereby the insurance company insured the use and occupancy of plaintiff's fertilizer factory. From the reported decision the terms of the policy were the same as those contained in the policies now under consideration. At the time of the fire the fertilizer company's plant consisted of a number of buildings only one of which was damaged by fire. This building was completely destroyed. This building was used in the manufacture of acid

phosphate, bone black and bone meal, and in the curing and mixing of the ingredients of commercial fertilizers. In it phosphate rock was passed through grinding machines, crushed and pulverized, then washed down and acidulated with sulphuric acid, and pumped from another building which contained acid chambers. By these operations was produced acid phosphate, which is a principal ingredient of commercial fertilizer. In the building which was destroyed by fire was located machinery for acidulating and dissolving bone black and grinding bone meal. In it also the various ingredients there manufactured were mixed and put into sacks and made ready for shipment. These were the principal operations carried on at the fertilizer company's plant. Sulphuric acid was manufactured in a separate building. There were a number of other buildings used for storage and other purposes, which included a power house, machine shop and laboratory; but in none of them was any manufacturing process carried on. After the fire, in an effort to diminish its loss, the company constructed a temporary building in which it continued to mix fertilizers. However, it did not manufacture any of the ingredients, but purchased them in the open market.

The defense of the insurance companies in that case was that, during the period required for the replacement of its destroyed building, the plaintiff produced two-fifths of the fertilizer that it would have produced if there had been no fire, and consequently their recovery should be limited to three-fifths of the total amount of insurance.

This loss was referred to arbitration and adjusters and it was found that it would require 315 days to replace the building destroyed by fire; that during the period of normal production plaintiff's output would have been 53,970 tons, which would

have produced an income of $532,586.72; that the fixed charges and expenses would have been $314,-008.22, leaving a net profit of $218,578.50; that during the period of suspension the plaintiff could produce 21,588 tons in its temporary building, which would result in a gross income of $213,192.-26, which was less by over $100,000.00 than its fixed charges and expenses. The result arrived at from these figures was that the plaintiff sustained a loss of $319,394.26. As a consequence, there were no net profits earned during the replacement period fixed by the arbitration. Inasmuch as the sum total of all the insurance carried by the company was $100,000.00 the court directed a verdict for the plaintiff in the full amount of the policies. We quote from a portion of the opinion written by Bryan, Circuit Judge, as follows:

> "There was a total suspension, for a period of 315 days, of plaintiff's business of manufacturing fertilizer as conducted by it before the fire. Plaintiff was required by a clause of the policy to use other property, if by doing so it could diminish the loss payable under the terms of the policy. But the same clause also provides that, in the event the plaintiff should continue business at some other location, or by using other property during the period of replacement, *"the net profits so earned shall be applied to the reduction of the loss, and adjustment shall be made as provided herein for partial losses." In our opinion that clause has no application under the evidence in this case. The "loss hereunder," as there used, means the loss of any profits; of course, it includes fixed charges and expenses, because until they are earned there can not be any net profits.*
>
> *Plaintiff did not continue in the same business which it had been engaged before the*

> *fire.* The manufacture of fertilizers as theretofore conducted entirely ceased, and the plaintiff, by purchasing, instead of manufacturing, the ingredients of its fertilizers, engaged in a different kind of business, in an effort to diminish its own as well as defendant's loss. *Defendant was not entitled to have the loss under the policy reduced, unless net profits were earned by the plaintiff.* In our opinion the adjustment referred to in the quoted part of the clause for diminution of loss means adjustment of net profits, and does not come into play unless net profits should be earned. *If, as contended by the defendant, there should be an adjustment in the proportion that the fertilizers bought and mixed by the plaintiff during the period of suspension of business bore to the full normal production of fertilizers manufactured and mixed during such period, even though no net profits were earned, then the policy would be of no value to an insured, because it would be possible, by multiplying temporary plants, to produce the full normal output, although the cost might be prohibitive. We do not think the policy is open to such a construction.*"
>
> The italics are ours.

Several important points now under consideration were decided in the last mentioned case. It will be noted that although the plaintiff therein engaged in business after the fire for the purpose of reducing its and the company's loss, no mention is made by the court of the absorption of fixed charges. This is not unusual because the policies contained nothing about absorption of fixed charges. In the next place the court determined what was meant by the statement in the policies "actual loss sustained." The court held as we are

contending here that the actual loss sustained consisted of

> "(1) The net profits of the business which has been prevented.
>
> (2) Such fixed charges and expenses pertaining to the business as must necessarily continue.
>
> (3) And such expense as must necessarily be continued during the period of the suspension of business."

In view of Mr. Priaulx' testimony to the effect that the complainant suffered losses in the operation of its temporary mill amounting to $172,722.28 for the period between April 9, 1925 and December 31, 1925, it is quite apparent that the complainant could not have absorbed any part of its fixed charges. Placing the fixed charges of complainant at $194.18 a day, its total fixed charges for the balance of the year after the fire would amount to approximately $43,000.00. The fixed charges are necessarily a part of the loss sustained by the complainant but in addition to its failure to make its fixed charges for the balance of the year, the complainant has suffered a further loss of over $130,000.00. On the basis of these figures it goes without saying that the complainant has not absorbed any part of its fixed charges, if we are to indulge in that expression. As we have heretofore pointed out the question of absorption of fixed charges is not in the case. The actual loss sustained within the meaning of the policies was the loss of profits and the fixed charges multiplied by the duration of the suspension of business. If the operation of the temporary mill resulted in any profit then the amount of the profit should have been deducted from the actual loss sustained, but we have clearly established that there was no profit from the operation of the temporary mill, but on

the contrary there was a loss and consequently nothing can be deducted in favor of the defendants. We feel that the foregoing is a complete answer to the argument advanced under point one of defendants-appellants' brief, but lest our silence might be construed as an acquiescence in many of the statements of our adversary we will comment on his argument and attempt to point out the fallacies therein. The case of Davis vs. Henry, 121 Mass. 150 is cited in defendants-appellants' brief and we too desire to quote from a portion thereof as follows:

> "It must be shown that, by some error, they (arbitrators) were so misled or deceived that they did not apply the rules which they intended to apply to the decision of the case so that upon their own theory a mistake was made which has caused the result to be something different from that which they had reached by their reason and judgment."

By no calculations manifested to anyone did the umpire fix complainant's loss of fixed charges at $19,418.00. He determined that the complainant's daily fixed charges amounted to $194.18 and he estimated that these charges could have been absorbed in 100 days. Did he mean that at the end of one hundred days the production of the complainant would have so greatly and profitably increased that there was no need for any further allowance of fixed charges? By allowing the sum of $194.18 for a period of 100 days did he assume that during that period of time the complainant had not made any part of its fixed charges? The admitted figures before him show the actual production and the cost thereof was available. It is interesting to consider the production of the complainant for a period of approximately 200 days after the fire.

Year	Month	Day Work in Pounds	Night Work	Total	Percentage of Normal Production
1925	June (8 days only)	44,750	43,650	88,400	5.6772
1925	July	172,500	139,000	311,500	20.0051
1925	August	190,441	68,250	258,691	16.6136
1925	September	225,750	177,000	402,750	25.8654
1925	October	230,135	138,150	368,285	23.6520
1925	November	296,300	149,800	446,100	28.6494
1925	December	306,070	151,500	457,570	29.3860

The foregoing computations are taken from Exhibit I of complainant's accountant's report. See also testimony of Ernest Glasser (S. C. 105-106).

A part of the testimony of Mr. Hastings, the accountant for the insurance companies, is quoted, and he explains that it was necessary for the assured to produce 17 tons per day to pay all of its overhead charges. It must be kept in mind that the 17 tons production per day were calculated on the cost and conditions which existed prior to the fire and he concludes that it was only necessary for the assured to manufacture 17 tons per day after the fire to make its fixed charges. Such a theory has little, if any, logic to support it because we would have to take into consideration all conditions which existed after the fire. In the first place the complainant was producing products which were characterized as common products and special products. See testimony of Peter Igoe (S. C. pgs. 93, 516-517). Mr. Igoe said that little if any profit could be made on the common products, but that the profit of the company was made on the special products and that approximately 70 to 75 per cent of the company's business was based on special products. After the fire the complainant set up one wire block from which it made a very common wire and subsequently they added

a few more machines for manufacturing wire and subsequently obtained a nail machine. Prior to the fire the plant of this company was fully equipped with modern machinery to enable the company to operate its business to its fullest capacity and a minimum of cost, but quite the contrary were the operations after the fire. Mr. Hastings did not take into consideration the income received by Igoe Brothers for the six months after the fire in order to estimate the gross profits. The amount of the company's gross profits was very material to him according to the formula adopted by him on page 485 of the State of the Case. He said that he did not take into consideration the figures resulting after the fire because that would be ridiculous but he did not give any explanation as to why it would have been ridiculous. On page 491 he admits that he has predicated his 17 tons on the products manufactured before the fire and that he would have changed his opinion if it should appear that the company manufactured different products after the fire. He was asked if he examined the books of Igoe Brothers to determine the amount that they lost during 1925 and he answered in the negative and he said that he was not interested in 1925.

We have no quarrel to find with the illustration set forth in the brief to the effect that if a plant requires a production of ten tons in order to pay all of its fixed charges that it will have made its fixed charges upon the production of 10 tons, but we do think the balance of the illustration is logical where it is contended that if a fire occurs and the plant continues with the production of 10 tons that it will not have lost any fixed charges but that it only would have lost the profit which would have been made had its production exceeded 10 tons. This is sound if the conditions and cost of

manufacture after the fire were the same as those existing before the fire, but if the cost of production is greater after the fire then the number of tons to be produced would have to be increased. Moreover, we are not interested in the tonnage produced except insofar as there was production at a profit. The actual loss sustained consisting of loss of net profits and fixed charges. The only deduction that the companies were entitled to was the net profits made after the fire.

It is said in defendant-appellant's brief that "the only accurate method of arriving at complainant's loss of fixed charges was that used by Mr. Hastings." We have searched the State of Case in vain and have been unable to find any method fixed by Mr. Hastings regarding fixed charges in accordance with the terms of the policies. He attempted on pages 475 to 479 to set forth some method, but on page 476 and after working out some sort of formula he proceeds to state that in his opinion the assured's loss of fixed charges was $19,400.00 and when asked how he arrived at that figure he answered, "$194.00 per day for 100 days." Upon cross-examination he was interrogated at length and he admitted (S. C. 491) that if the company was producing materials which did not result in as great a profit after the fire as before the fire he would have to increase the amount of tonnage to meet the overhead charges. It is interesting to note (S. C. 495) that after the Umpire had indicated his views to the appraisers that Mr. Hastings submitted a further report wherein he set forth a summary as per the Umpire's finding which read as follows:

> "Summary as per Umpire's finding, net profits per day, average of two years, 1924, 1923, 600 days and multiplied by 200 days, gave $297.90 times 200 days, equalling $59,-

> 580.00; fixed charges per day, $193.91 times 200 days, equalling $38,782.00, making a total as per Umpire's finding of $98,362.00."

He was asked the following questions:

> "Q. Now that was your opinion as reading the Umpire's preliminary report, wasn't it, as per his findings? A. Yes, sir.
>
> Q. And then you subsequently changed your view and argued in your report for an allowance of 100 days? A. I did not change my views. I am just stating what the Umpire found. I did not agree with him."

Mr. Hastings was then asked the following questions:

> "Q. Now, Mr. Hastings, if Igoe Brothers had a loss averaging approximately $525. a day, and they had fixed charges of $194. per day, you would say, would you not, that they did not meet any of their fixed charges? A. If Igoe Brothers had a loss—
>
> Q. Averaging $525, you would say that they did not meet any part of their fixed charges of $194, wouldn't you? A. Surely."
>
> (S. C. 495)

In view of the testimony last quoted it is quite apparent that Mr. Hastings knew the true principle which should have been followed to determine the loss under the policies and therefore it is quite startling to have him testify (S. C. 491, line 21) that he did not examine the books of Igoe Brothers to determine the amount that they lost during the year 1925. He contented himself with the answer that he was not interested in 1925. The following question was then immediately put to Mr. Hastings. (S. C. 491, line 26).

> "Q. Now, Mr. Hastings, if you were interested in getting a real accurate formula to

> show the number of tons produced or which were required to be produced, rather, in order to carry the overhead of Igoe Brothers, don't you think you could have gone in and examined the books to find out how much their gross profits were, if any? A. No, sir. Because the policy distinctly states that they were compensating you for lost profits, not loss."

It is quite apparent that he was attempting to set up a theory not warranted by the policies because his answer was incorrect when he said that the policies only compensated the assured for lost profits. A plain reading of the policies will disclose that the complainant was entitled to loss of profits and fixed charges.

It is urged that Mr. Igoe testified that the complainant could have continued operating even though part of its plant had not been completed, and he is quoted as stating that he could have continued operating and probably absorbed the overhead. It is unfortunate that Mr. Igoe's complete testimony in this regard was not quoted and we take the liberty of quoting it here.

(S. C. 109-110).

> "Q. When you gave your testimony the other day, Mr. Igoe, you gave certain testimony concerning building H and the manufacture of bale ties in that building. This question was asked you: "Well, was that a large part of the company's business?" And your answer was: "It was a fairly good part of the business, yes."
>
> Q. "When you say you could have run along without that building, what do you mean? A. I mean that we could have continued operating and probably absorbed our overhead."
>
> Now, I asked you—will you amplify that

statement and tell us what was meant when you gave that answer?

A. Well, the bale ties business was a very small part of our business. We did not manufacture but about five or ten per cent. of the wire that was used in the manufacture of bale ties. That wire was all furnished us by H. P. & H. F. Robinson Company, for whom we made the ties.

Q. When you stated that you could have continued operating and probably absorbed your overhead, just what was meant by that? A. I mean that if we had the balance of the factory in operation, we could have absorbed our overhead regardless of the bale ties running at all.

Q. In other words, you could not have absorbed your overhead operating with regard to bale ties alone? A. No, not at all.

Q. And you meant they would play an inappreciable part in the business? A. Have very little bearing on the total manufacturing."

It is next stated that even if the Umpire and appraisers had not considered the actual operations of complainant after the fire they might probably have concluded from the evidence presented to them that although the plant could not have been completely restored in less than 200 days it could have been completed in a lesser period to enable operations by complainant. Such conjecture is not open to the defendants since no testimony was offered by them to establish that partial operations could have been completed within any given period of time excepting, of course, that the plant could have been fully completed within 200 days. Mr. Igoe testified (S. C. 87) that the greatest portion of the plant would have to be completed so it could run as a unit. This is uncontradicted. Mr. Woodward, a master me-

chanic of complainant and in its employ for twenty-five years, gave testimony detailing the operation of complainant's business and he, too, testified that the plant practically had to be operated as a unit. (S. C. 72-78).

It is next urged that it is not the function of the Court of Chancery to set aside the finding of arbitrators merely because the interpretation of the evidence presented to the arbitrators and to the court led each to a different conclusion. If that were the situation in this case we would not take the time of this court and the court below to ask for reformation, but we feel that we have clearly established that the terms of the policies were not followed.

It is next urged that assuming the Umpire and appraisers did commit legal error in rendering their award the same should be re-submitted to them for further consideration and determination. We respectfully direct attention to paragraphs six and seven of the Arbitration Agreement. (S. C. XXI).

> "6. If either of the parties hereto shall feel aggrieved by the award of the appraisers (or the award in writing of one of the appraisers and the umpire) in that the appraisers (or one of the appraisers and umpire) have taken into consideration in arriving at their award matters which were improper or illegal for their consideration, such party shall, within ten days from the entry of the aforesaid awards, institute proper proceedings in the Court of Chancery for the purpose of correcting and reforming the awards in accordance with the practice of that court and either party taking such action shall proceed with all reasonable despatch. In the event that no such action shall be taken by either of the parties hereto within ten days from the date of the

awards made as aforesaid, the awards in their respective amounts shall be conclusive and final and for all purposes of this agreement binding upon the parties hereto.

7. Either party hereto at any time after the respective awards as aforesaid have become finally determined, may apply to the New Jersey Supreme Court, the Essex County Circuit Court, the Essex County Court of Common Pleas, or the Court of Chancery of New Jersey, to have the policies of insurance and the true meaning and application thereof construed, in the manner and in accordance with the provisions and the practise of an act of the Legislature of the State of New Jersey entitled "An Act Concerning Declatory Judgments and Decrees," Chapter 140, Laws of 1924, and a final judgment or decree as the case may be, shall be entered in the amount of such award as shall conform to the true construction and meaning of the aforesaid policies of insurance. The right of either of the parties hereto to appeal from any order, judgment or decree is expressly reserved."

It is respectfully contended that these two paragraphs should be read together and it is quite apparent that neither the assured nor the companies were contented to rely upon the legal construction to be placed on the policies by the appraisers or by the appraisers and the umpire and consequently they availed themselves of the act concerning declatory judgments and decrees. Admittedly the Court of Chancery has jurisdiction to reform an award where the award is the result of a mistake. *Dennis, et al,* vs. *Standard Fire Insurance Co.* 90 N. J. Eq. 419. (107 A. 161). Therefore the construction of the policies was properly before said Court. Now we feel that we have established that the Umpire and appraiser made a mistake in con-

struing the award to which the complainant was entitled. We again repeat that the actual daily loss sustained by the complainant was $301.45, loss of profits and $194.18 fixed charges, a total of $495.63. Multiplying this figure by 200 days gives a total of $99,126.00. As we have heretofore pointed out the companies are entitled only to a reduction in this last mentioned amount insofar as they can establish that net profits were derived by operations after the fire. Admittedly the burden of proof was on the assured to establish the amount of its loss. This it has done. The burden was on the insurance companies to establish the facts entitling them to a reduction. This the companies have utterly failed to do. They can not point to the testimony of Mr. Hastings because the latter has not followed the terms of the policies. Consequently the court below acted within its jurisdiction in reforming the award and passing a decree that the award should stand as so amended. We do not contend that this matter should have been re-submitted to the appraisers and the Umpire in view of the agreement entered into between the parties and our sole grievance with the decree in the court below is that the terms of the policies had not been properly construed. It is respectfully submitted that no further submission of this controversy should be made to the appraisers and Umpire but that the decree in the court below should be modified to the extent hereinbefore set forth.

POINT TWO.

(A)

The Umpire acted within his jurisdiction in determining that complainant's profits would continue at the same average as the two years next preceding the fire and that his conclusion so arrived at was final.

The policies provided that in determining complainant's loss due consideration should be given to the "experience of the business before the fire and the probable business thereafter."

The adjusted net profits from sales in 1920 to 1924 were as follows:

Year 1924	$ 91,123.68
Year 1923	197,678.50
Year 1922	53,066.64
Year 1921	50,941.27
Year 1920	286,771.20

The average net profit per day in the manufacturing department, based on a one, two, three, four and five year average, as adjusted by the Umpire is as follows:

Net profits per day based on 1 year average	$190.23
Net profits per day based on 2 year average	301.45
Net profits per day based on 3 year average	237.89
Net profits per day based on 4 year average	205.01
Net profits per day based on 5 year average	283.74

It is urged that under no circumstances may a party be allowed damages in an amount greater than it claims. We do not dispute this statement of law. The defendant-appellants attack the find-

ing of the Umpire in using the two year figure on the ground that it grants to the complainant more than the complainant requested as an allowance. It is respectfully submitted that this is not the fact. In the original claim submitted by Igoe Brothers they requested net profits of $573.47 per day, fixed charges in the amount of $297.63 per day, making a total of $871.10. After the Umpire had written to the appraisers expressing his thoughts on the matters before him he asked the accountants for the respective parties to submit figures to him in accordance with his findings. As the Master sets forth in his report, Igoe Brothers suggested that the average net profits per day be based on a five year period with an increase of twenty-five per cent because of the probability of larger profits after the fire on account of improved business conditions. They did not request an allowance of $283.75 but asked for that amount plus twenty-five per cent or a total of $353.94. (See report of Special Master S. C. XL). It is argued in defendant-appellant's brief that business conditions were on the downward grade subsequent to the fire and quotations are set forth from "Iron Age 1925." The complainant introduced testimony to show that business conditions in the wire and nail business improved during the year 1925 over that of 1924. (See testimony of Theodore B. Smith, S. C. pp. 576-577). On page 581 he testified that "Iron Age" represents only common products and not special products and that the business of manfacturers dealing in special products is not reflected in the chart. Mr. Peter Igoe testified that considerable additional machinery and equipment had been installed in 1924 which increased the output and lowered the cost of operations (S. C. pp. 90-91). We mention the conflict

in the testimony regarding the prospects of business being increased in 1925 over that of 1924 to show that there was an honest difference of opinion between the appraisers. On one hand the insurance companies were contending for a one or three year average and the assured contending for a five year average with an increase of twenty-five per cent. The Umpire had to make a decision and for the reasons stated by him in his award he concluded that by taking the average profit for the two years next preceding the fire that it would have been an equitable adjustment between the parties. Manifestly the Umpire was called upon to exercise his judgment and with errors of judgment on the part of the parties making the award the court has no concern. *Collins Carriage Co.* vs. *German American Insurance Co. et al,* 86 N. J. Eq. 53. The assured was contending for an amount greatly in excess of $300.00 and the companies were contending for an amount as low as $119.28 per day. The Umpire was not required to decide on a figure between the two limits contended for. The Umpire when called upon to decide the differences between the appraisers "acted as a juror, and was to exercise his own untrammeled judgment." *Dennis* vs. *Standard Fire Insurance Co.* supra.

It is contended by the companies that sound accounting practise seems to call for the adoption of odd years for determining true averages and it is stated that the practise of ascertaining average profits by considering profits for periods of one and three years is approved by a number of cases. In support of this the case of In re *Hall,* 94 N. J. L. 396 (119 A. 669) is cited. We desire to quote in part from that decision:

> "The value of the good will of a business is naturally not susceptible of determination

> with exactitude. The usual method is to take the actual annual net profits of the business for a period of years, add them and divide by the number of years, thus obtaining the average annual net profit, and then to multiply that average profit by a certain number of years. This last multiplier is called the "number of years purchase," and varies, of course, with the particular circumstances in each case. *In some instances 2 years has been taken,* in others, 3, 4 and 5. Three years purchase seems fairly well accepted as a reasonable and conservative figure in ordinary cases. * * *"
>
> "The question as to what years are to be taken in computing the average, is, however, a question of fact and *of judgment under the circumstances* and the proof before the comptroller, and is not for the judgment of this court in substitution for that of the comptroller."

Of course, the Umpire was not concerned with the item of good will but was only interested in determining what the reasonable profits might have been in the future had not this fire occurred. It was solely a matter of judgment to be exercised by the Umpire and in the absence of some judicial misconduct his determination was final. *Collings Carriage Co.* vs. *German American Insurance Co.* supra.

In passing, we desire to call attention to an unintentional but erroneous statement of fact in defendant-appellant's brief. It is stated that the profits during the period from January 1, 1925 to April 9, 1925 (the date of the fire) were $12,772.32 or $153.88 per day. The net profits from operations in the manufacturing department amounted to $25,588.08, and after adding discounts received and deducting discounts paid the net profits for

the period amounted to $24,062.51 or an average per day of $289.91 (Exhibit A of complainant's accountants' report and see also testimony of Mr. Hastings S. C. p. 476).

(B)

There was no error in allowing seventy-five per cent. of items listed on complainant's books as an operating expense to be treated as capital expenditures, thereby increasing the net profits for the year 1924.

On the books of Igoe Brothers the sum of $45,319.37 was charged to expenses and it was contended by the assured that these expenditures were capital expenditures and were not expenses. A difference arose between the appraiser for the assured and the appraiser for the companies and the following was submitted to the Umpire for his determination:

> "2. Are certain items which appear in the assured's books as expense of 1924 in the amount of $45,319.37 to be considered as operating expenses or capital expenditures?" (Exhibit C-14)

In the communication addressed by the Umpire to the two appraisers (Exhibit C-15), the Umpire stated the following:

> "5. As to the question whether the book records for 1924 should be adjusted by capitalizing items previously charged to expenses; I am not so much interested in what the books show as I am interested in ascertaining the facts. If the books do not correctly represent the situation so far as the facts are

concerned, there is no doubt in my mind that I should ignore the book entries and base my conclusions on the facts as they actually exist or existed. It is well known that income tax investigators ignore book entries in determining the facts for income tax purposes. It is also well known that set-ups in books are constantly changed so that they may be in accord with new and changing facts of a situation. I have no doubt that if the accountant for the insurance companies had found that expense items had been capitalized he would have made the necessary adjustment in the book figures, and he would have been right in so doing. There is no doubt in my mind that during 1924 considerable monies were expended which could and should have been capitalized. Why it was not done is beside the point. Perhaps the question of income tax had something to do with it. At any rate, an examination of the exhibit furnished in behalf of the assured (Exhibit E) clearly shows that monies expended in purchases and properly chargeable to capital, were listed as expenses or repairs. Not only were they listed as such but they were certified to by the accountants and Mr. Igoe, which causes Mr. Hastings to argue that Mr. Igoe cannot now claim the benefits of these items because of his certification. But as I have said, we are not interested in the manner of entries, nor any statement made by anybody in making those entries, if the facts are otherwise. I have gone over these accounts now attempted to be capitalized and as nearly as I can estimate there is no question that about 75% thereof should be capitalized. There is some doubt about the remaining 25% and I am disallowing 25% of them because of this doubt. It might be noted in passing that for four years prior to the fire the average amount of charges to this particular account of repairs to buildings and

> machinery, was about $8,000. as compared with about $37,000. during 1924."

We are of the opinion that the statement made by the Umpire is dispositive of this point.

That Mr. Hastings was of the same opinion as the Umpire is indicated by his testimony which we quote as follows:

> "Q. Well, now, if Igoe Brothers had carried as items of capital, certain items which were admittedly expense, and thereby increasing their profit, you would have contended that they should have been disallowed wouldn't you? A. Yes, sir." (S. C. 496)

We do not dispute the legal principle that the books of Igoe Brothers could be used as admissions against them but we respectfully submit that every item in their books was open to examination and explanation, and if an item appeared to have been charged to expense, whereas it should have been charged to capital, then the true facts were to be determined by the Umpire, irrespective of their characterization on complainant's books. It is urged that the line between "capital" and "expense" is shady and generally impossible to determine with certainty where the item should be placed. That this was in the mind of the Umpire is clearly evidenced by the fact that he said that there was some doubt in his mind about twenty-five per cent of the items which were charged to expense and that because of his doubt he would decide against Igoe Brothers with respect to such items.

Mr. Wigmore treats admissions in two senses, the one where an admission is made in open court and which a person is not permitted to contradict

and a quasi-admission which can be explained. He states that:

> "1. A quasi-admission, of the present sort, being nothing but an item of evidence, is therefore not in any sense final or conclusive. The opponent, whose utterance it is, may none the less proceed with his proof in denial of its correctness; it is merely an inconsistency which discredits, in a greater or less degree, his present claim and his other evidence. * * * *
>
> 2. It follows that an opponent whose admissions have been offered against him may offer any evidence which serves as an explanation for his former assertion of what he now denies to be the fact."
>
> (Wigmore on Evidence, Vol. 2, Sec. 1058-1059)

We do not understand that the contention is being made that the last mentioned principle of law is not to be followed in this case and such being the state of the law and the Umpire having considered each item listed as expense, we respectfully submit that the conclusion reached by him can not be impeached.

Conclusion.

It is submitted that the decree of the Court of Chancery should be modified to the extent that complainant-respondent be allowed the full amount of its fixed charges for a period of 200 days at the rate of $194.18, and that the decree stand in all other respects; that in view of the arbitration agreement it is not necessary to re-submit this matter to the appraisers and Umpire, but that the award be modified as herein contended for. All of the issues involved in this controversy have been

tried out on the merits. This matter has been in arbitration and in court since 1925. If any of the pleadings of either party are not broad enough to cover all of the points litigated it is urged that the pleadings be moulded to cover the matters in controversy to the end that a final result will be arrived at as expeditiously as possible.

We also submit that inasmuch as the matters raised by the defendant-appellant's counter-claim were questions of fact, opinion and judgment to be settled by the Umpire and that inasmuch as there has been no fraud or misconduct on the part of the Umpire with regard thereto and inasmuch as he acted within the jurisdiction given to him by the arbitration agreement that his findings should be undisturbed.

Respectfully submitted,

WOLBER & GILHOOLY,
Solicitors for and of Counsel
with Complainant-Respondent.

EDWARD J. GILHOOLY,
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97 OCT.T.1931

New Jersey Court of Errors and Appeals

Between

IGOE BROTHERS, INC., a corporation,
Complainant-Respondent,

and

NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., *et als.*,
Defendants-Appellants.

On Appeal from Chancery.

BRIEF FOR DEFENDANTS-APPELLANTS.

Statement of Facts.

Defendants-appellants issued policies of insurance covering complainant against loss caused by business interruption resulting from fire, ordinarily called use and occupancy insurance. All of the policies insured complainant for "the actual loss sustained" including loss of profits and fixed charges during the period which would be required to rebuild the premises damaged by fire (2 S. C., p. 7).

Complainant was engaged in the manufacture of wire and nails at its plant in Newark. A fire occurred at complainant's plant resulting in damage to the insured property and causing a suspension of part of complainant's business. Complainant and defendants were unable to agree as to the amount of the loss; they thereupon entered into an arbitration agreement by the terms of which they agreed to submit to appraisers and

an umpire the determination of the amount of complainant's loss.

Pursuant to their agreement the parties appointed appraisers who were unable to agree upon the amount of the loss sustained by complainant. The Hon. Charles F. Lynch was then duly appointed umpire by the Essex County Court of Common Pleas. The appraisers and umpire conducted numerous hearings and voluminous evidence was submitted on behalf of the parties. Under date of September 26, 1927, the umpire sent a preliminary letter to the appraisers (2 S. C., p. 42) and on November 18, 1927, a final award allowing $79,708.00 to assureds was rendered (2 S. C., p. 33). The umpire and E. F. McCrossin, the appraiser appointed by the defendants joined in the award.

In their award the umpire and appraiser considered the individual items in dispute and determinations on all of said items were made; only the pertinent items will be referred to here. A considerable amount of evidence was presented to the umpire and appraisers on the following question: "What length of time would be required for the assured to restore the profit making facilities?" The umpire and appraiser found that the complainant's plant could be completely restored within 200 days (2 S. C., p. 40). Defendants concede the finality of the 200 day finding and it is our understanding that complainant will do likewise; accordingly, that item is not in dispute here.

The umpire and appraisers likewise received considerable evidence as to the amount which would adequately compensate complainant for loss of fixed charges. The evidence disclosed and the umpire and appraiser found that complainant continued its manufacturing operations after the fire and that a 100 day allowance would adequately

compensate complainant for the loss of fixed charges. This finding was in complete accord with the evidence presented to the umpire and appraisers by James J. Hastings, a certified public accountant (1 S. C., p. 476). Mr. Hastings submitted detailed reports which established that the assured had lost approximately $19,400 in fixed charges (1 S. C., p. 476). Since the umpire and appraiser found the daily fixed charges to be $194.18, their 100 day allowance adequately compensated complainant for its loss of fixed charges.

In their award for loss of profits, the umpire and appraiser assumed that the profits would continue "at the same level as they averaged for the previous two years before the fire" (2 S. C., p. 35). On that basis they allowed $301.45 per day as profits lost. From the preliminary letter sent to the appraisers by the umpire it appears that complainant contended that it should be allowed a daily net profit based on a five year average, or, in other words, $283.74 (2 S. C., p. 43). From the final award it appears that complainant contended that its profits would increase 25%, presumably, above the preceding year, 1924 (2 S. C., p. 35). Its profits for 1924 as adjusted and increased by the umpire were $190.23 per day. Adding 25% to that figure results in a total of $237.78. The allowance of $301.45 as daily profits lost was accordingly in excess of the amount complainant would have received if its contentions were accepted.

The remaining finding of the umpire and appraiser which is pertinent here is their allowance of 75% of an item listed on complainant's books as an operating expense, to be treated as capital, thereby increasing the net profits of 1924 by $33,989.52.

After the award was rendered complainant filed a bill in Chancery for reformation. The bill was

subsequently amended and, as amended, sets forth that the umpire and appraiser erred in their determination of the amount of the complainant's profits before the fire and its loss of fixed charges (1 S. C., p. XXV). The bill of complaint does not attack the finding of fact that it would require 200 days before the profit making facilities could be restored and nowhere in complainant's bill is reformation of that finding sought. Complainant later abandoned its objection to the finding as to the amount of its profits, but urged that the 100 day finding as to fixed charges was improper (1 S. C., p. 2).

Defendants filed an answer and counterclaim setting forth the validity and finality of the 100 day finding and attacking the action of the umpire and appraiser, in adopting a two year average resulting in the allowance of $301.45 per day as profits lost, and in increasing the profits of complainant for 1924 above the figure disclosed by its books (1 S. C., p. XXX).

The matter was referred to Vice-Chancellor Church and was in turn referred to Hon. Charles F. Lynch as a special master of the Court of Chancery to take testimony and report to the Court (1 S. C., p. XXXVII). Many hearings were held before the special master, considerable testimony was taken and voluminous exhibits were introduced in evidence.

On May 29, 1930 the special master rendered a report disallowing defendants' counterclaim and increasing the award for loss of fixed charges from $19,418 to $30,563.20 thus increasing complainant's award from $79,708 to $90,853.20 (1 S. C., p. XV). Defendants duly filed exceptions to the master's report (1 S. C., p. LIV). Complainant also filed exceptions, alleging that the allowance for loss of fixed charges was insufficient (1 S. C., p. LVII). The exceptions were argued on behalf of

the parties before Vice-Chancellor Church who delivered a memorandum opinion dismissing the exceptions of both parties (1 S. C., p. LIX).

On February 25, 1931, a final decree confirming the master's report and increasing the award from $79,708 to $90,853.20 and allowing a counsel fee and costs to complainant was entered (1 S. C., p. LX). Defendants have duly filed notice and petition of appeal and urge the following grounds for the reversal of the decree entered by the Court below.

ARGUMENT.

POINT I.

The lower Court erred in increasing the award for loss of fixed charges.

(A)

The submission to the appraisers and umpire expressly provided that they were to ascertain the amount of complainant's loss, including loss of fixed charges. In the course of their deliberations the umpire and appraiser heard considerable testimony bearing on the extent of complainant's loss of fixed charges. The uncontradicted evidence displayed that after the fire the assured continued with its operations and the award contains a finding of fact that "the assured continued manufacturing operations after the fire" (2 S. C., p. 40). That finding is not subject to attack here.

The award contains the further finding of fact that the manufacturing operations after the fire "gradually absorbed the overhead charges" and that an allowance of 100 days or $19,418.00 adequately compensated complainant for its loss of fixed charges (2 S. C., p. 40). This result was

in substantial agreement with the testimony of Mr. Hastings (1 S. C., pp. 475-478) whose qualifications as an accountant are admitted by complainant.

It seems clear that the finding of fact by the umpire and appraiser that complainant's loss of fixed charges was $19,418 was conclusive, it being admitted by complainant that the umpire and appraiser were guilty of no fraud or misconduct. In *Kaplan* vs. *Niagara Fire Insurance Company,* 73 N. J. L. 780, 789 (1906), our Court of Errors and Appeals recognized the well settled rule that such findings are conclusive and will not be reviewed by a court of law or equity, and the cases to the same effect are legion. See *Continental Insurance Company of New York* v. *Titcomb,* 7 F. (2d) 833 (C. C. A., 8th, 1925); *Burchell* vs. *Marsh,* 17 How. 344, 15 L. Ed. 96 (1855), and the numerous cases collected in 5 *C. J.* 179.

Complainant has heretofore contended that the award was the result of "mistake". But its proofs, viewed from their most favorable aspect, are directed merely towards the establishment of an error of judgment; and, as stated by Vice Chancellor Leaming in *Collings Carriage Co.* v. *German American Insurance Co.,* 86 N. J. Eq. 53, 57 (Ch. 1916):

> "With errors of judgment on the part of the parties making the award this court has no concern."

In this connection the language of the United States Supreme Court in *Burchell* vs. *March, supra,* is pertinent:

> "Courts should be careful to avoid a wrong use of the word 'mistake' and by making it synonymous with mere error of judgment assume to themselves an arbitrary power of awards."

A contention similar to that urged by complainant in this proceeding was made in *Davis* vs. *Henry,* 121 Mass. 150, 154 (1876). In answer to the complaining party's contention the Court said:

> "When it is sought to set aside an award upon the ground of a mistake committed by arbitrators, it is not sufficient to show that they came to a conclusion of fact erroneously, however clearly it may be demonstrated that the inference drawn by them was wrong. It must be shown that, by some error, they were so misled or deceived that they did not apply the rules which they intended to apply to the decision of the case so that upon their own theory a mistake was made which has caused the result to be something different from that which they had reached by their reason and judgment. *Boston Water Power Co.* v. *Gray,* 6 Met. 131, 169. *Carter* v. *Carter,* 109 Mass. 306. *Spoor* v. *Tyzzer,* 115 Mass. 40."

There can be no intimation that the umpire and appraiser did not do what they intended to do; from conflicting evidence they decided that complainant's loss was $19,418. A conclusion that that finding can be set aside would in effect eliminate the finality of all awards and would permit findings of fact by appraisers to be set aside in every instance.

Finally we wish to note that in 1923 our legislature passed "An Act concerning arbitrations and awards", *P. L. 1923, C. 134, p. 291,* containing an enumeration of grounds upon which awards may be attacked. The act seems to express a clear legislative mandate prohibiting modifications of awards on a ground such as that urged by complainant.

It is respectfully submitted that the finding by the umpire and appraiser that complainant's loss of fixed charges was $19,418 is conclusive and that the modification thereof by the lower Court should be set aside.

(B)

Assuming that the finding as to loss of fixed charges was reviewable it is submitted that the testimony presented to the master and the Court below required that the determination of the umpire and appraiser be sustained. Mr. Hastings, an admittedly competent accountant, testified as follows:

> "Q. What was the production of Igoe Brothers before the fire? A. 62,284 pounds or 31 tons per day.
>
> Q. What production per day was necessary to meet all overhead including fixed charges per day? A. 17 tons.
>
> Q. How do you arrive at that figure? A. The umpire finds that the net profit per day in the manufacturing department is $301.45. The assured's accountants report Exhibit A shows overhead expenses $31,970 for 83 days. January 1st to April, 1925, date of the fire, or $385.18 per day. If production is 31 tons per day, the production for 83 days is 2,573 tons. * * * Assured's accountants' report, Exhibit A, shows the gross profit in the manufacturing department on $57,588.08 for 83 days. Therefore, since we know the production for 83 days and we know the total overhead for 83 days, $31,970, which includes the fixed charges, we now must find how many tons per day must be produced at the same margin of gross profit in order to pay the total overhead of $31,970, or $385.18 per day. We determine this by dividing the production of 83 days, 2,573 tons, into the gross profit for 83 days, $57,558.08, which gives a gross profit per ton of $22.37. Having determined the gross profit per ton $22.37 we now divide that amount into the average total overhead per day, $385.18, and arrive at the conclusion that the assured has to produce 17 tons per day to pay all the overhead per day, which includes all the fixed charges.

Q. In your opinion, what was the assured's loss of fixed charges? A. $19,400.

Q. How do you arrive at that figure? A. $194 per day for 100 days.

Q. What do you mean by 100 days? A. I mean that an allowance of 100 days of fixed charges will cover all the loss of fixed charges suffered by the assured.

Q. Explain how you arrive at the 100 days? A. Here is a statement which shows the production by pounds and tons for the eight months or 200 days after the fire.

Mr. Vanderbilt: I ask to have that marked.

(Received in evidence and marked Exhibit D-20.)

A. And here is a statement which shows the amount of fixed charges unabsorbed in each month due to the lack of production.

Mr. Vanderbilt: I ask to have that marked.

(Received in evidence and marked Exhibit D-21.)

Q. Do I understand that your allowance of 100 days of fixed charges would extend practically up to the end of September, 1925, or six months after the fire? A. Yes.

Q. What do you mean by unabsorbed fixed charges in each month? A. That amount of the fixed charges which the assured cannot pass on to his customers due to lack of production, which is the amount the insurance companies agree to pay the assured as lost fixed charges'' (1 S. C., p. 475).

The umpire and appraiser found as a fact that the assured continued manufacturing operations after the fire and absorbed some of its fixed charges and with this finding of fact the special master concurred (1 S. C., p. XLV). A fixed charge is an expense of a business which continues regardless of the absence of any production. With

production, however, part of the fixed charges are absorbed in the cost of articles produced and as production increases the portion of the fixed charges which is absorbed increases. To use a simple illustration: The "A" plant may require a production of 10 tons in order to pay all of its fixed charges; if its production is less than 10 tons, it has not absorbed its fixed charges, while if it is over 10 tons, the plant will be making a profit. If a fire occurs and the "A" plant continues with the production of 10 tons it will not have lost any fixed charges for its return on the 10 tons produced covers that. However, it will have lost the profit it would have made on what would have been its production above 10 tons, were it not for the fire. It is apparent in determining the loss of the "A" plant because of the fire, the production after the fire must be considered as absorbing the fixed charges and, accordingly, "A's" only loss is its loss of expected profits.

Similarly, in our case, complainant by its production after the fire absorbed some of the fixed charges. There is no dispute between the parties as to the extent of complainant's production after the fire. Complainant admits the accuracy of the statement marked Exhibit D-20 showing complainant's production after the fire; the testimony introduced on behalf of complainant is to the same effect (1 S. C., pp. 103-109).

Nor does complainant dispute the accuracy of Mr. Hastings' testimony that before the fire the production of Igoe Bros. was 31 tons a day and that 17 tons production was necessary to meet overhead charges. Indeed, Mr. Hastings accepted the figures furnished by complainant in reaching his conclusion (1 S. C., p. 475). Since the production after the fire and the amount of production necessary to meet fixed charges were established

the ascertainment of the amount of fixed charges absorbed by the production after the fire was relatively simple. If complainant had produced 17 tons daily then it would have been entitled to nothing for loss of fixed charges; since its production after the fire averaged less than 17 tons a day it was entitled to be compensated for the fixed charges unabsorbed by the production. Mr. Hastings' testimony discloses that the unabsorbed fixed charges were $19,400 (1 S. C., p. 476). Since the umpire and appraiser had determined the fixed charges to be $194.18 per day, which figure was in substantial agreement with that of Mr. Hastings, the allowance of 100 days adequately compensated complainant for its loss of fixed charges.

The master in his report states that the 100 day finding of the umpire and appraiser was only an "estimate" (1 S. C., p. XLVI). Mr. Hastings' testimony clearly establishes that it was not an estimate but was an accurate calculation (1 S. C., pp. 475-477).

The master in his report states that the evidence produced before him shows that 21.3019% of fixed charges were absorbed (1 S. C., p. XLVI). Defendants are at a loss to understand upon what evidence the master reached his conclusion, although complainant in a memorandum filed before Vice Chancellor Church stated that the master's figure represents complainant's production after the fire.

Assuming, for present purposes, that complainant's assertion is accurate, it is nevertheless clear that the umpire erred in his conclusion that 21.3019% represented the percentage of fixed charges absorbed. If the master's conclusion that 21% production absorbed only 21% of fixed charges were correct it would take 100% production to absorb 100% of fixed charges, leaving no profit. Admittedly, complainant's production before the fire resulted in a profit and 100% fixed

charges were absorbed in less than 100% production. Similarly, 21% of fixed charges were absorbed in less than 21% production and 21% production would absorb more than 21% of fixed charges. Just how much more, could be arrived at only in the manner used by Mr. Hastings in arriving at his conclusion that $19,400 represented complainant's loss of fixed charges. In his report the master states that "there is no satisfactory proof that any loss or profit resulted from these partial operations" (1 S. C., p. XLVI). Assuming that to be so, it is evident that the only accurate method of arriving at complainant's loss of fixed charges was that used by Mr. Hastings.

In the light of the evidence presented to the master and considering the well settled rule that:

> "Every reasonable intendment and presumption comes to the support of an award in arbitration proceedings. The attacking party has the burden of establishing the invalidity of the award by clear proof for an award will not be lightly set aside. *Caledonian Insurance Co.* v. *North Dutch Reformed Church,* 96 N. J. Eq. 342, 124 Atl. 703; *McQuard Market House Co.* v. *Home Insurance Co.,* 147 Minn. 254, 180 N. W. 97." *Melton Bros.* v. *Philadelphia Fire and Marine Insurance Co.,* 104 N. J. Eq. 153, 144 Atl. 726 (E. & A. 1929).

can there be any doubt that the invalidity of the finding of the umpire and appraiser has not been established?

Mr. Igoe in his testimony before the special master admitted that complainant could have continued operating even though part of its plant had not been completed. On direct examination he testified as follows:

> "Q. When you say you could have run along without that building what do you

> mean? A. I mean that we could have continued operating and probably absorbed the overhead'' (1 S. C., p. 87).

The umpire and appraiser found that complainant's plant could have been completely restored within 200 days and that an allowance of 100 days was adequate for the loss of fixed charges which it could not have absorbed in that period. We have shown above that complainant's operations after the fire compelled the 100 day finding. But even if the umpire and appraiser had not considered the actual operations of complainant after the fire they might properly have concluded from the evidence presented to them that although the plant could not have been completely restored in less than 200 days it could have been sufficiently restored in a lesser period to enable the commencement of operations by complainant. Having so concluded they might properly have found that an allowance of $19,418 (or 100 days) represented complainant's loss of fixed charges during the 200 day period. And it being admitted that the umpire and appraiser had committed no fraud or misconduct the legal presumption in favor of the validity of the award would require, in any event, that it be sustained.

It is interesting to note that the master recommended an increase in the allowance for loss of fixed charges on the sole ground that his ''review of the evidence discloses the finding should have been that the amount of the fixed charges actually absorbed was 21.3019%'' (1 S. C., p. XLVI). But it was not his function, nor the function of the lower Court to set aside findings of arbitrators merely because their interpretation of evidence presented to them lead them to a different conclusion. The umpire and appraiser fully considered a wealth of evidence as to the extent of complainant's loss.

The weight which they attributed to the respective items of proof presented to them is of course unknown and cannot be now ascertained. It is conceded by the master, however, that they honestly decided what complainant's loss was on the basis of the evidence presented to them and it would seem that even if the special master's conclusion that the evidence presented to him warranted a larger allowance for loss of fixed charges were correct, the finding of the umpire and appraiser was final and should not have been modified.

Finally, it is submitted that even if the action of the Court below, in setting aside the finding of the umpire and appraiser as to loss of fixed charges was not erroneous its action in increasing the award was improper. If the umpire and appraiser did commit legal error in rendering their award it should be resubmitted to them for further consideration and determination. The Court has no authority to substitute its opinion as to what the award should be for the opinion of the appraisers and umpire. See 5 *C. J.* 198.

It is respectfully submitted that the decree of the lower Court increasing the award for loss of fixed charges from $19,418 to $30,563.20 should be reversed with directions that the original finding be reinstated.

POINT II.

The lower Court erred in disallowing defendants' counterclaim.

Defendants concede that findings of fact by the umpire and appraiser are conclusive. The award discloses on its face, however, that as to several of their findings the umpire and appraiser clearly violated established rules of law. As to those

findings defendants submit that in disallowing their counterclaim the lower Court erred:

(A)

The umpire and appraiser in estimating profits lost by complainant erred in assuming that complainant's profits would continue at the same average as the two years next preceding the fire, thereby allowing to complainant a sum greater than it requested.

The policies of insurance provided that in determining complainant's loss due consideration should be given to the "experience of the business before the fire and the probable business thereafter" (2 S. C., p. 10).

According to complainant's books, the net profits from sales in the manufacturing department (that being the only department covered by the policies) were as follows:

Year 1924	$57,134.16
Year 1923	197,678.50
Year 1922	53,066.64
Year 1921	50,941.27
Year 1920	286,771.20

The umpire and appraiser adjusted the profits of 1924 by including as capital 75% of an item appearing as an operating expense on complainant's books (2 S. C., p. 34). The adjusted profits for 1924 were $91,123.68.

The average net profits per day in the manufacturing department based on a one, two, three, four and five year average as adjusted by the umpire were as follows:

1 year average	$190.23
2 " "	301.45
3 " "	237.89
4 " "	205.01
5 " "	283.74

In his preliminary report the umpire said:

> "In calculating the profits lost, Accountant Hastings based his report on the figures for 1924, one year only, while Accountant Rhyne went back a period of five years and struck an average. There is a dispute as to which should be adopted. It might not be quite fair to consider only the year previous to the fire in ascertaining an estimate of profits lost. One year could be out of line for many reasons while two or three would furnish more stable information as to the general average of activities and worth of the business. I think it would be more reasonable to take a period of two years previous to the fire for the purpose of ascertaining this loss" (2 S. C., p. 43).

In the final award the umpire and appraiser said:

> "The assured claims that the prospects after the fire were much brighter than previously thereto and consequently the rate of profit would have been 25%, or some other percentage higher. The insurance companies contend that the profits would have been lower because business was poorer" (2 S. C., p. 35).

Translating complainant's contentions into figures, according to the preliminary award, it requested that it be allowed daily profits of $283.74 (based on a five year average). According to the final award, complainant requested that it be allowed daily net profits of $237.78 (based on a one year average plus 25%). The allowance to complainant of $301.45 as daily net profits was grossly in excess of each of the foregoing demands of complainant. In so doing the umpire and appraiser acted in direct violation of the established rule of law that under no circumstances may a party be allowed damages in an amount greater than it claims. And this is true regard-

less of the amount of damages proven. *Karnuff* vs. *Kelch,* 69 N. J. L. 499 (Sup. Ct. 1903); *Weber* vs. *Morris and Essex Railroad Company,* 35 N. J. L. 409 (Sup. Ct. 1872).

The special master in his report attempted to justify the action of the umpire and appraiser, on the ground that complainant's real demand was for an allowance based on a five year average plus 25%. But it is clear from the face of the award that complainant never contended that business would be 25% better than the average of the five years last past. It seems obvious that when it contended that business would be 25% better it meant 25% better than the year next preceding the fire.

The correctness of this interpretation is established by the supplementary report of Mr. Hastings which was introduced in evidence. Mr. Hastings there states that:

> "The assured in the revised claim expresses an opinion that the business of 1925 would result in 25% more profit than 1924 (see pages 8, 9, 10, 11, 12 of report of Messrs. Courter and Rhyne)" (2 S. C., p. 114).

It is significant that complainant did not introduce in evidence the report of Messrs. Courter and Rhyne even after that fact was called to its attention (1 S. C., p. 487).

Furthermore, the umpire and appraiser did not find that business would be better; on the contrary the award contains an express finding that future business conditions would be the same as past business conditions and on that assumption a two year average was taken. The award contained the following finding:

> "The assumption that the profits after the fire would continue at the same level as before the fire raises the question as to what were the profits before the fire and after care-

> ful consideration of the above figures I am of the opinion that a period of two years would furnish stable information as to the general average of activities and net profits of the business'' (2 S. C., p. 36).

The two year average admittedly awarded the complainant more than a five year average, as urged by complainant, would have, and the finding based thereon should acordingly be set aside.

In addition to the objection that the two year average awarded to complainant more than it requested, it is urged that considering the undisputed facts and pertinent rules of law, the acceptance of the two year average was grossly erroneous as a matter of law and should be set aside. A careful examination of adjudicated cases has failed to disclose any support for a two year average. Sound accounting practice seems to call for the adoption of odd years for determining true averages and we accordingly find numerous cases approving the practice of ascertaining average profits by considering profits for periods of one and three years. See *Standard Printing & Publishing Co.* vs. *Bothwell*, 143 Md. 303 (1923); *In re Welch*, 77 Misc. 427, 137 N. Y. S. 941; *Matter of Silkman*, 105 N. Y. S. 872, 121 App. Div. 202; *In re Hall*, 94 N. J. E. 398, 119 Atl. 669, 99 N. J. L. 1, 125 Atl. 246, 100 N. J. L. 405, 126 Atl. 924.

In *In re Welch, supra,* the Court said:

> ''The cases teach that three times the average annual profits will fairly represent the value of good will in a case where good will is found. *For convenience and indeed for accuracy, the last three years of the course of an enterprise are generally taken for the calculation.*''

In *In Re Hall, supra,* the comptroller adopted a three year average and his action was approved by our courts. No case has been found in which

a two year average has been adopted; and a brief survey of the pertinent facts of our case will display how improper its use was here. The profits as shown by complainant's books, for the five years preceding the fire were as follows:

1920	$286,771.20
1921	50,941.27
1922	53,066.64
1923	197,678.50
1924	57,134.16

The profits for 1924 were adjusted by the umpire and appraiser and were increased to $91,123.68 or $190.23 per day. The profits earned during the period from January 1st, 1925 to April 9th, 1925 (the date of the fire) were $12,772.32 or $153.88 per day.

Admittedly, the profits for 1920 were very abnormal. The year 1920 marked the end of post-war price inflation and marked the beginning of a tremendous decline of profits in the type of business conducted by complainant. Peter Igoe, treasurer of complainant, conceded that 1920 marked the end of large profits and inflation due to conditions produced by the World War (1 S. C., p. 96).

Similarly, the profits for 1923 were also abnormally high as indicated by a comparison with the profits for the years immediately preceding and following 1923. Peter Igoe testifying on behalf of complainant admitted that 1923 was an abnormal year (1 S. C., p. 96).

From the foregoing undisputed facts it is obvious that the two year average allowed to complainant considerably more than its actual loss. One of the two years (1923) was admittedly abnormal (1 S. C., p. 96); the profits of the other year (1924), as adjusted by the umpire and appraiser, almost doubled the years 1922 and 1923 respectively and

yielded a daily net profit considerably in excess of the period from January 1st to April 9th, 1925.

And, if the testimony relating to future probabilities is considered the thought that the two year average was grossly improper is considerably strengthened.

The only testimony as to future probability based on evidence more substantial than the witnesses' sublime faith, is that contained in the report of Accountant Hastings (2 S. C., p. 61). He states:

> "It will be noted that the prices for the year 1925 were considerably less than those for the year 1924 and conditions as set forth in the trade paper 'Iron Age' show a marked decrease in the demand for wire nails and wire products, as illustrated by the following comments:
>
> *Iron Age—1925*
>
> April 30th—Trend toward reduction in stocks. Demands on mills do not amount to much tonnage.
> May 21st—Wire products industry operating only 50 to 55 per cent. of capacity. Price cutting.
> June 18th—Keen competitive market.
> June 25th—Lower prices. 40 to 45 per cent. capacity.
> July 16th—Market comparatively quiet 50 per cent. capacity production.
> August 27th—Business gaining due to low prices.
> September 17th—Brisk demand. 65 to 70 per cent. of capacity.
> November 12th—Strengthening in demand for wire products.
>
> This indicates that the year 1925 would evidently have shown a decrease in profits over the year 1924 had no fire occurred. A chart prepared by 'Iron Age' is included herewith (See Exhibit 'F')."

In the light of the authorities and the evidence as to past profits and future probabilities, it is clear that the two year average awarded to complainant more than its loss. The one year average would have allowed complainant the same daily profit it earned in 1924 despite the evidence that profits would be lower and despite the fact that complainant's daily net profit for the period from January 1st to April 9th, 1925, was considerably lower than that of 1924. Three and five year averages would have allowed complainant still higher daily net profits. The two year average, however, gave complainant much more than it was entitled to; indeed, more than it requested.

It is respectfully submitted that the finding of the umpire and appraiser that profits would continue at the same average as the two years next preceding the fire and the action of the lower Court confirming that finding should be set aside.

(B)

The umpire and appraiser erred in allowing 75% of an item listed on complainant's books as an operating expense to be treated as capital, thereby increasing the net profits of 1924 by $33,989.52.

Complainant's books showed the net profits for 1924 to be $57,134.16 (S. C., p. 471). Despite this, complainant contended that its profits were greater, basing its contention on the assertion that an item of $45,319.37 listed as an operating expense on its books, was really capital. The umpire allowed 75% of this figure as capital (2 S. C., p. 34).

The hearings before the master were replete with testimony as to the age and obsolete condition of complainant's plant. Kenneth Louis, a witness on behalf of defendants, testified as follows:

> "Q. Well, now, will you describe to the judge, in a general way, the equipment of the plant as you saw it when you were there before the fire? A. I only have a general recollection of it. I only carried away a general impression, that it was very old stuff, and obviously of no value; probably could not be operated profitably. I am referring only to the wire and nail equipment. There may have been some specialties, some flat wire or other equipment that I paid no attention to, but it was the wire and nail equipment that interested me. I carried away the impression that it was worse than obsolete" (1 S. C., p. 222).

Obviously a plant of the foregoing description would be in need of extensive repairs to enable its continued operation at a profit. An item of $45,319.37 for repairs is, therefore, not at all surprising.

The line between "capital" and "expense" is very often indistinct and it is generally, as in our case, impossible to determine with certainty where the item should be placed. It is clear, however, that before one may say, with even a slight degree of certainty, where a particular item should be placed, he must have intimate knowledge of his subject matter.

In our case complainant's officers and agents, who were entirely familiar with every detail of the plant, after deliberation, listed the item in question as an operating expense. This constitutes a legal admission by complainant on a subject peculiarly within its knowledge and should be binding on it in this action.

The umpire in his preliminary award cited the practice of income tax investigators in support of his position that complainant's books could be disregarded in ascertaining its profits (2 S. C., p. 44). And the special master suggested that since the defendants could impeach complainant's

book entries, complainant could do likewise (1 S. C., p. XLIX). But the practice of the government investigators and the right of defendants to attack complainant's book entries are merely illustrations of the well-settled rule that self-serving declarations do not bind adverse parties. This rule is merely a corollary of and in no wise affects the equally well established rule that adverse parties, the defendants in this case, may use complainant's book entries as admissions against complainant.

> *3 Wigmore, Evidence,* Section 1557, p. 303.

And where as in our case these admissions were made after careful deliberation by the only persons really qualified to determine whether the item was one of "expense" or "capital" they should be conclusive and binding on complainant in this action (2 S. C., p. 113).

It is respectfully urged that complainant's profits for 1924 should be accepted as $57,134.16.

It is respectfully submitted that the decree of the Court disallowing defendants' counterclaim be reversed.

Conclusion.

It is submitted that the decree of the lower Court dismissing defendants' counterclaim, allowing complainant $30,563.20 for loss of fixed charges, allowing a counsel fee of $2,500 to solicitors of complainant, $1,000 to the special master and costs to complainant, including $627 for testimony taken before the special master, be reversed with costs.

Respectfully submitted,

ARTHUR T. VANDERBILT,
Solicitor for and of Counsel with
Defendants.

97 OCT.1.1931

New Jersey Court of Errors and Appeals

Between

IGOE BROTHERS, INC., a corporation,
Complainant-Respondent,

and

NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., *et als.*,
Defendants-Appellants.

On Appeal from Chancery.

REPLY BRIEF FOR DEFENDANTS-APPELLANTS.

POINT I.

In our original brief we urged that the finding of the umpire and appraiser that an allowance of 100 days or $19,418 would adequately compensate complainant for its loss of fixed charges was final and the authorities therein cited compel that conclusion. Complainant's brief fails to present any authority for a contrary result.

Under its first point complainant advances the contention that since it would take 200 days to completely restore its plant, it was entitled to an allowance of 200 days for loss of fixed charges. That contention completely ignores the fact that although the plant could not have been entirely rebuilt until the expiration of 200 days, opera-

tions during the 200 day period absorbed at least part of the fixed charges.

When a plant has been completely destroyed by fire and no operations have taken place after the fire the assured has lost its fixed charges and the profit it would have made. However, as soon as there has been some production after the fire the return thereon absorbs some of the fixed charges. Admittedly, complainant manufactured certain units of production after the fire and part of the cost of producing the manufactured units was the fixed charges. The return on that production admittedly absorbed some of the fixed charges. As the quantity of production increased more of the fixed charges were absorbed and the umpire and appraiser found that an allowance of 100 days would compensate the assured for its loss of fixed charges. It must not be understood that the umpire and appraiser found that all of the fixed charges of the manufacturing department had been absorbed within 100 days after the fire. They merely found that complainant's production after the fire gradually absorbed the fixed charges and that an allowance of 100 days adequately compensated complainant for its loss of fixed charges.

Throughout its brief complainant refers to the fact that the policies do not contain the phrase "absorption of fixed charges". While that phrase may not be found in the policies there is no basis for complainant's contention that it is entitled to recover for fixed charges it has not lost. It seems too clear to warrant extended discussion that if a plant continues production after a fire sufficient to absorb all of its fixed charges no recovery for loss of fixed charges may be had on a policy insuring against the "actual loss sustained". Similarly where, as in our case, the production continued in part, sufficient to absorb

some of the fixed charges complainant is not entitled to recover for charges absorbed by production.

Reference is made in complainant's brief to the testimony of its witness, Cecil M. Priaulx, to the effect that complainant suffered an "operating loss" after the fire. Even assuming the correctness of that statement it lends no support to complainant's contentions. An operating loss after a fire may be due to any number of reasons and is immaterial in determining complainant's loss as a result of the fire. Furthermore, it should be noted that the testimony of Mr. Priaulx (S. C., p. 150) does not establish a loss in the manufacturing department, which is the only one we are interested in (that being the only department covered by the policies) (2 S. C., p. 8). Mr. Priaulx did not testify that the operating loss was in the manufacturing department and there is no evidence indicating a loss in that department. The special master's report expressly states that no satisfactory proof of loss had been introduced (1 S. C., p. XLVI) and accordingly complainant's remarks as to "operating loss" may be dismissed.

Complainant's brief deals at length with *Hartford Fire Insurance Company* vs. *Wilson & Toomis Fertilizer Co.*, 4 F. (2d) 835 (C. C. A. 5th, 1925), a case involving a set of facts entirely foreign to ours. As the Court stated, in that case "plaintiff did not continue in the same business in which it had been engaged before the fire" (p. 838). In our case the umpire and appraiser expressly found that the "assured continued manufacturing operations after the fire" (2 S. C., p. 40). The master has arrived at the same conclusion. Of course, a case where the assured after a fire undertakes a different business has no application to our facts. Furthermore, in the *Hartford* case plaintiff's loss of profits exceeded the face amount of the policy

and the question of absorption of fixed charges never arose. The insurance companies in that case contended that the "plaintiff produced 2/5ths of the fertilizer it would have produced if there had been no fire and their recovery should be limited to 3/5ths of the total amount of insurance". This contention was properly held to be unsound. In our case defendants have never made any such contention and the award was not based on any such principle.

It is significant that the umpire and appraisers in the *Hartford* case acted in the same manner as did the umpire and appraiser in our case. They determined how long it would take to restore the profit making facilities and then ascertained what the fixed charges and profits were. They then considered the production of a temporary plant as absorbing fixed charges and calculated the plaintiff's loss on the basis of unabsorbed fixed charges and profits lost (p. 837). The Court affirmed their award.

Complainant states that Mr. Hastings' calculations were not in accordance with the terms of the policies. Mr. Hastings ascertained the amount of production necessary to meet fixed charges. Since the amount of complainant's production after the fire was known, he was able to readily compute the amount of fixed charges not absorbed by the production. His calculations disclosed that complainant had lost $19,400 in fixed charges and this result was in substantial compliance with the finding of the umpire and appraiser.

In its brief complainant suggests that "we are not interested in the tonnage produced except in so far as there was a production at a profit". It is difficult to find any justification for complainant's position. Before the fire complainant absorbed all of its fixed charges by producing 17 tons a day. If after the fire it had continued pro-

ducing 17 tons a day it would obviously have lost no fixed charges although it would have lost expected profits. Since complainant's production after the fire was less than 17 tons per day it did lose some fixed charges; the 100 day allowance adequately covers that item.

Throughout its brief complainant suggests that this is a matter involving a "construction" of the policies. There is no real problem of construction of insurance policies involved. If there were this matter would be for the law courts and could not be considered in our Court of Chancery even though the parties consented. *San Giacomo* v. *Oraton Investment Co.*, 103 N. J. Eq. 273, 143 Atl. 329 (E. & A. 1928). Complainant is entitled to net profits and fixed charges lost and, as with every insurance policy, the limit of its recovery is the actual loss sustained. As to its loss of fixed charges it is submitted that the allowance of $19,418 by the umpire and appraiser should be sustained.

POINT II.

At page 23 complainant states that it suggested that the average daily profits be based on a five year average plus 25% because of the probability of better business conditions. But as we pointed out in our original brief the preliminary and final awards as well as the evidence in the case disclose that no such suggestion was ever made. Furthermore, the umpire and appraiser expressly found that business would not be better but would continue at the same level as before the fire. Admittedly, the two year average awarded complainant more than the five year average urged by it would have and the finding based thereon should accordingly be set aside.

At page 25 complainant asserts that our statement that the profits from January 1, 1925 to April 9, 1925 were $153.88 per day is erroneous. The report of accountant Hastings, introduced in evidence, contains in detail the pertinent figures and displays that our statement is entirely accurate (2 S. C., p. 57).

Respectfully submitted,

ARTHUR T. VANDERBILT,
Solicitor for and of Counsel
with Defendants.

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NEW JERSEY COURT OF ERRORS AND APPEALS

Between IGOE BROTHERS, INC., a corporation, *Complainant-Respondent,* and NATIONAL BEN FRANKLIN FIRE INSURANCE COMPANY OF PITTSBURGH, PA., et als., *Defendant-Appellant.*	ON APPEAL FROM DECREE IN CHANCERY SAT BELOW CHURCH, V. C.

STATE OF THE CASE

EXHIBITS

Vol. 2

APPEARANCES:

ARTHUR T. VANDERBILT,
Solicitor for Defendant-Appellant.

WOLBER & GILHOOLY,
Solicitors for Complainant-Respondent.

COMPLAINANT'S EXHIBITS

EXHIBIT C-1

266989

Standard Fire Insurance Policy of the State of New Jersey, Connecticut, Rhode Island and Virginia.

Expires .....January 29, 1926.....

Property .....So. of Poinier St. & Avenue A.....

Amount .....$.....10,000.....

Premium .....$..... 123.00
9.66

Igoe Brothers,

This policy effected through

ALFRED WORMAN

a licensed New Jersey broker

numbered 22-W-2903

35 Nassau St. New York.

No. 2304571

United States

Fire Insurance

Company

OF NEW YORK

110 WILLIAM STREET

CASH CAPITAL $2,000,000

ALFRED WORMAN

INSURANCE

76 WILLIAM STREET, N. Y.

It is important that the written portions of all Policies covering the same property read exactly alike. If they do not, they should be made uniform at once. 57832

DIRECTORS

ISAAC L. ALLEN
ROBERT D. ANDREWS
LOUIS F. BALLARD
AREUNAH M. BURTIS
OTTO B. CANDIDUS
FREDERICK T. FISHER
G. BURGESS FISHER
JOHN A. FORSTER
EDWARD E. HALL
WILLIAM H. HARKNESS
RUDOLPH O. HAUBOLD
AUGUSTUS S. HUTCHINS
WALDO HUTCHINS
WILLIAM A. JONES
SOLOMON KETCHAM
FRANK J. LEFEVRE
COURTLANDT LINKROUM
FRANK B. LOWN
EDWARD E. MOBERLY
CHARLES A. NORRIS
J. LESTER PARSONS
WILLIAM Mc D. PIERSON
CHARLES W. PILGRIM
J. WILSON POUCHER
E. S. POWELL, JR.
PETER H. TROY
CASPER J. VOORHIS
DAVID G. WAKEMAN
LEO H. WISE
HENRY J. WYATT

☞ If this Policy is cancelled the following receipt

.....

is to be filled up and signed by the insured.

.....

.....19.....

In Consideration *of* .....*Dollars,*

Return Premium, the Receipt of which is hereby acknowledged, this Policy is cancelled and surrendered to the UNITED STATES FIRE INSURANCE COMPANY OF NEW YORK.

.....ASSURED.

No. 2304571 stock company

United States Fire Insurance Company

OF NEW YORK

ORGANIZED 1824

Amount $10,000..... Rate.....$1.23 Pemium $123.00.....
In Consideration of the Stipulations herein named and
of
.....One Hundred Twenty-Three and 00/100

Dollars Premium

Does Insure.....Igoe Brothers, as is now or may be hereafter constitued.

.....for the term of .....One Year.....
from the .....29th....day of..... January.....1925....at noon
to the.....29th.....day of.....January.....1926.....at noon
against all direct loss or damage by fire, except as hereinafter provided, to an amount not exceeding

.....Ten Thousand and 00/100.....Dollars

Newark, N. J., March 12, 1925.

In consideration of the rate under this policy having been reduced to $.966, a return premium of $12.27 is therefore allowed.

Attached to policy No. 2304571 of the United States Fire Ins. Co.

RYERSON & HALL, Agents.
Newark, N. J., Feb. 13, 1925.

The rate under this policy having been reduced to $1.129 a return premium of $9.66 is therefore allowed.

Attached to policy No. 2304571 of the United States Fire Ins. Co.

RYERSON & HALL, Agents.

FORM NO. 1

USE AND OCCUPANCY

For Maufacturing Plants in Steady Operation.

"Straight U. & O."

*If liability for suspension of business due to damage to or destruction of stock is to be included, insert here "and/or stock."

If the plant operates Sundays and holidays the fraction 1/300 in Total Suspension Clause must be changed to 1/365.

$10,000.

On the use and Occupancy of the property described below.

The conditions of this contract are that if the building (s) situate....on and South of Poinier St., and Avenue A. Newark, N. J., and occupied for manufacture of nails.....,and/or machinery and/or equipment*.....and/or stock contained therein, be destroyed or damaged by fire occuring during the term of this policy so as to necessitate a

total or partial suspension of business, this Company shall be liable under this policy for the actual loss sustained, consisting of net profits on the business which is thereby prevented, such fixed charges and expenses pertaining thereto as must necessarily continue during a total or partial suspension of business and such expenses as are necessarily incurred for the purpose of reducing the loss under this policy, for not exceeding such length of time as shall be required with the exercise of due diligence and dispatch, to rebuild, repair or replace such part of said building (s) and machinery and equipment*.....and/or stock.....as may be destroyed or damaged (commencing with the date of the fire and not limited by the date of expiration of this policy), subject to the following conditions and limits, to wit:

TOTAL SUSPENSION: The per diem liability under this policy during the time of total suspension of business of all the properties described herein shall be limited to the "Actual Loss Sustained," not exceeding 1/300 of the amount of this policy for each business day of such suspension, due consideration being given to the experience of the business before the fire and the probable experience thereafter.

PARTIAL SUSPENSION: The per diem liability under this policy during the time of a partial suspension of business shall be limited to the "Actual Loss Sustained," not exceeding that proportion of the per diem liability that would have been incurred by a total suspension of business which the actual per diem loss sustained, during the time of such partial suspension, bears to the per diem loss which would have been sustained by a total suspension of business, for the same

time, of all properties described herein, due consideration being given to the experience of the business before the fire and the probable experience thereafter.

The word "business" wherever used in this contract shall be construed to mean "The production of goods." The word "stock" wherever used in this contract shall be construed to mean "materials" or "raw stock" entering into "the production of goods."

The word "day" however modified, wherever used in this contract, shall be held to cover a period of twenty-four hours.

The liability hereunder shall not exceed the amount of insurance by this policy, nor a greater proportion of any loss than the insurance hereunder shall bear to all insurance, whether valid or not, and whether collectible or not covering in any manner the loss insured against by this policy.

It is a condition of this insurance that the insured shall not be entitled to compensation on account of delay which may be occasioned by any ordinance or law regulating construction or repair of buildings, or by the suspension, lapse or cancellation of any license, or for any other consequential damage.

It is a condition of this insurance that as soon as practicable after any loss, the insured shall resume complete or partial operation of the property herein described and shall make use of other property, if obtainable, if by so doing the amount of loss hereunder will be reduced, and in the event of the insured continuing busi-

ness (in whole or in part), at some other location, or using other property during the time occupied in repairing or reconstruing the property described therein, the net profits so earned shall be applied to the reduction of the loss and adjustment shall be made as provided herein for partial suspensions.

It is a condition of this insurance that surplus machinery or duplicate parts thereof, equipment or supplies, and (if this policy covers libaility for suspension of business due to damage to, or destruction of stock) surplus or reserve stock, which may be owned, controlled or used by the insured shall, in the event of loss, be used in placing the property in condition for continuing or resuming business.

It is a condition of this insurance, if covering liability for suspension of business due to damage to, or destruction of stock: (1) that this Company shall not be liable for loss on account of damage or destruction of the finished product, or for the time required to reproduce any finished product which may be damaged; (2) that liability for suspension of business due to damage to, or destruction of raw materials shall be limited to that period of time for which the damaged or destroyed raw materials would have furnished operating conditions for the plant; but no liability shall exist on this account, unless or until actual suspension of business shall have occurred through the insured's inability to procure suitable materials to take the place of those damaged or destroyed.

It is a condition of this insurance, if this policy covers liability for suspension of business due to damage to or

destruction of building (s), machinery and equipment only, that this Company shall not be liable for any loss due to damage to or destruction of finished product and/or such materials as enter into and become a part of the finished product.

It is a condition of this insurance that in case the insured and this Company are unable to agree as to any question affecting the amount of loss under this policy, the same shall be determined by appraisers in the manner provided by the policy to which this form is attached, the provisions of which policy shall govern in all matters pertaining to this insurance, except as herein otherwise provided.

Other insurance permitted.

Lightning and Electrical Exemption Clauses.

LIGHTNING CLAUSE: This policy shall cover use and occupancy loss caused by lightning (meaning thereby the commonly accepted use of the term lightning and in no case to include loss or damage by cyclone, tornado or windstorm), not exceeding the sum insured, nor the interest of the insured in the property, subject to the terms and conditions of this form and the policy to which it is attached. Provided, however, if there shall be any other use and occupancy insurance on said property, this Company shall be liable only pro rata with such other insurance for any use and occupancy loss by lightning, whether such other insurance be against loss by lightning or not.

ELECTRICAL EXEMPTION CLAUSE: It is a special condition of this policy that this Company shall

not be liable for any use and occupancy loss resulting from any electrical injury, disturbance or damage to dynamos, exciters, lamps, switches, motors or other electrical appliances or devices whether from artificial or natural causes, unless fire ensues and then only for such use and occupancy loss as may be caused by such ensuing fire.

Attached to and forming part of Policy No. 2304571 of the United States Fire Ins. Co.

RYERSON & HALL,
W. A. HALL, Pres.

This Policy is made and accepted subject to the foregoing stipulations and conditions, and to the following stipulations and conditions printed on back hereof, which are hereby specially referred to and made a part of this policy together with such other provisions, agreements, or conditions as may be endorsed hereon or added hereto; and no officer, agent or other representative of this Company shall have power to waive any provision or condition of this Policy except such as by the terms of this Policy may be the subject of agreement endorsed hereon or added hereto; and as to such provisions and conditions no officer, agent, or representative shall have such power or be deemed or held to have waived such provisions or conditions unless such waiver, if any, shall be written upon or attached hereto, nor shall any privilege or permission affecting the insurance under this Policy exist or be claimed by the insured unless so written or attached.

PROVISION REQUIRED BY LAW TO BE STATED IN THIS POLICY.—This policy is in a stock corporation,

and is issued under and in pursuance of Sections 130, 131 and 132 of the Insurance Law of the State of New York.

IN WITNESS WHEREOF, this Company has executed and attested these presents; but this policy shall not be valid until countersigned by the duly authorized Agent of the Company at .....Newark, N. J.

DAVID G. WAKEMAN *Secretary.* J. L. PARSON *President.*

Countersigned at....Newark, N. J.....this....9th.....day of.....DEC.....1924.

RYERSON & HALL,
W. A. HALL, Pres.

.....*Agent.*

This company shall not be liable beyond the actual cash value of the property at the time any loss or damage occurs, and the loss or damage shall be ascertained or estimated according to such actual cash value, with proper deduction for depreciation however caused, and shall in no event exceed what it would then cost the insured to repair or replace the same with material of like kind and quality; said ascertainment or estimate shall be made by the insured and this company, or, if they differ, then by appraisers, as hereinafter provided, and, the amount of loss or damage having been thus determined, the sum, for which this company is liable pursuant to this policy shall be payable sixty days after due notice, ascertainment, estimate, and satisfactory proof of the loss have been received by this company in accordance with the terms of this policy. It shall

be optional, however, with this company to take all, or any part, of the articles at such ascertained or appraised value, and also to repair, rebuild, or replace the property lost or damaged with other of like kind and quality within a reasonable time on giving notice, within thirty days after the receipt of the proof herein required, of its intention so to do; but there can be no abandonment to this company of the property described.

This entire policy shall be void if the insured has concealed or misrepresented, in writing or otherwise, any material fact or circumstance concerning this insurance or the subject thereof; or if the interest of the insured in the property be not truly stated herein; or in case of any fraud or false swearing by the insured touching any matter relating to this insurance of the subject thereof, whether before or after a loss.

This entire policy, unless otherwise provided by agreement indorsed hereon or added hereto, shall be void if the insured now has or shall hereafter make or procure any other contract of insurance, whether valid or not, on property covered in whole or in part by this policy; or if the subject of insurance be a manufacturing establishment and it be operated in whole or in part at night later than ten o'clock, or if it cease to be operated for more than ten consecutive days; or if the hazard be increased by any means within the control or knowledge of the insured; or if mechanics be employed in building, altering or repairing the within described premises for more than fifteen days at any one time; or if the interest of the insured be other than unconditional and sole ownership; or if the subject of insurance be a building on ground not owned by the insured in fee simple; or if

the subject of insurance be personal property and be or become incumbered by a chattel mortgage; or if, with the knowledge of the insured, foreclosure proceedings be commenced or notice given of sale of any property covered by this policy by virtue of any mortgage or trust deed; or if any change, other than by the death of an insured, take place in the interest, title, or possession of the subject of insurance (except change of occupants without of hazard) whether by legal process or judgment or by voluntary act of the insured, or otherwise; or if this policy be assigned before a loss; or if illuminating gas or vapor be generated in the described building (or adjacent thereto) for use therein; or (any usage or custom of trade or manufacture to the contrary notwithstanding) there be kept, used, or allowed on the above described premises, benzine, benzole, dynamite, ether, fireworks, gasoline, greek fire, gunpowder exceeding twenty-five pounds in quantity, naphtha, nitro-glycerine or other explosives, phosphorus, or petroleum or any of its products of greater inflammability than kerosene oil of the United States standard (which last may be used for lights and kept for sale according to law but in quantities not exceeding five barrels, provided it be drawn and lamps filled by daylight or at a distance not less than ten feet from artificial light); or if a building herein described, whether intended for occupancy by owner or tenant, be or become vacant or unoccupied and so remain for ten days.

This company shall not be liable for loss caused directly or indirectly by invasion, insurrection, riot, civil war or commotion, or military or usurped power, or by order of any civil authority; or by theft; or by neglect of the insured to use all reasonable means to save and

preserve the property at and after a fire or when the property is endangered by fire in neighboring premises; or (unless fire ensues, and, in that event, for the damage by fire only) by explosion of any kind, or lightning; but liability for direct damage by lightning may be assumed by specific agreement hereon.

If a building or any part thereof fall, except as the result of fire, all insurance by this policy on such building or its contents shall immediately cease.

This company shall not be liable for loss to accounts, bills, currency, deeds, evidences of debt, money, notes, or securities; nor, unless liability is specifically assumed hereon, for loss to awnings, bullion, casts, curiosities, drawings, dies, implements, jewels, manuscripts, medals, models, patterns, pictures, scientific apparatus, signs, store or office furniture or fixtures, sculpture, tools, or property held on storage or for repairs; nor, beyond the actual value destroyed by fire, for loss occasioned by ordinance or law regulating construction or repair of buildings, or by interruption of business, manufacturing processes, or otherwise; nor for any greater proportion of the value of plate glass, frescoes, and decorations than that which this policy shall bear to the whole insurance on the building described.

If an application, survey, plan, or description of property be referred to in this policy it shall be a part of this contract and a warranty by the insured.

In any matter relating to this insurance no person, unless duly authorized in writing, shall be deemed the agent of this company.

This policy may by a renewal be continued under the original stipulations, in consideration of premium for the renewed term, provided that any increase of hazard must be made known to this company at the time of renewal or this policy shall be void.

This policy shall be canceled at any time at the request of the insured; or by the company by giving five days notice of such cancellation. If this policy shall be canceled as hereinbefore provided, or become void or cease, the premium having been actually paid, the unearned portion shall be returned on surrender of this policy or last renewal, this company retaining the customary short rate; except that when this policy is canceled by this company by giving notice it shall retain only the *pro rata* premium.

If, with the consent of this company, an interest under this policy shall exist in favor of a mortgagee or of any person or corporation having an interest in the subject of insurance other than the interest of the insured as described herein, the conditions hereinbefore contained shall apply in the manner expressed in such provisions and conditions of insurance relating to such interest as shall be written upon, attached, or appended hereto.

If property covered by this policy is so endangered by fire as to require removal to a place of safety, and is so removed, that part of this policy in excess of its proportion of any loss and of the value of property remaining in the original location, shall, for the ensuing five days only, cover the property so removed in the new location; if removed to more than one location, such excess of this policy shall cover therein for such

five days in the proportion that the value in any one such new location bears to the value in all such new locations; but this company shall not, in any case of removal, whether to one or more locations, be liable beyond the proportion that the amount hereby insured shall bear to the total insurance on the whole property at the time of fire, whether the same cover in new location or not.

If fire occur the insured shall give immediate notice of any loss thereby in writing to this company, protect the property from further damage, forthwith separate the damaged and undamaged personal property, put it in the best possible order, make a complete inventory of the same, stating the quantity and cost of each article and the amount claimed thereon; and, within sixty days after the fire, unless such time is extended in writing by this company, shall render a statement to this company, signed and sworn to by said insured, stating the knowledge and belief of the insured as to the time and origin of the fire; the interest of the insured and of all others in the property; the cash value of each item thereof and the amount of loss thereon; all incumbrances thereon; all other insurance, whether valid or not, covering any of said property; and a copy of all the descriptions and schedules in all policies; any changes in the title, use, occupation, location, possession, or exposures of said property since the issuing of this policy; by whom and for what purpose any building herein described and the several parts thereof were occupied at the time of fire; and shall furnish, if required, verified plans and specifications of any building, fixtures, or machinery destroyed or damaged; and shall also, if required, furnish a certificate of the magistrate or notary public (not interested in the claim as a credi-

tor or otherwise, nor related to the insured) living nearest the place of fire, stating that he has examined the circumstances and believes the insured has honestly sustained loss to the amount that such magistrate or notary public shall certify.

The insured, as often as required, shall exhibit to any person designated by this company all that remains of any property herein described and submit to examinations under oath by any person named by this company, and subscribe the same; and, as often as required, shall produce for examination all books of account, bills, invoices, and other vouchers, or certified copies thereof if originals be lost, at such reasonable place as may be designated by this company or its representative, and shall permit extracts and copies thereof to be made.

In the event of disagreement as to the amount of loss the same shall, as above provided, be ascertained by two competent and disinterested appraisers, the insured and this company each selecting one, and the two so chosen shall first select a competent and disinterested umpire; the appraisers together shall then estimate and appraise the loss, stating separately sound value and damage, and, failing to agree, shall submit their differences to the umpire; and the award in writing of any two shall determine the amount of such loss; the parties thereto shall pay the appraiser respectively selected by them and shall bear equally the expenses of the appraisal and umpire.

This company shall not be held to have waived any provision or condition of this policy or any forfeiture

thereof by any requirement, act, or proceeding on its part relating to the appraisal or to any examination herein provided for; and the loss shall not become payable until sixty days after the notice, ascertainment, estimate, and satisfactory proof of the loss herein required have been received by this company, including an award by appraisers when appraisal has been required.

This company shall not be liable under this policy for a greater proportion of any loss on the described property, or for loss by and expense of removal from premises endangered by fire, than the amount hereby insured shall bear to the whole insurance, whether valid or not, or by solvent or insolvent insurers, covering such property, and the extent of the application of the insurance under this policy or of the contribution to be made by this company in case of loss, may be provided for by agreement or condition written hereon or attached or appended hereto. Liability for re-insurance shall be as specifically agreed hereon.

If this company shall claim that the fire was caused by the act or neglect of any person or corporation, private or municipal, this company shall, on payment of the loss, be subrogated to the extent of such payment to all right or recovery by the insured for the loss resulting therefrom, and such right shall be assigned to this company by the insured on receiving such payment.

No suit or action on this policy, for the recovery of any claim, shall be sustainable in any court of law or equity until after full compliance by the insured with all the foregoing requirements, nor unless commenced within twelve months next after the fire.

Wherever in this policy the word "insured" occurs, it shall be held to include the legal representative of the insured, and wherever the word "loss" occurs, it shall be deemed the equivalent of "loss or damage."

If this policy be made by a mutual or other company having special regulations regulations lawfully applicable to its organization, membership, policies or contracts of insurance, such regulations shall apply to and form a part of this policy as the same may be written or printed upon, attached, or appended hereto.

ASSIGNMENT OF INTEREST BY INSURED

The interest of.....as *owner of property covered by this Policy is hereby assigned to*.....*subject to the consent of the* UNITED STATES FIRE INSURANCE COMPANY OF NEW YODK.

.....

(Signature of the Insured.

Dated, ...

NOTE—To secure Mortgagees, if desired, the Policy should be made payable on its face to such Mortgagee as follows: Loss, if any, payable to *John Doe,* Mortgagee.

CONSENT BY COMPANY TO ASSIGNMENT OF INTEREST

The UNITED STATES FIRE INSURANCE COMPANY OF NEW YORK, *hereby consents that the interest of*.....*as owner of the property covered by this Policy be assigned to* .....

.....

(Signature for Company)

FORM FOR REMOVAL

Permission is hereby granted to remove the property insured by this Policy to the.....

situate .....

.....

.....

and this Policy is hereby made to cover the same property in new locality, all liability in former locality to cease from this date.

Rate increased to.....*% Additional Premium* $.....

Rate reduced to.....*% Return Premium* $.....

.....*Agent.*

Dated,.....19.....

SHEET.....BLOCK.....No.....

(Exhibits C-2, C-12 inclusive, are policies issued by the other defendants in forms similar to C-1. They are omitted by consent of counsel).

EXHIBIT C-13

THIS AGREEMENT entered into this 21st day of June, 1926, by and between Igoe Brothers, Inc., a corporation, party of the first part hereinafter designated as the insured and United States Fire Insurance Company of New York; Rhode Island Insurance Company; National Ben Franklin Insurance Company; Continental Insurance Company of the City of New York; Phoenix Assurance Company Ltd., of London; Great American Insurance Co. of New York; St. Paul Fire & Marine Insurance Co., St. Paul, Minn.; Hartford Fire Insurance Co.; National Fire Insurance Co. of Hartford Conn.; American Central Insurance Company, St. Louis, Mo.; National Union Fire Insurance Co. of Pittsburgh, Pa. and Hudson Insurance Company, each for itself and not jointly, parties of the second part hereinafter designated as the insurer.

WHEREAS the parties of the second part hereto did issue to the party of the first part certain policies of insurance on the use and occupancy of certain property of the party of the first part situated on and south of Poinier Street and Avenue A in the City of Newark, County of Essex and State of New Jersey.

AND WHEREAS the party of the first part has sustained a loss under said policies by reason of a fire which occurred on the 9th day of April, 1925 in respect to the use and occupancy of the buildings aforesaid and mentioned in the policies of insurance held by the said party of the first part in the companies designated herein as the parties of the second part:

AND WHEREAS the party of the first part conducted in the buildings owned by them at the place aforesaid three different branches of their business as follows:

(a) Manufacturers of wire and nails:

(b) Jobbers in metal bars used in reinforced concrete work:

(c) Jobbers in nails.

AND WHEREAS a dispute has arisen between the parties hereto as to the true construction to be placed on the terms of the policies held by the party of the first part in the companies aforesaid and the said parties hereto are not in accord with respect to the amount of loss suffered by the party of the first part under said policies:

AND WHEREAS it is the desire of the parties hereto to have the loss sustained by the party of the first part appraised and determined in the manner hereinafter set forth and to have the true meaning and application of the said policies properly construed:

AND WHEREAS the party of the first part heretofore and on April 8th, 1926 instituted a suit in the New Jersey Supreme Court to recover its loss under said policies and all of the parties of the second part hereto were made parties defendant in said suit, and the parties hereto and each of them are desirous of expediting the determination of the true amount of the loss suffered by the party of the first part and with that end in view have entered into the within agreement.

NOW THEREFORE THIS AGREEMENT WITNESSETH that for and in consideration of the premises and the mutual covenants herein contained the parties hereto do agree as follows:

1. The party of the first part hereby selects and appoints Clifford McEvoy of No. 505 Orange Street, Newark, New Jersey and the party of the second part hereby selects and appoints E. F. McCrossen of No. 82 Beaver Street, New York City as the respective appraisers for the parties hereto to estimate and appraise, in accordance with the terms, conditions and requirements of said policies, the amount of loss or damages sustained by the party of the first part under the policies aforesaid, it being understood that the said Clifford McEvoy has been selected by the party of the first part as its appraiser and the said E. F. McCrossen has been selected by the parties of the second part as their appraiser.

2. The said appraisers shall within ten days of the date of the execution of this agreement first select a competent and disinterested umpire as provided by said policies and in the event that the appraisers so selected as herein provided shall fail or neglect, for a space of ten days from the date of this agreement, to agree upon and select an umpire, either the party of the first part or the parties of the second part shall be at liberty to apply to the inferior Court of Common Pleas of the County of Essex, on five days notice, in writing, to the attorney or attorneys for the respective parties hereto of the intention of either party so to do, to appoint a competent and disinterested umpire; and the acts of the umpire so appointed shall be binding upon the insured

and the insurer to the same extent as if such umpire had been selected in the manner provided for in said policies of insurance.

3. The appraisers shall thereupon together first estimate and appraise the loss sustained by the party of the first part under and within the meaning of all of said policies but taking into consideration in determining such loss only the use and occupancy of the buildings and structures formerly used by the insured in the manufacture of wire and nails; and failing to agree on the amount of such loss they shall submit their differences to the umpire; and the award in writing of any two shall determine the amount of the loss as hereinafter provided.

4. The appraisers shall together then next estimate and appraise the loss sustained by the insured under and within the meaning of all of the policies but taking into their consideration the use and occupancy of all of the buildings used by the insured at the place aforesaid; and, failing to agree, shall submit their differences to the umpire; and the award in writing of any two shall determine the amount of such loss as hereinafter provided.

5. The appraisers together shall next estimate and appraise the loss sustained by the insured at the place aforesaid, but shall take into consideration the use and occupancy of all of the buildings used by the insured at the place aforesaid, but excluding, however, the use and occupancy of such buildings which were used by the insured in its business as jobbers and/or distributors in nails received from the plant of the insured or those

purchased by the insured in open market; and, failing to agree shall submit their differences to the umpire; and the award in writing of any two shall determine the amount of such loss, as hereinafter provided.

6. If either of the parties hereto shall feel aggrieved by the award of the appraisers (or the award in writing of one of the appraisers and the umpire) in that the appraisers (or one of the appraisers and umpire) have taken into consideration in arriving at their award matters which were improper or illegal for their consideration, such party, shall, within ten days from the entry of the aforesaid awards, institute proper proceedings in the Court of Chancery for the purpose of correcting and reforming the awards in accordance with the practise of that court and either party taking such action shall proceed with all reasonable despatch. In the event that no such action shall be taken by either of the parties hereto within ten days from the date of the awards made as aforesaid the awards in their respective amounts shall be conclusive and final and for all purposes of this agreement binding upon the parties hereto.

7. Either party hereto at any time after the respective awards as aforesaid have become finally determined, may apply to the New Jersey Supreme Court, the Essex County Circuit Court, the Essex County Court of Common Pleas, or the Court of Chancery of New Jersey to have the policies of insurance and the true meaning and application thereof construed, in the manner and in accordance with the provisions and the practise of an act of the legislature of the State of New Jersey entitled "An Act Concerning Declaratory Judgments and Decrees", Chapter 140, Laws of 1924, and

a final judgment or decree as the case may be, shall be entered in the amount of such award as shall conform to the true construction and meaning of the aforesaid policies of insurance. The right of either of the parties hereto to appeal from any order, judgment or decree is expressly reserved.

8. Upon an award being arrived at by the appraisers (or appraiser and umpire) the insurer may, at its option pay to the insured the amount of any of the awards arrived at by the appraisers (or appraiser and umpire). In the event that the parties of the second part makes such payment and it shall be ultimately determined that the payment so made is excessive, the party of the first part does hereby agree to refund to the parties of the second part in proportionate amounts, the excess. In the event that the parties of the second part shall not make payment of any of the awards as last mentioned the party of the first part shall become entitled to interest on the amount of the award to which it shall finally be determined to have been entitled and such interest shall be computed from the date of the award by the appraisers (or appraiser and umpire) to the date of payment by the insurer. The parties of the second part may, however, tender payment to the party of the first part at any time during the proceeding, of such sum of money as it shall elect to pay and thereafter no interest shall be computed on the amount so paid by the parties of the second part irrespective of the ultimate and final judgment or decree. The words "finally determined", "ultimately determined", "ultimate final judgment or decree", shall be construed to mean that result arrived at after all appeals have been exercised, lost or waived.

9. It is agreed by and between the parties hereto that the present suit instituted by the party of the first part against the parties of the second part shall not be discontinued but that the insured will not proceed with said suit during the pendency of the within agreement and during the faithful performance of the provisions hereof, and should the insured elect to proceed with said suit, notice in writing shall be given to Messrs. Arthur T. Vanderbilt, and Lum, Tamblyn & Colyer, as attorneys for the parties of the second part of its intention to proceed with said suit and the parties of the second part shall thereafter have twenty days from the service of such a notice to plead, answer or demur to the complaint now filed. The parties of the second part do hereby agree that they or any of them will not urge as a defense to the claim of the insured the provision in the policies reading as follows:

> "No suit or action on this policy for the recovery of any claim, shall be sustainable in any court of law or equity until after full compliance by the insured with the foregoing requirements, nor unless commenced within twelve months next after the fire."

And the time to institute suit or action on behalf of the insured is hereby extended by the insurers to such time or times as shall be necessary to give the parties hereto an opportunity to effectually carry out the intent and purposes of the within agreement.

10. In the event that all of the courts hereinbefore mentioned (New Jersey Supreme Court, Essex County

Circuit Court, Essex County Court of Common Pleas and the Court of Chancery of New Jersey) shall decline to take jurisdiction to determine the true construction and application of the aforesaid policies (and only in that event)it is understood and agreed by and between the parties hereto that the true construction and application of said policies shall be determined by the appraisers and the umpire, and the award so arrived at shall be final and conclusive except in so far as the same may be reformed and corrected by an application to the Court of Chancery of New Jersey. In the event of such a contingency and either party should be aggrieved at the award so made, such party shall make application within ten days from the date of said award to have the same reformed and in the event of the failure to make such application within that time the same shall be considered as waived and the party of the first part shall be at liberty to enter judgment forthwith in the amount of the award.

11. The attorneys for the respective parties hereto do represent by their signatures hereto that they are duly and lawfully authorized to execute the foregoing agreement on behalf of their principal or principals.

IN WITNESS WHEREOF the parties hereto have caused these presents to be signed by their respective attorneys the day and year first above writetn.

WOLBER & GILHOOLY,

Attorneys for Igoe

Brothers.

LUM, TAMBLEYN & COLYER,
Attorneys for National Ben Franklin Insurance Company.

ARTHUR VANDERBILT,
Attorney for other defendants.

EXHIBIT C-14

REPORT AND AWARD OF CHARLES F. LYNCH, UMPIRE, in re: USE AND OCCUPANCY LOSS OF IGOE BROTHERS, INC., a corporation of Newark, New Jersey.

Fire—April 9th, 1925

The undersigned having been duly appointed by the Hon. Dallas Flannagan, Judge of the Essex County Court of Common Pleas, on the 6th day of July, 1926, as Umpire to act with Clifford F. MacEvoy, Appraiser for Igoe Bros., Inc., a corporation, and E. F. McCrossen, Appraiser for United States Fire Insurance Company of New York, Rhode Island Insurance Company, National Ben Franklin Insurance Company, Continental Insurance Company of the City of New York, Phoenix Assurance Company, Ltd., of London, Great American Insurance Co. of New York, St. Paul Fire & Marine Insurance Co., St. Paul, Minn., Hartford Fire Insurance Co., National Fire Insurance Co. of Hartford, Conn., American Central Insurance Company, St. Louis, Mo., National Union Fire Insurance Co. of Pittsburgh, Pa. and Hudson Insurance Company, in accordance with an agreement entered into by and between the foregoing named parties on the 21st day of June, 1926, herewith submit my report and award.

After careful study and consideration of the reports and testimony of the appraisers and the appraisers' ac-

countants, there would appear to be eight disputed points regarding which I have reached the following conclusions:—

1. What perecentage of the business of Igoe Brothers, Newark, N. J. was manufacturing business, and what percentage was jobbing business?

The accountants have evidently made an exhaustive study of the sales and have reached the following conclusions:—

	Manufacturing Sales	Jobbing Sales
Findings of Assured's Accountants	62.628%	37.372%
Findings of Companies' Accountants	62.50 %	37.50 %

These figures are so nearly in agreement that no comment need be made other than to say that in my calculations I have used the percentages of the assured.

2. Are certain items which appear in the assured's books as expense of 1924 in the amount of $45,319.37 to be considered as operating expenses or capital expenditures?

In my opinion a large portion of these items enumerated in the report of the assured's accountants are capital expenditures and should be so treated in the calculation of the profits of 1924. I have concluded that 75% of the $45,319.37 in question should be charged

to capital and 25% to operating expenses, thereby increasing the profit of the year 1924 by $33,989.52.

3. Did the sales of merchandise to an affiliated company affect the profits of Igoe Brothers, Newark, N. J.?

As to the point that the insured should receive the benefit of approximately $44,000.00 in profits for wire and wire products sold to Igoe Brothers & Cooney, an an affiliated company, which it might have received if this merchandise were sold elsewhere, I am not in accord with the viewpoint of the assured. The practice of selling at cost to Igoe Brothers & Cooney had been carried on without interruption for many years prior to the fire and in all probability would have continued for 1925 and perhaps thereafter. Certainly there is no fact brought to my attention which would justify me in guessing that this large quantity of merchandise turned over to Igoe Brothers & Cooney would have been sold or disposed of elsewhere during the period of "loss" and greater profits realized.

4. Would the business of Igoe Brothers, Newark, N. J. be as profitable for the period after the fire as the period before the fire?

The assured claims that the prospects after the fire were much brighter than previously thereto and consequently the rate of profit would have been 25%, or some other percentage, higher. The insurance compaines contend that the profits would have been lower because busi-

ness was poorer. Data is submitted by both sides in support of their respective contentions. One set of data leads one to believe that business was on the improve after the fire, while the other set tends to show that business after the fire was not so good as before. I think that probably a fair decision on this point would be to assume that the profits after the fire would continue at the same level as they averaged for the previous two years before the fire.

5. What were the profits of Igoe Brothers, Newark, N. J., before the fire?

The accountants are in agreement that the books of the company show the following figures of sales, gross profits, selling and administrative expenses and net profits from sales:—

As per Books

Year	Sales	Gross Profit	Selling and Administrative Expenses	Net Profits from Sales
1924	$1,378,816.02	$240,499.27	$183,365.11	$57,134.16
1923	1,460,482.94	371,804.67	174,126.17	197,678.50
1922	1,113,701.11	205,381.08	152,314.44	53,066.64
1921	842,222.20	182,554.10	131,612.83	50,941.27
1920	1,666,787.57	480,858.25	194,087.05	286,771.20

The assumption that the profits after the fire would continue at the same level as before the fire raises the question as to what were the profits before the fire and after careful consideration of the above figures I am of

the opinion that a period of two years would furnish stable information as to the general average of activities and net profits of the business.

I have figured the average daily net profits on the basis of two years as follows:—

	2 years	
Net Profit from Sales 1924	$ 57,134.16	
" " " " 1923	197,678.50	
Net Profit from Sales for years 1924-1923 as per books		$254,812.66
Add		
Additional Profit for 1924 Capital expenditures charged on books to expenses $45,319.37 x 75%		33,989.52
Adjusted Profit for two years		$288,802.18
Average Adjusted Profit for one year		144,401.09

This average adjusted profit for one year represents both the manufacturing and jobbing business, but since we are only concerned with the manufacturing profits, it is necessary to apply the percentage of manufacturing profit which is 62.628% as follows:—

$144,401.09 x 62.628% -- $90,435.51

$90,435.51 divided by 300 days gives an average daily manufacturing profit of $301.45.

6. What were the overhead expenses of Igoe Brothers, Newark, N. J. and should the $31,035.92 of miscellaneous labor be considered as overhead expenses under the terms of the policy of insurance?

The evidence submitted indicates that the $31,035.92 was paid to men who were not highly skilled and were only paid from time to time as they worked and, therefore, it is my opinion that this amount should not be considered as a fixed charge.

The accountants agree that with the elimination of the $31,035.92 of miscellaneous labor above mentioned the average daily overhead in the manufacturing department is $194.18 and I have used this figure in calculating the award.

7. What length of time would be required for the assured to restore the profit making facilities?

As to the period of loss; in this situation we have two very competent appraisers who furnish an estimate as to how long they think it would take to restore the profit making facilities. Of course no time should be allowed for the adjustment of property losses. But they do not agree as to the length of time, and it becomes my duty to use my best judgment in fixing a time. One estimates four months while the other estimates a much longer period of time. The difference between them is wide and, as I have said, both estimates were made by highly competent men. Of course, each is naturally inclined to favor the viewpoint of the side which he represents.

This is understood. Mr. MacEvoy, I think, is one of the best men who could be obtained to testify regarding the estimated time of physical replacement of buildings. Mr. McCrossen, a man of very wide experience in engineering and construction, maintains that the buildings could be completed within four months, the machinery installed, tuned up and ready for action within a week or so thereafter. Mr. MacEvoy does not agree to this estimate, but says it would take a year. Mr. McCrossen referred to huge plants built during the war, when he was active in the interests of the government. We all remember the great pressure exerted in those days in the construction of facilities where time was of the essence and the cost of secondary importance. Obviously, it would not be fair to fix such a standard for the rebuilding of a manufacturing plant during peace times. All experienced in building know of the many things which crop up to interfere with high speed methods. The best finding I can make is upon the basis of the time it would take a reasonably prudent and diligent man under the same or similar circumstances. The report of Fletcher-Thompson, Inc. goes into the matter at great length and furnishes very interesting and helpful data. Mr. McCrossen orally argued against it. It appears that at one time the appraisers tentatively agreed on a period of 6½ months as a basis of negotiations in arriving at a settlement.

In order to furnish a basis upon which to arrive at a determination of the matter it is necessary for me to decide from the reports submitted as well as the oral arguments adduced what, in my opinion, is the shortest

possible time within which the plant could be restored to full operation. I, therefore, after a comparison of the evidence submitted, and arguments set forth, find that it would take eight months or 200 manufacturing days to restore the profit making facilities which is about a midway position between the two extremes stated by the appraisers.

8. What length of time would be required before the assured's operations after the fire would absorb the overhead charges?

While it is my opinion that it would require 200 days before the profit making facilities were restored, it is evident that since the assured continued manufacturing operations after the fire, these operations gradually absorbed the overhead charges and, in my opinion, an allowance of 100 days of overhead would seem to be fair.

AWARD

After due consideration of all the evidence submitted by the appraisers for the assured and the insurance compaines I find:—

1. That the assured should be allowed net profits of $301.45 per day for 200 days or	$60,290.00
2. That the assured should be allowed fixed charges of $194.18 per day for 100 days or	$19,418.00
Amount of Award	$79,708.00

Respectfully submitted this 18 day of November, A. D., 1927.

CHARLES F. LYNCH
Umpire

I, Clifford F. MacEvoy, appraiser for Igoe Brothers, Inc., do hereby join in the foregoing award.

Appraiser

I, E. F. McCrossen, appraiser for the various insurance companies named, do hereby join in the foregoing award.

E. F. MCCROSSEN
Appraiser

New York, N. Y., November 19, 1927.

EXHIBIT C-15

September 26, 1927.

Mr. Clifford F. MacEvoy,
507 Orange Street,
Newark, New Jersey.

Mr. E. F. McCrossen,
82 Beaver Street,
New York, New York.

Re: Appraisal of use and occupancy
loss of Igoe Brothers.

Dear Sirs:

I have carefully considered the disputed points which we have separately and jointly argued and have reached the following conclusions in reference thereto. I am sending you this letter setting forth my conclusions so that you may ascertain the figures in line herewith and let me have a report of the same, in order that I may prepare and file my findings. If you, or either of you, care to join me in my report based on these conclusions, I shall be pleased to have you do so. You will, of course, understand that in making up the statement or figures which I am now requesting, you are not required to join with me unless you care to do so.

In case there is any point which I have not

disposed of, or which should be disposed of, I will appreciate it if you will call the same to my attention.

1. As to the point that the insured should receive the benefit of approximately $44,000 in profits for wire and wire products sold to Igoe Brothers & Cooney, an affiliated company, which it might have received if this merchandise were sold elsewhere, I am not in accord with the viewpoint of the assured. The practice of selling at cost to Igoe Brothers & Cooney had been carried on without interruption for many years prior to the fire and in all probability would have continued for 1925 and perhaps thereafter. Certainly there is no fact brought to my attention which would justify me in guessing that this large quantity of merchandise turned over to Igoe Brothers & Cooney would have been sold or disposed of elsewhere during the period of "loss" and greater profits realized.

2. In calculating the profits lost, Accountant Hastings based his report on the figures for 1924 (one year only) while Accountant Rhyne went back a period of five years and struck an average. There is a dispute as to which should be adopted. It might not be quite fair to consider only the year previous to the fire in ascertaining an estimate of profits lost. One year could be out of line for many reasons, while two or three would furnish more stable information as to the general average of activities and worth of the business. I think it would be more reasonable to take the period of two years previous to the fire for the purpose of ascertaining this loss.

3. The assured claims that the prospects after the fire were much brighter than previously thereto and

consequently the rate of profit would have been 25%, or some other percentage, higher. The insurance companies contend that the profits would have been lower because business was poorer. Data is submitted by both sides in support of their respective contentions. One set of data leads one to believe that business was on the improve after the fire, while the other set tends to show that business after the fire was not so good as before. I think that probably a fair decision on this point would be to assume that the profits after the fire would continue at the same level as they averaged for the previous two years.

4. As to the fixed charges per day lost; I am not in favor of including miscellaneous labor $31,035.92, to be set up under a capital charge. These men were not highly skilled and were only paid from time to time as they worked.

5. As to the question whether the book records for 1924 should be adjusted by capitalizing items previously charged to expenses; I am not so much interested in what the books show as I am interested in ascertaining the facts. If the books do not correctly represent the situation so far as the facts are concerned, there is no doubt in my mind that I should ignore the book entries and base my conclusions on the facts as they actually exist or existed. It is well known that income tax investigators ignore book entries in determining the facts for income tax purposes. It is also well known that set-ups in books are constantly changed so that they may be in accord with new and changing facts of a situation. I have no doubt that if the accountant for

the insurance companies had found that expense items had been capitalized he would have made the necessary adjustment in the book figures, and he would have been right in so doing. There is no doubt in my mind that during 1924 considerable monies were expended which could and should have been capitalized. Why it was not done is beside the point. Perhaps the question of income tax had something to do with it. At any rate, an examination of the exhibit furnished in behalf of the assured (Exhibit E) clearly shows that monies expended in purchases and properly chargeable to capital, were listed as expenses or repairs. Not only were they listed as such, but they were certified to by the accountants and Mr. Igoe, which causes Mr. Hastings to argue that Mr. Igoe cannot now claim the benefits of these items because of his certification. But as I have said, we are not interested in the manner of entries, nor any statement made by anybody in making those entries, if the facts are otherwise. I have gone over these accounts now attempted to be capitalized and as nearly as I can estimate there is no question that about 75% thereof should be capitalized. There is some doubt about the remaining 25% and I am disallowing 25% of them because of this doubt. It might be noted in passing that for four years prior to the fire the average amount of charges to this particular account of repairs to buildings and machinery, was about $8,000. as compared with about $37,000. during 1924.

6. As to the period of loss; in this situation we have two very competent appraisers who furnish an estimate as to how long they think it would take to restore the profit making facilities. Of course, no time should be allowed for the adjustment of property losses.

But they do not agree as to the length of time, and it becomes my duty to use my best judgment in fixing a time. One estimates four months while the other estimates a much longer period of time. The difference between them is wide and, as I have said, both estimates were made by highly competent men. Of course each is naturally inclined to favor the viewpoint of the side which he represents. This is understood. Mr. MacEvoy, I think, is one of the best men who could be obtained to test by regarding the estimated time of physical replacement of buildings. Mr. McCrossen, a man of very wide experience in engineering and construction maintains that the buildings could be completed within four months, the machinery installed, tuned up and ready for action within a week or soon thereafter. Mr. MacEvoy does not agree to this estimate but says it would take a year. Mr. McCrossen referred to huge plants built up during the war, when he was active in the interests of the Government. We all remember the great pressure exercised in those days in the construction of facilities where time was of the essence and the cost of secondary importance. Obviously it would not be fair to fix such a standard for the rebuilding of a manufacturing plant during peace times. All experienced in building know of the many things which crop up to interfere with high speed methods. The best finding I can make is upon the basis of the time it would take a reasonably prudent and diligent man under the same or similar circumstances. The report of Fletcher-Thompson, Inc. goes into the matter at great length and furnishes very interesting and helpful data. Mr. McCrossen orally argued against it. It appears that at one time the appraisers tentatively agreed on a period of 6½ months as a basis of negotiations in arriving at a settlement.

In order to furnish a basis upon which to arrive at a determination of the matter it is necessary for me to decide from the reports submitted as well as the oral arguments adduced what, in my opinion, is the shortest possible time within which the plant could be restored to full operation. I, therefore, after a comparison of the evidence submitted, and arguments set forth, find that it would take eight months or 200 manufacturing days to restore the profit making facilities which is about a midway position between the two extremes stated by the appraisers. I respectfully request the accountants or either of them to work out figures based on eight months or 200 manufacturing days estimate of loss and let me have these figures for my guidance and information.

If I have overlooked any disputed point, please advise me without delay concerning same.

Yours sincerely,

Signed—CHARLES F. LYNCH
Umpire

Copies hereof to
Mr. James J. Hastings,
Federal Trust Building,
Newark, N. J.

DEFENDANT'S EXHIBITS

EXHIBIT D-18

IGOE BROTHERS

Newark, N. J.

Fire: April 9th 1925

Use and Occupancy Loss

Report Prepared for
Mr. E. F. McCrossin,
82 Beaver St., New York City,
Appraisers for Various Insurance
Companies under Agreement dated
June 21st 1926.

(Duplicate)

JAMES J. HASTINGS & CO.
CERTIFIED PUBLIC ACCOUNTANTS
FEDERAL TRUST BUILDING
COMMERCE STREET, NEWARK, N. J.

JAMES J, HASTINGS & CO.
CERTIFIED PUBLIC ACCOUNTANTS
FEDERAL TRUST BUILDING
COMMERCE ST.
NEWARK, N. J.

December 27, 1926.

Mr. E. F. McCrossen,
(Appraiser for the Insurance Companies),
82 Beaver Street,
New York, N. Y.

Mr. Clifford McEvoy,
(Appraiser for the Assured),
505 Orange Street,
Newark, New Jersey.

Use and Occupancy Loss of

Igoe Brothers, Newark, N. J.

Fire: April 9th 1925

Gentlemen:

We have completed the examination of the books and accounts of Igoe Brothers, Newark, N. J. and, after giving due consideration to conditions before and after the fire, we have determined that the net profit and

fixed charges per day that should be used in the calculation of the loss are as follows:

		Net Profit Per Day
(a)	Manufacturer of wire and nails	$ 153.88
(c)	Jobbers in nails, etc.	92.33
(b)	Jobbers in metal bars used in reinforced concrete work	120.71
		$ 366.92

		Fixed Charges Per Day
(a)	Manufacturer of wire and nails	$ 193.91
(c)	Jobbers in nails, etc.	77.15
(b)	Jobbers in metal bars used in reinforced concrete work	32.15
		$ 303.21

The net profit and fixed charges per day have been determined in accordance with the agreement dated June 21st 1926 between Igoe Brothers, and various insurance companies and from which agreement we quote the following:

"AND WHEREAS the party of the first part conducted in the buildings owned by them at the place aforesaid three different branches of their business as follows:

(a) Manufacture of wire and nails;

(b) Jobbers in metal bars used in reinforced concrete work;

(c) Jobbers in nails.

"(3) The appraisers shall thereupon together first estimate and appraise the loss sustained by the party of the first part under and within the meaning of all of said policies but taking into consideration in determining such loss only the use and occupancy of the buildings and structures formerly used by the insured in the manufacture of wire and nails; and failing to agree on the amount of such loss they shall submit their differences to the umpire; and the award in writing of any two shall determine the amount of the loss as hereinafter provided.

"(4) The appraisers shall together then next estimate and appraise the loss sustained by the insured under and within the meaning of all of the policies but taking into

their consideration the use and occupancy of all of the buildings used by the insured at the place aforesaid; and, failing to agree, shall submit their differences to the umpire; and the award in writing of any two shall determine the amount of such loss as hereinafter provided.

"(5) The appraisers together shall next estimate and appraise the loss sustained by the insured at the place aforesaid, but shall take into consideration the use and occupancy of all of the buildings used by the insured at the place aforesaid, but excluding, however, the use and occupancy of such buildings which were used by the insured in its business as jobbers and/or distributors in nails received from the plant of the insured or those purchased by the insured in open market; and, failing to agree shall submit their differences to the umpire; and the award in writing of any two shall determine the amount of such loss, as hereinafter provided."

Before submitting the details supporting the results of our findings as to net profits and fixed charges per day in the various departments of Igoe Brothers, at Newark, N. J., we wish to present the following resume:

Igoe Brothers is a New Jersey corporation, with a plant at Newark, N. J. for the manufacture of wire and wire products and for the jobbing of wire, wire products, roofing materials, fences and reinforcing bars for concrete work.

The books of account of Igoe Brothers reflect no segregation of the sales and expenses by departments other than to separate the sales and expenses of the busi-

ness transacted as jobbers in reinforcing bars for concrete work from all other sales and expenses.

Therefore, in order to show a division of sales and expenses between the manufacturing operations and the jobbing operations in wire, wire products, roofing materials and fences it was necessary to analyze the sales and expenses to determine the proper percentage of sales and expenses of each department represented in the total sales and expenses.

The sales of Igoe Brothers for the years 1925, 1924 and 1923 are as follows:

	1925	1924	1923
Manufacturing & Jobbing	$1,006,574.72	$1,378,816.02	$1,460,482.94
Reinforcing Bars	546,992.96	529,072.97	410,913.74
	$1,553,567.68	$1,907,888.99	$1,871,396.68

Igoe Brothers and Cooney is a New York corporation with the main plant at Brooklyn, N. Y. and warehouses at Jamaica and New York City, and is engaged in the jobbing of wire, wire products, roofing materials and fences identically the same as Igoe Brothers, at Newark, N. J. and with the only exception that Igoe Brothers, at Newark, N. J. manufacture wire and wire products and job in reinforcing bars.

The control of Igoe Brothers and Cooney at Brooklyn, N. Y. is in the hands of the same stockholders who control Igoe Brothers at Newark, N. J.

The sales of Igoe Brothers and Cooney for the years 1925, 1924 and 1923 are as follows:

	1925	1924	1923
Brooklyn Branch	$1,461,155.46	$1,414,781.79	$1,425,174.02
New York Branch	175,454.31	206,229.23	224,749.25
Jamaica Branch	85,540.06	—	—
	$1,722,149.83	$1,621,011.02	$1,649,923.27

The sales, cost of sales, gross profits and percentage of gross profit on the sales of Igoe Brothers and Cooney for the years 1925, 1924 and 1923, after taking into consideration all branches in operation, and as shown in the books of account and the reports of the assured's accountants are as follows:

Year	Sales	Cost of Sales	Gross Profit	Per Cent of Gross Profit on Sales
1925	$1,722,149.83	$1,423,659.19	$298,490.64	17.33%
1924	1,621,011.02	1,316,003.58	305,007.44	18.81%
1923	1,649,923.27	1,297,461.76	352,461.51	21.35%

The selling and administrative expense of Igoe Brothers and Cooney, and Igoe Brothers for the years 1925, 1924 and 1923 are submitted herewith in comparative form:

	Igoe Brothers	Igoe Brothers & Cooney
Year	Selling & Administrative Expenses of Manufacturing and jobbing in wire, wire products, roofing materials and fences	Selling and Administrative Expenses
1925	$229,585.55	$209,591.47
1924	183,365.11	207,338.05
1923	174,126.17	199,595.48

From a detailed examination of the 1925, 1924 and 1923 figures of Igoe Brothers and Cooney, which is a jobbing business exclusively and which handles the same commodities as the jobbing department of Igoe Brothers, it would appear that the percentage of gross profit on sales was approximately 18%.

The gross profit of Igoe Brothers and Cooney is not affected by its business transactions with Igoe Brothers; that is, through the possibility of favorable purchase at prices less than the open market prices. The purchases of Igoe Brothers and Cooney from Igoe Brothers represent a very small percentage of the total purchases.

NET PROFITS PER DAY OF IGOE BROTHERS, AT NEWARK, N. J.

In order to establish the percentage of gross profit on sales and the net profit per day in the manufacturing and jobbing departments of Igoe Brothers, it has been necessary to analyze the sales and expenses of Igoe Brothers, because as previously stated, the sales and expenses of the company are divided into two classes in the books of account and the reports of the assured's accountants as follows:

1. Sales and expenses of manufacturing and jobbing of nails, wire, etc.

2. Sales and expenses of jobbing in metal bars used in reinforced concrete work.

In the study of the figures we have had in mind establishing a figure for the manufacturing department which would reflect the conditions for the period before and after the fire.

The net profit per day figures as determined from the books of the assured and the reports of the assured's accountants, which said reports are in accord with the books, are as follows:

	Manufacture of Wire - Nails 83 day Period Jan. 1 to Apr. 9 1925	Jobbers in Nails, etc. 83 Day Period Jan. 1 to Apr. 9 1925	Total 83 day Period Jan. 1 to Apr. 9 1925
Net Sales	$256,663.49	$153,998.07	$410,661.56
Cost of Goods Sold	210,464.05	126,278.43	336,742.48
Gross Profit—18%	$ 46,199.44	$ 27,719.64	$ 73,919.08
Selling Expenses (Exhibit "G")	$ 15,803.12	$ 9,481.87	$ 25,284.99
Administrative Expenses (" ")	16,101.54	9,660.93	25,762.47
Total Expenses	$ 31,904.66	$ 19,142.80	$ 51,047.46
Net Profit from Operations	$ 14,294.78	$ 8,576.84	$ 22,871.62
Add Income Credits—Discounts	1,468.43	881.06	2,349.49
	$ 15,763.21	$ 9,457.90	$ 25,221.11
Less Income Charges—Discounts	2,990.89	1,794.53	4,785.42
Net Profit	$ 12,772.32	$ 7,663.37	$ 20,435.69
Average Per Day	$ 153.88	$ 92.33	$ 246.21

SALES OF THE MANUFACTURING AND JOBBING DEPARTMENTS

We have analyzed in detail the sales of the period January 1st 1925 to April 9th 1925 (the date of the fire) represented by approximately 9000 sales invoices which total $410,661.56 (not including jobbing sales of reinforcing bars for concrete work).

The result of this analysis shows:

37½% of the total sales of $410,661.56 are jobbing sales of wire, wire products, roofing materials and fences amounting to $153,998.07.

62½% of the total sales of $410,661.56 are sales of manufactured products amounting to $256,663.49.

Our inspection of the assured's analysis of the sales for the year 1924, on a tonnage basis, indicates that the ratio of manufacturing and jobbing sales was 65% and 35% which confirms our analysis of the period January 1st 1925 to April 9th 1925.

GROSS PROFITS OF THE MANUFACTURING AND JOBBING DEPARTMENTS.

The report of the assured's accountants for the year 1924 shows the percentage of gross profit on the manufacturing and jobbing sales combined as 17.44%.

Exhibit "E" attached is a statement wherein we show our analysis of jobbing sales for the period January 1st to April 9th 1925 by commodity and amount and the assured's cost figures by commodity which we have verified. This statement is summarized as follows:

Jobbing Sales Jan. 1st to April 9th 1925	$153,472.16
Cost of Jobbing Sales	125,904.21
Gross Profit on Sales	$ 27,567.95
Per Cent of Gross Profit on Sales	17.96%

At the time of the settlement of the merchandise loss, the insurance companies and the assured fixed the value of the merchandise on hand at April 9th 1925 (the date of the fire) at $225,660.74. Using this figure (after adjustment), as an inventory at April 9th 1925, we establish the actual gross profit for the period January 1st 1925 to April 9th 1925 as $71,619.38 or 17.44% gross profit on sales of the manufacturing and jobbing departments combined.

In view of the fact that we have conclusively proven by our analysis of sales for the period January 1st 1925 to April 9th 1925 and our use of the assured's cost figures that the percentage of gross profit on jobbing sales was 17.96%, it naturally follows that the percentage of gross profit on sales of manufacturing was less than the average of the combined manufacturing and jobbing sales, that is 17.44%.

Notwithstanding the fact that the percentage of gross profit on sales in the manufacturing department appears to be something less than the average profit of 17.44% for the combined sales of 1924, we have used a percentage of gross profit on manufacturing of 18% because in the determination of the amount of gross profit on sales for the year 1924 some of the items of cost of manufacturing were unusually heavy and apparently above the average.

The use of 18% gross profit on sales in the jobbing department is undoubtedly fair and equitable for the reason that it compares favorably with the percentage of gross profit on sales for Igoe Brothers and Cooney for the same period, bearing in mind that Igoe Brothers and Cooney is a jobbing firm exclusively.

While it would appear that we have now shown that 18% is a fair and equitable percentage of gross profit in both departments prior to the fire, some consideration should be given to the conditions in the trade after the fire. We have communicated with the magazine "Iron Age" and have received from that publication the following information with regard to trade conditions in wire and nails as reflected in prices for the years 1925, 1924 and 1923:—

Year	Wire Rods Pbgh. per Gro. Tons	Plain Wire, Base Pbgh. Cents per Pound	Wire Nails Pbgh. Dollars per Kegs of 100 lbs	Cut Nails Dollars per Kegs of 100 lbs.
		Average Prices:		
1919	$ 53.98	3.11 cents	$ 3.41	
1920	69.55	3.53 cents	4.09	
1921	45.94	2.78 cents	2.96	
1922	40.49	2.31 cents	2.51	$ 3.82
1923	50.39	2.70 cents	2.94	3.92
1924	48.31	2.64 cents	2.89	3.69
1925	46.05	2.52 cents	2.72	3.47

It will be noted that the prices for the year 1925 were considerably less than those for the year 1924 and conditions as set forth in the trade paper "Iron Age" show a marked decrease in the demand for wire nails and wire products, as illustrated by the following comments:

IRON AGE—1925

April 30th—Trend toward reduction in stocks. Demands on mills do not amount to much in tonnage.

May 21st —Wire products industry operating only 50 to 55 per cent of capacity. Price cutting.

June 18th —Keen competitive market.

June 26th—Lower prices.
40 to 45 per cent capacity.

July 16th —Market comparatively quiet. 50 per cent capacity production.

Aug. 27th—Business gaining due to low prices.

Sept. 17th—Brisk demand.
65 to 70 per cent of capacity.

Nov. 12th—Strengthening in demand for wire products.

This indicates that the year 1925 would evidently have shown a decrease in profits over the year 1924 had no fire occurred. A chart prepared by "Iron Age" is included herewith. (See Exhibit "F").

ADMINISTRATIVE AND SELLING EXPENSES.

These expenses are the actual expenses of the manufacturing and jobbing departments for the period January 1st to April 9th 1925 as shown by the books of account of the assured and also used by the assured in the claim for merchandise loss in the fire April 9th 1925. The expenses are divided between the manufacturing and jobbing departments in the same ratio as the sales of each department.

NET PROFITS OF THE MANUFACTURING AND JOBBING DEPARTMENTS.

The total net profit for the period January 1st 1925 to April 9th 1925 (83 days) is $20,435.69 of which $12,772.32 is manufacturing and $7,663.37 jobbing and which, when divided by 83 days, gives the net profit per day previously shown.

The business transacted as "Jobbers in metal bars used in reinforced concrete work was not interrupted by the fire and the net profits for 1925 and 1924 are stated herewith in comparative form:—

(b)

Jobbers in Reinforcing Bars

	Year 1925	Year 1924
Net Sales less Sales Discounts	$544,563.21	$528,095.93
Cost of Sales—less Purchase Discounts	429,474.91	401,755.44
Gross Profit from Reinforcement Sales	$115,088.30	$126,340.49
Selling Expenses	$ 37,370.60	$ 30,005.25
Administrative Expenses	41,503.99	43,049.92
Total Expenses	$ 78,874.59	$ 73,055.17
Net Profit from Operations	$ 36,213.71	$ 53,285.32
Average Profit per Day (300 days)	$ 120.71	$ 177.61

We would refer you to the following schedules offered in support of our opinion that the total sales are 37½% jobbing sales and 62½% manufacturing sales, and that the gross profit on both jobbing and manufacturing sales is approximately 18% for the period January 1st 1924 to December 31st 1924 and from January 1st 1925 to April 9th 1925, the date of the fire:—

EXHIBIT "A"—Exhibit B as shown in the report of the assured's accountants, dated June 27th 1925, on the accounts of Igoe Brothers, Newark, N. J., for the year ended December 31st 1924.

This exhibit shows that the percentage of gross profit on the combined jobbing and manufacturing sales of Igoe Brothers, for the year 1924 was 17.44%.

Schedule A-1 Selling Expenses of 1924 summarized in the above mentioned exhibit.

Schedule A-2 Administrative Expenses of 1924 summarized in the above mentioned exhibit.

EXHIBIT "B"—Exhibit B-1, Exhibit C and Exhibit D combined for the year 1925 as shown in the report of the assured's accountants, dated June 19th 1926, on the accounts of Igoe Brothers and Cooney, Brooklyn, N. Y. for the year ended December 31st 1925.

EXHIBIT "C"—Exhibit B-1 and Exhibit C combined for the year 1924 as shown

in the report of the assured's accountants, dated April 20th 1925, on the accounts of Igoe Brothers and Cooney, Brooklyn, N. Y., for the year 1924.

Exhibit "D"—Exhibit B and Exhibit C combined for the year 1923 as shown in the report of the assured's accountant, dated April 20th 1925, on the accounts of Igoe Brothers and Cooney, Brooklyn, N. Y., for the year 1923.

These exhibits show that the gross profit on sales of Igoe Brothers and Cooney (exclusively a jobbing concern) for the years 1925, 1924 and 1923 averaged approximately 18%.

EXHIBIT "E"—Summary of analysis of jobbing sales, cost of jobbing sales, and gross profit on jobbing sales, by commodity, for the period January 1st to April 9th 1925.

This exhibit shows that of the total sales of the jobbing and manufacturing departments for the period January 1st 1925 to April 9th 1925, 37½% were jobbing sales and 62½% were manufacturing sales, and that on the jobbing sales the actual gross profit was 17.96%.

EXHIBIT "F"—Chart prepared by the "Iron Age" showing fluctuations in prices from 1913 to 1925 inclusive.

FIXED CHARGES

The following is a list of the fixed charges which have been pro-rated between the jobbing and manufacturing departments on the basis of sales; that is, 37½% of the total as jobbing department, and 62½% as manufacturing department. The fixed charges and overhead expenses of the reinforcing bar department have been charged to that department and, therefore, do not enter into this calculation.

Salaries and wages of officers, superintendents and other employees whom it is necessary to retain on the payroll whether business is carried on or not.

Name	Title	Total per Annum	Jobbing Department	Manufacturing Department
Peter Igoe	Treasurer	$ 20,000.00	$ 7,500.00	$ 12,500.00
Thomas Igoe	Pes. & Gen. Mgr.	7,500.00	2,812.50	4,687.50
Joseph Igoe	Asst. Gen. Mgr.	5,200.00	1,950.00	3,250.00
John R. Cooney	Secy. & Supt.	7,500.00		7,500.00
		$ 40,200.00	$ 12,262.50	$ 27,937.50
Foremen				
Geo. Woodward	Master Mechanic	$ 7,500.00		$ 7,500.00
H. Suber Asst.	" "	4,600.00		4,600.00
		$ 12,100.00		$ 12,100.00
Salaries of Salesmen, Draughtsmen, Watchmen, and office employees		$ 20,488.00	$ 7,683.00	$ 12,805.00
Taxes		$ 8,532.01	$ 3,199.50	$ 5,332.51
Total Fixed Charges		$ 81,320.01	$ 23,145.00	$ 58,175.01
Fixed Charges per day (300)		$ 271.06	$ 77.15	$ 193.91

The fixed charges of the Reinforcing Bar Department are as follows:

Officers' Salaries	$ 5,000.00
Office Salaries	4,645.28
Total	$ 9,645.28
Fixed Charges per day (300)	$ 32.15

In connection with the determination of the number of days to be allowed the assured, as representing the time of suspension, we would comment as follows:

The assured should be allowed the net profit per day for the number of days it would take to restore the profit making facilities.

With regard to fixed charges we are of the opinion that the assured should be allowed the fixed charges for the period from the date of the fire to the date when the operations in the temporary wire mill (started within a month after the fire), were able to absorb the fixed charges in the cost of manufacture. From a study of the production reports and sales figures, we are of the opinion that this period did not exceed four months.

The assured presented to us a copy of the use and occupancy claim as prepared by Mr. Maltbie, the assured's adjuster; and Mr. Glasser, the assured's accountant.

We are showing as a separate part of this report the claim of the assured together with comments as to wherein our findings differ with the assured's figures.

Respectfully submitted,
JAMES J. HASTINGS & Co.
Certified Public Accountants.

EXHIBIT "A"

IGOE BROTHERS
STATEMENT OF INCOME, PROFIT AND LOSS
FOR THE YEAR ENDED DECEMBER 31, 1924.

			Per Cent of Sales
Sales		$1,378,816.02	*100.00*
Cost of Sales			
Inventory—Opening	$129,499.58		
Purchases	501,747.82		
	$631,247.40		
Less Inventory—Closing	160,919.60		
Cost of Materials Used	470,327.80		
Cost of Finished Goods Sold	420,629.58		
Manufacturing Supplies	33,514,34		
Manufacturing Labor	143,692.75		
Draughtsmen's Wages	2,686.50		
General Supplies	2,367.44		

Electric Light and Power	7,746.71		
Sundry	613.04		
Repairs—Machinery	20,915.75		
" —Buildings	16,092.94		
Depreciation—Machinery	1,511.22		
" —Buildings	8,433.02		
Water	463.00		
Insurance Manufacturing Dept	9,322.66		
Cost of Sales		1,138,316.75	*82.56*
Gross Profit		240,499.27	*17.44*
Selling Expenses (Schedule No. 1)	$ 91,140.50		
Administrative Expenses (Sched. No. 2)	92,224.61	183,365.11	
Net Profit on Manufactured & Resale Stock		57,134.16	
Sales—Mill Shipments	$212,056.62		
Cost of Sales—Mill Shipments	210,746.50		

Profit on Mill Shipments		1,310.12
Net Profit on Operations		58,444.28
Add:		
Discount Received	$ 16,551.23	
Rental Received	5,949.96	
Interest Received	95,155.19	
Commissions	18.04	
Collection of Accounts Previously written off	5,474.12	
Unclaimed Wages		123,148.54
		181,592.82
Less: Discount on Sales	$ 20,286.84	
Federal Income Taxes	20,163.25	40,450.09
NET PROFIT FOR YEAR		$141,142.73

EXHIBIT "A"

Schedule No. 1

IGOE BROTHERS

STATEMENT OF SELLING EXPENSES

FOR THE YEAR ENDED DECEMBER 31, 1924.

Salesmen's Salaries and Expenses	$ 18,257.06
Automobile Expense	11,679.48
Service Trucks	6,220.01
Gasoline and Motor Oil	5,545.26
Depreciation of Stable Equipment	194.00
Tires	1,105.28
Trucks, Taxes and Licenses	736.92
Ford Car Expense	962.22
Stable Expense	7,918.80
Outward Freight	3,383.46
Commission	759.35
Advertising	2,416.06
Subscriptions	553.26
Porters' Wages	24,236.44
Sundry	792.29
Tags and Burlap	47.76
Depreciation of Automobiles	3,931.13
Insurance	2,111.72
Cigars and Entertainment	290.00
TOTAL	$ 91,140.50

EXHIBIT "A"

Schedule No. 2

IGOE BROTHERS

STATEMENT OF ADMINISTRATIVE EXPENSES FOR THE YEAR ENDED DECEMBER 31, 1924

Officers Salaries	$ 52,100.00
Office Salaries	16,795.50
Telephone and Telegraph	1,353.01
Stationery and Office Supplies	1,949.99
Postage	943.93
Insurance	573.68
General Taxes	10,069.26
Depreciation, Office Furniture	.....
Subscriptions and Dues	532.86
Peter Igoe's Expense	310.02
Professional Services	1,777.22
Sundry	507.04
Thomas Igoe's Expense	1,350.60
Uncollectible Accounts	3,492.65
General Travelling	468.85
TOTAL	$ 92,224.61

EXHIBIT "B"

IGOE BROTHERS AND COONEY
STATEMENT OF INCOME AND PROFIT AND LOSS FOR THE YEAR ENDED DECEMBER 31st 1925

	Brooklyn Branch	New York Branch	Jamaica Branch	Total	Per Cent of Sales
Sales—Net	$1,461,155.46	$175,454.31	$85,540.06	$1,722,149.83	*100.00*
Cost of Goods Sold	1,194,672.43	155,233.92	73,752.84	1,423,659.19	*82.66*
Gross Profit on Sales	$266,483.03	$ 20,220.39	$11,787.22	$ 298,490.64	*17.34*
Mill Shipments—Sales	$258,306.21	.....	.....	$ 258,306.21	
Mill Ship.—Cost of Sales	228,836.17	.....	.....	$ 228,836.17	
Gross Profit on Mill Shipment Sales	$ 29,470.04	.....	$.....	$ 29,470.04	
Gross Profit from Sales	$295,953.07	$ 20,220.39	$11,787.22	$ 327,960.68	
Expenses					
Selling Expenses	$ 39,079.88	$ 6,293.66	$ 3,538.00	$ 48,911.54	
Warehouse Expense	111,201.64	.....	.....	$ 111,201.64	

Administration Expenses	126,399.58	19,788.14	14,492.25	160,679.97
Total Expenses	$276,681.10	$ 26,081.80	$18,030.25	$ 320,793.15
Net Profit or Loss *from Operations*	$ 19,271.97	$ *5,861.41*	$ *6,243.03*	$ 7,167.53
Other Income:				
Discounts Received	$ 27,181.44	$ 3,033.66	$ 1,650.58	$ 31,865.68
Commissions	.....	.....	.....	.....
Micellaneous Revenue	138.75	.....	.....	138.75
Tenement Income	9,184.28	.....	.....	9,184.28
Amounts Collected Previously written off	3,295.31	201.26	.....	3,496.57
Profit on sale of Capital Assets	.....	.....		
Refund Prior Year State Franchise Taxes	1,729.21	.....	.....	1,729.21
Total Other Income	$ 41,528.99	$ 3,234.92	$ 1,650.58	$ 46,414.49

Total Income or Loss	$ 60,800.96	$ *2,626.49*	$ *4,592.45*	$ 53,582.02
Income Deductions:				
Discounts on Sales	$ 19,842.55	$ 1,729.67	$ 409.18	$ 21,981.40
Ins. on Lives of Officers	7,171.20	.....	.....	7,171.20
Reserve for Insurance	2,000.00	.....	.....	2,000.00
Loss on Patents Discarded	584.88	.....	.....	584.88
Bad Debts Written Off	.....	.....	519.99	519.99
Total Income Deductions	$ 29,598.63	$ 1,729.67	$ 929.17	$ 32,257.47
NET INCOME OR LOSS *FOR THE YEAR*	$ 31,202.33	$ *4,356.16*	$ *5,521.62*	$ 21,324.55

EXHIBIT "C"

IGOE BROTHERS AND COONEY

STATEMENT OF INCOME AND PROFIT AND LOSS FOR THE YEAR ENDED DECEMBER 31st 1924

	Brooklyn Branch	New York Branch	Total	Per Cent of Sales
Sales—Net	$1,414,781.79	$206,229.23	$1,621,011.02	*100.00*
Cost of Goods Sold	1,143,911.52	172,092.06	1,316,003.58	*81.18*
Gross Profit on Sales	$ 270,870.27	$ 34,137.17	$ 305,007.44	*18.82*
Mill Shipments—Sales	$217,389.83	$.....	$ 217,389.83	
" " —Cost of Sales	205,566.98	.....	205,566.98	
Gross Profit on Mill Shipments	$ 11,822.85	$.....	$ 11,822.85	
Gross Profit from Sales	$282,693.12	$ 34,137.17	$316,830.29	

Expenses			
Selling Expense	$ 48,799.20	$ 3,014.91	$ 51,814.11
Warehouse Expense	97,781.08	.....	97,781.08
Administration Expense	135,206.40	20,317.54	155,523.94
Total Expenses	$281,786.68	$ 23,332.45	$305,119.13
Net Profits from Operations	$ 906.44	$ 10,804.72	$ 11,711.16
Other Income			
Discounts Received	$ 25,605.51	$ 3,302.85	$ 28,908.36
Commissions	105.29	.....	105.29
Miscellaneous Revenue	8.60	.....	8.60
Tenement Income	9,774.93	.....	9,774.93
Accounts Collected Previously written off	1,716.45	89.57	1,806.02
Profit on Sale of Capital Assets			
Assets	3,530.11	.....	3,530.11
Total Other Income	$ 40,740.89	$ 3,392.42	$ 44,133.31

Total Income	$ 41,647.33	$ 14,197.14	55,844.47
Income Deductions			
Discount on Sales	$ 16,567.87	$ 2,154.79	$ 18,722.66
Insurance on Lives of Officers	6,837.00	.....	6,837.00
Reserve for Insurance	2,000.00	.....	2,000.00
Total Income Deductions	$ 25,404.87	$ 2,154.79	$ 27,559.66
Net Income for the Year	$ 16,242.46	$ 12,042.35	$ 28,284.81
LESS Federal Income Tax	$	1,225.16	$ 1,225.16
NET PROFIT CARRIED TO SURPLUS ACCOUNT	$ 16,242.46	$ 10,817.19	$ 27,059.65

EXHIBIT "D"

IGOE BROTHERS AND COONEY
STATEMENT OF INCOME, PROFIT AND LOSS
FOR THE YEAR ENDED DECEMBER 31, 1923.

	Brooklyn Branch	New York Branch	Total	Per Cent of Sales
Sales—Net	$1,425,174.02	$224,749.25	$1,649,923.27	*100.00*
Cost of Goods Sold	1,118,197.46	179,264.30	1,297,461.76	*78.6*
Gross Profit on Sales	$ 306,976.56	$ 45,484.95	$ 352,461.51	*21.36*
Mill Shipment Sales	$ 161,035.47	$.....	$ 161,035.47	
Mill Shipment Cost of Sales	145.647.83	.....	145,647.83	
Gross Profit on Mill Shp'ts.	$ 15,387.64	$.....	$ 15,387.64	
Gross Profit on Sales	$ 322,364.20	$ 45,484.95	$ 367.849.15	

Expenses			
Selling Expense	$ 45,697.76	$ 1,179.73	$ 46,877.49
Warehouse Expense	92,496.15	.....	92,496.15
Administration Expense	131,262.83	21,455.16	152,717.99
Total Expenses	$ 269,456.74	$ 22,634.89	$ 292,091.63
Net Profits from Operations	$ 52,907.46	$ 22,850.06	$ 75,757.52
Other Income			
Discounts Received	$ 25,056.84	$ 3,658.32	$ 28,715.16
Commissions	398.70	.....	398.70
Miscellaneous Revenue	46.54	.....	46.54
Tenement Income	9,968.68	.....	9,968.68
Total Other Income	$ 35,470.76	3,658.32	$ 39,129.08
Total Income	$ 88,378.22	$ 26,508.38	$ 114,886.60

Income Deductions			
Loss on Sales of Buck Dept. Assets	$ 5,256.57	$.....	$ 5,256.57
Discount on Sales	17,628.74	.....	17,628.74
Insurance: Lives of Officers	6,852.50	.....	6,852.50
Reserve for Insurance	2,000.00	.....	2,000.00
Total Income Deduction	$ 31,737.81	$.....	31,737.81
Net Income for the Year	$ 56,640.41	$ 26,508.38	$ 83,148.79
Less: Federal Income Taxes	.....	3,313.55	3,313.55
NET PROFIT CARRIED TO SURPLUS ACCOUNT	$ 56,640.41	$ 23,194.83	$ 79,835.24

EXHIBIT "E"
IGOE BROTHERS
Newark, N. J.

SUMMARY OF ANALYSIS OF JOBBING SALES
JANUARY 1st to APRIL 9th 1925.

	Quantity		Total Sales	Total Cost
Galv. Wire in Coils	56,727	lbs.	$ 3,977.89	$ 2,269.08
Galv. Wire in Stones	3,576	lbs.	289.65	244.96
Tinned " " "	132	"	13.89	10.42
Galv. Wire cut to length	65,432	"	3,762.34	2,911.72
Ajax Refills	19		34.58	18.24
' Complete	9		56.25	35.55
Cut Nails	879	kegs	3,999.45	3,296.25
Galv. Wire Nails	765	"	6,181.20	4,681.80
Misc. Nails	31,702	lbs.	3,090.95	2,219.14
Galv. Staples	142	kegs	1,065.00	639.00
Sash Weights	283,756	lbs.	6,072.38	5,457.38

Wall Board	7,001 sq. ft.	227.53	182.03	
Ideal Nails Bright	224 kegs	1,646.40	1,310.40	
" " Galv.	80 kegs	760.00	652.00	
Copper Screen Cloth 14 m.	127,260 sq. ft.	6,527.93	5,726.25	
" " " 16 m.	45,300 " "	2,545.86	2,265.00	
Bronze " " 14 m.	88,341 " "	5,203.28	4,637.90	
" " " 16 m.	40,563 " "	2,620.37	2,190.40	
Pearl " " Heavy	13,669 " "	721.72	717.62	
" " " 14 m.	48,317 " "	1,903.69	1,932.68	
" " " Reg	8,550 " "	470.25	320.63	
Opal " " 14 m.	337,763 " "	10,301.77	8,444.08	
" " " 12 m.	9,800 " "	259.70	205.80	
" " " 16 m.	23,187 " "	813.86	637.64	
Black " " 12 m.	45,516 " "	933.08	819.29	
" " " 14 m.	11,700 " "	306.54	263.25	
Apex " " 12 m.	11,934 " "	245.84	250.61	
" " " 16 m.	2,516 " "	121.77	67.93	
" " " 14 m.	57,709 " "	1,656.25	1,442.73	
Poultry Netting	4,757 rolls	20,716.74	15,698.10	

Hardware Cloth	133,348	sq. ft.	6,147.34	5,333.92
American Fence	107	rolls	857.07	749.00
Cyclone Fence	459	"	8,101.35	6,907.95
Chain Link	3,839	lin. ft.	1,303.34	998.14
Posts	3,317	pcs.	1,669.11	1,459.48
Cyclone Basket	306	pcs.	734.40	416.16
Rubbish Burners	98	"	162.19	122.50
Gates	51	sets	354.45	302.94
Wire Mats	61	pcs.	87.17	62.22
Sand Screen	12	pcs.	57.00	46.92
Poultry Netting Seconds	130	rolls	887.90	143.00
Jack Frost Tar Paper & Slaters Felt	4,000	rolls	4,260.00	3,880.00
Roofing	4,331	"	6,643.75	4,980.65
Sq. Shingles	248	sq.	854.36	1,178.00
Building	7,092	rolls	4,432.50	3,758.76
Deadening Felt	11	rolls	30.85	24.64
Carried forward			$123,108.94	$99,912.16

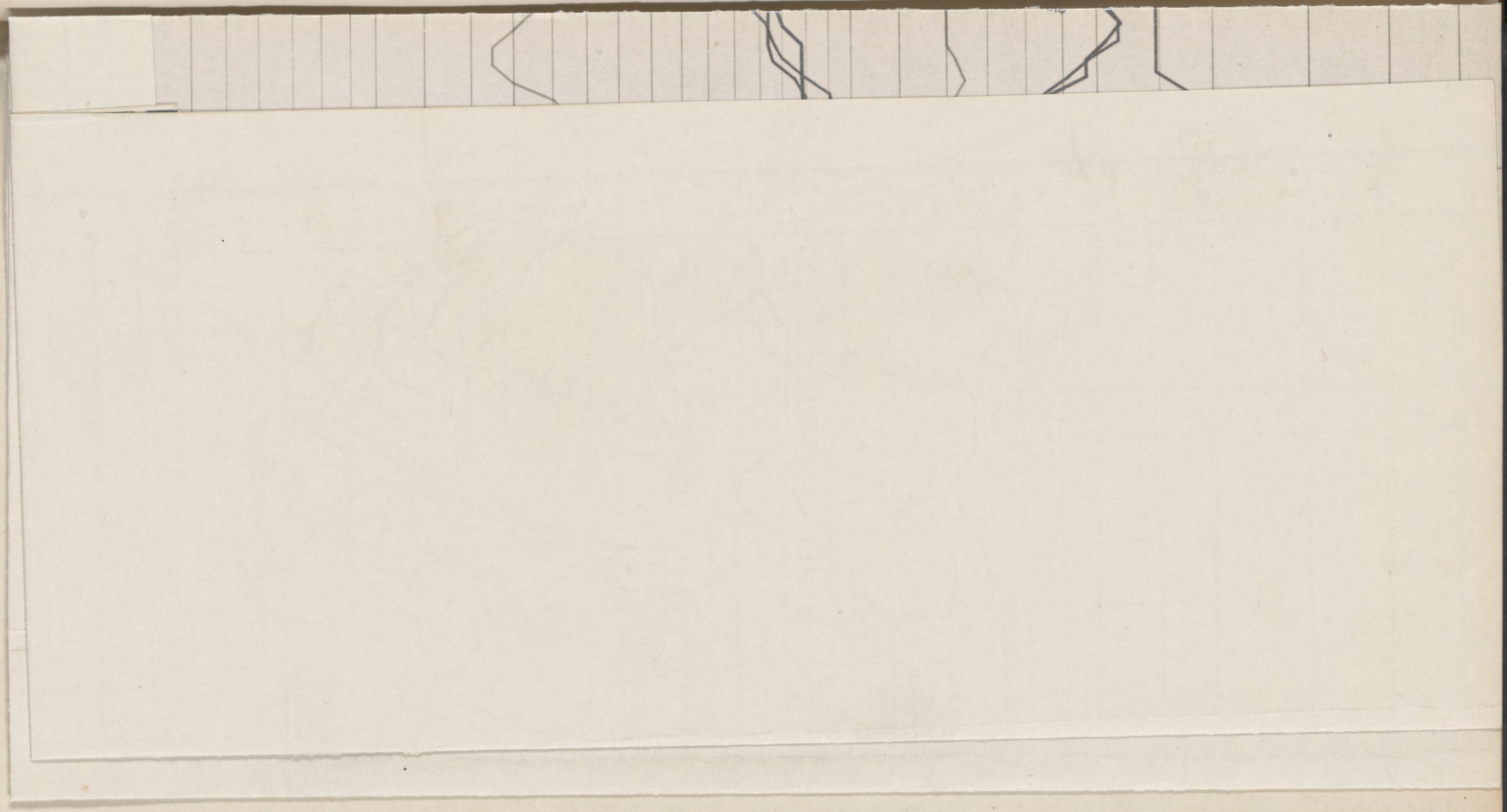
EXHIBIT "E".
IGOE BROTHERS
Newark, N. J.

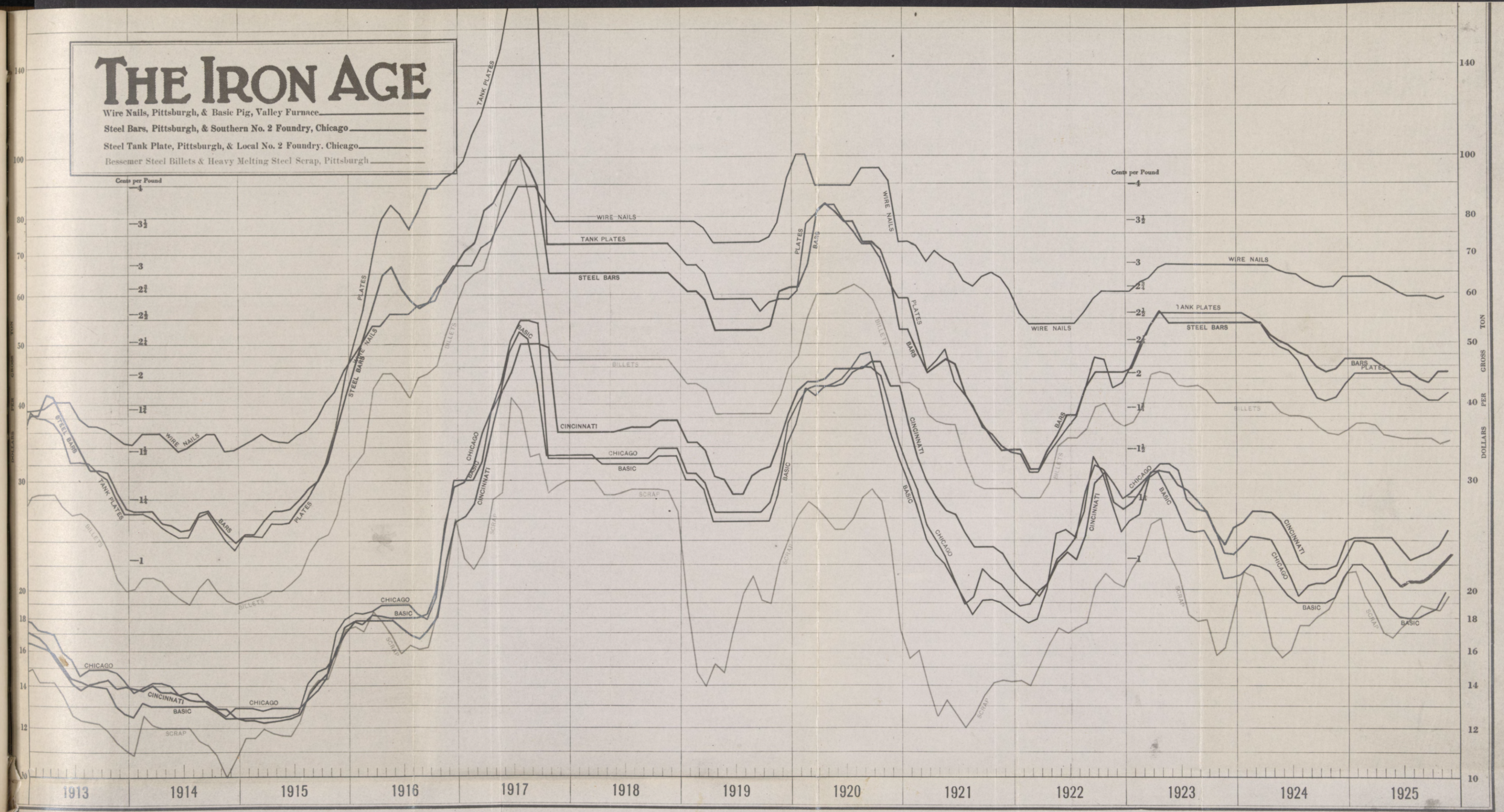
SUMMARY OF ANALYSIS OF JOBBING SALES
JANUARY 1st to APRIL 9th 1925.

	Quality	Total Sales	Total Cost
Brought forward	-	$ 123,108.94	$ 99,912.16
Roofing Caps	449 lbs.	31.43	29.19
Roof Coating - Barrets Elastigum	351 gal.	126.36	201.83
- Plastic	160 lbs.	17.44	20.80
Stormtight - Liquid	518 gal.	720.02	647.50
-Plastic	569 lbs.	125.18	85.35
Plastic Cement	356 lbs.	39.16	46.28
Barbed Wire Reels	5,892 "	324.06	223.90
" " 25' Coils	115 pcs.	28.75	16.10
" " 50' "	871 Coils	435.50	235.17

" " 75′ "	2	"	1.50	.80
" " 100′ "	837		795.15	435.24
Handy Trucks	100	pcs.	215.00	169.00
Clothes Line Wire 50′	25	dz.	79.00	54.00
" " " 100′	55½	"	281.38	170.94
" " "1000′	3	reels	15.75	13.50
Galv. Cut Nails	15	kegs	108.75	90.00
Brass Brads	105	lbs.	31.58	31.50
Bolts	50	lbs.	3.13	1.00
Fence Stretcher	4	pcs.	38.00	29.00
" Fittings	265	"	64.93	39.75
Cyclone Guard	299	rolls	3,037.84	2,960.10
Wood Picket Fence	154	"	1,529.72	1,347.50
Painted Ball Tops	-		-	-
Single Gates	207	pcs.	691.38	480.24
Trellis Arch	43		422.26	172.00
Ribbon Wire	1 roll & 2,926	lbs.	263.34	187.26
Stove Pipe Wire	3	dz. hanks	1.20	.90
Fairbanks Trucks No. 1	9	pcs.	31.95	25.20

" " No. 2	4	"	19.80	18.00
Neponsit	85	rolls	234.60	144.50
Coal Tar	1	bbl.	10.57	8.75
Black Cloth No. 14 mesh	1,533	sq. ft.	38.33	34.49
" " No. 16 mesh	2,184	" "	144.14	60.06
Galv. Fasteners	310	lbs.	43.40	36.11
Nail Collars	5,000		6.25	5.25
Tree Guards	15	pcs.	16.50	8.25
Double Hd. Nails	2	kegs	24.00	19.70
Rubberoid Fibre	48	gal.	40.80	27.60
Tomato Supports	4	D.	7.50	5.00
Grey	2,918	sq. ft.	68.57	46.69
Nails	4,828	K.	20,519.00	17,863.60
TOTAL			$153,472.16	$125,904.21





Fluctuations in Prices of Pig Iron and Finished Steel—Thirteen Years

RECAPITULATION

Total Sales	$153,472.16
Cost of Sales	125,904.21
Gross Profit on Sales	$ 27,567.95
% of Gross Profit on Sales	17.96%

EXHIBIT "G"

IGOE BROTHERS

ANALYSIS OF SELLING EXPENSES
JANUARY 1st to APRIL 9th 1925.

Selling Expenses

Salesmen's Salaries and Expenses	$ 4,469.10
Auto. Truck Expenses	2,510.80
Hired Trucks	1,142.32
Gasoline and Motor Oil	1,765.92
Depreciation of Stable Equipment	76.77
Tires	49.83
Truck Taxes and Licenses	-
Ford Car Expenses	286.68
Stable Expenses	3,081.68
Outward Freight	1,085.46
Commissions	249.37
Advertising	426.02
Subscriptions	272.00
Porters' Wages	6,869.10
Bags & Burlap	316.30
Depreciation of Automobiles	863.31
Insurance	1,394.94
Cigars and Entertainment	29.00
Armored Car Service	21.67

Oil Burners	-
Sundry	292.66
Taking Down Smokestack	-
Collection Charges	30.06
Contributions	52.00
	$ 25,284.99

ANALYSIS OF ADMINISTRATIVE EXPENSES JANUARY 1st to APRIL 9th 1925.

Officers' Salaries	$ 14,413.78
Office Salaries	5,265.08
Telephone and Telegraph	661.35
Stationery and Office Supplies	486.21
Postage	311.66
Insurance	116.20
General Taxes	3,186.69
Depreciation - Office Furniture	-
Subscriptions	75.00
Peter Igoe's Expense	199.20
Thomas Igoe's Expense (Travel)	354.50
Professional Services	315.38
General Travelling	250.00
Office Equipment	-
General Maintenance and Parts	-
McNeil Patent Nail Expense	-
Sundry	127.42
Uncollectible Accounts	-
	$ 25,762.47

COMPARISON OF ASSURED'S CLAIM

AND OUR FINDINGS

We are attaching hereto a comparative statment which shows the claim of the assured as presented to us and our findings.

A comparative summary of the net profits and fixed charges per day follows :-

	Assured's Claim	Our Findings
Net Profit per day in the Manufacturing Dept.	$ 462.06	$ 153.88
Fixed Charges per day in the Manufacturing Department	374.17	193.91
Net Profit per day in the Jobbing Department	154.02	92.33
Fixed Charges per day in the Jobbing Department	48.54	77.15

NET PROFITS

The assured's figure of net profit for the period January 1st to April 9th 1924 is $51,135.68 for the jobbing and manufacturing combined. This net profit is determined by using a gross profit on sales of 18.31%.

Our net profit for the period January 1st to April 9th 1925 is $20,435.69 using a gross profit on sales of 18%. The difference between these two net profit figures is $30,699.99. In the calculation of the net profits, the assured has failed to deduct $14,413.78 of officers' salaries; selling expenses $8,103.32, and taxes $3,186.69 as expenses although claiming these expenses as fixed charges. (See Schedule attached).

In dividing the net profits between the jobbing and manufacturing departments the assured assumed that 80% of the net profits were manufacturing profits and 20% were jobbing profits. The inaccuracy of the statement is demonstrated by the analysis of jobbing sales and cost thereof in comparison with the total sales of the period January 1st to April 9th 1925.

FIXED CHARGES

The assured has divided the salary of Mr. Peter Igoe, $25,000.00, between the manufacturing and jobbing departments on the basis of $20,000.00 to manufacturing and $5,000.00 to jobbing.

Of the $25,000.00 paid to Mr. Peter Igoe by Igoe Brothers, $5,000.00 is charged to the reinforcement department, leaving $20,000.00 to be divided between the manufacturing and jobbing departments.

This item of expense has been pro-rated in our findings on the basis of sales because Mr. Peter Igoe is Treasurer of the company and the salary of the Treasurer, in our opinion, should be divided on the basis of sales.

Mr. Thomas Igoe, President and General Manager, receives a salary of $7,500.00 from Igoe Brothers. The assured has charged all of this amount to manufacturing which, in our opinion, is incorrect as indicated by the titles of the positions held by Mr. Thomas Igoe. We have pro-rated this expense on the basis of sales.

Mr. Joseph Igoe, Assistant General Manager, receives a salary of $5,200.00 from Igoe Brothers. The assured has divided this amount $3,900.00 Manufacturing Department and $1,300.00 Jobbing Department. We have divided this item on the basis of sales.

Salaries of salesmen, draughtsmen, watchmen and office employees are shown in the assured's claim as $20,488.00 divided $13,078.20 Manufacturing Department and $7,409.80 Jobbing Department. In our findings we have pro-rated this expense on the basis of sales.

The assured's claim shows an amount of $40,496.00 for skilled workers as follows:-

Foremen and Wire Workers	$ 28,990.00
Carpenters	11,506.00
	$ 40,496.00

Our investigation of the payroll after the fire shows that the workmen's wages included in the above amount were paid on the basis of actual working time and, therefore, we have not included them as a fixed charge.

Taxes were divided by the assured on the basis of 10% jobbing and 90% manufacturing while we have divided taxes on the basis of sales.

Respectfully submitted,
JAMES J. HASTINGS & Co.,
Certified Public Accountants.

IGOE BROTHERS

COMPARISON OF ASSURED'S CLAIM AND OUR FINDINGS

NET PROFIT

	Assured's Claim	Our Findings	Increase or *Decrease*
Gross Profit	$ 75,192.13	$ 73,919.08	$ *1,273.05*
Expenses			
Selling Expenses			
Salesmen's Salaries & Expenses	$ 4,496.10	$ 4,469.10	
Auto Truck Expenses	5,823.42	2,510.80	
Hired Trucks	-	1,142.32	*2,170.30*

Gasoline and Motor Oil	1,765.92	1,765.92	
Depreciation of Stable Equipt.	-	76.77	76.77
Tires	-	49.83	49.83
Ford Car Expenses	-	286.68	286.68
Stable Expenses	2,670.67	3,081.68	411.01
Outward Freight	-	1,085.46	1,085.46
Commissions	249.37	249.37	
Advertising	426.02	426.02	
Subscriptions	322.00	272.00	*50.00*
Porters' Wages	-	6,869.10	6,869.10
Bags & Burlap	-	316.39	316.30
Depreciation of Automobiles	-	863.31	863.31
Insurance	933.78	1,394.94	461.16
Cigars and Entertainment	-	29.00	29.00
Armored Car Service	21.67	21.67	
Sundry	292.66	292.66	
Collection Charges	30.06	30.06	
Contributions	177.00	25.00	*125.00*
Total Selling Expenses	$17,181.67	$ 25,284.99	$ 8,103.32

Administrative Expenses			
Officers' Salaries	$ -	$14,413.78	$14,413.78
Office Salaries	4,381.00	5,265.08	884.08
Telephone & Telegraph	653.62	661.35	7.73
Stationery & Office Supplies	-	486.21	486.21
Postage	333.36	311.66	*21.70*
Insurance	--	116.20	116.20
General Taxes	-	3,186.69	3,186.69
Subscriptions	150.00	75.00	*75.00*
Peter Igoe's Expenses	-	199.20	199.20
Thomas " "	-	354.50	354.50
Professional Services	315.38	315.38	
General Travelling	914.00	250.00	*664.00*
Sundry	127.42	127.42	
Total Administrative Expenses	$ 6,874.78	$25,762.47	$18,887.69
Total Expenses	$24,056.45	$51,047.46	$26,991.01
Net Profit from Operations	$51,135.68	$22,871.62	*$28,264.06*

Forward

IGOE BROTHERS

COMPARISON OF ASSURED'S CLAIM
AND OUR FINDINGS

NET PROFIT (continued)

	Assured's Claim	Our Findings	Increase or *Decrease*
Brought Forward -			
Net Profit from Operations	$ 51,135.68	$ 22,871.62	$ *28,264.06*
ADD: Income Credits -Discounts	-	2,349.49	2,349.49
		$ 25,221.11	$ *2,9514.57*
LESS: Income Charges-Discounts		4,785.42	4,785.42
Net Profit	$ 51,135.68	$ 20,435.69	$ 30,699.99

Manufacturing Profit	$ 38,351.76	$ 12,772.32	$ *25,579.44*
Jobbing Profit	$ 12,783.92	$ 7,663.37	$ *5,120.55*
Manufacturing Profit per Day	$ 462.06	$ 153.88	
Jobbing Profit per Day	$ 154.02	$ 92.33	

- - -

IGOE BROTHERS

COMPARISON OF ASSURED'S CLAIM AND OUR FINDINGS

FIXED CHARGES

	Assured's Figures		Our Findings	
	Manufauctur'g.	:Jobbing	Manufacturing	:Jobbing
Administrative				
Peter Igoe - Treasurer	$ 20,000.00	$ 5,000.00	$ 12,500.00	$ 7,500.00
Thomas ", Pres. & Gen. Mgr.	7,500.00	-	4,687.50	2,812.50
Joseph ", Asst. Gen Mgr.	3,900.00	1,300.00	3,250.00	1,950.00
John Cooney, Sec. & Supt.	7,500.00	-	7,500.00	
Salaries of Salesmen, Draughtsmen, Watchmen and Office Employees	13,078.20	7,409.80	12,805.00	7,683.00
Total Administrative	$ 51,978.20	$ 13,709.80	$ 40,742.50	$ 19,945.50

Skilled Labor Retained				
Geo. Woodward,				
Master Mechanic	$ 7,500.00	$	$ 7,500.00	
Hillery Suber,				
Asst. Master Mechanic	4,600.00		4,600.00	
Foremen, etc.	13,858.00		-	
Wire Workers	15,132.00		-	
Carpenters	11,506.00		-	
Total Skilled Labor	$ 52,596.00		$ 12,100.00	
Taxes				
Personal	$ 3,963.82	$ 440.43	$ 2,752.66	$ 1,651.59
Real Estate	3,714.99	412.77	2,579.85	1,547.91
Total Taxes	$ 7,678.81	$ 853.20	$ 5,332.51	$ 3,199.50
TOTAL FIXED CHARGES	$112,253.01	$ 14,563.00	$ 58,175.01	$ 23,145.00
TOTAL FIXED CHARGES PER DAY	$ 374.17	48.54	$ 193,91	$ 77.15

EXHIBIT D-19

IGOE BROTHERS

Newark, N. J.

Fire—April 9th 1925

Use and Occupancy Loss

Supplementary Report prepared

in answer to Assured's revised

Claim dated April 21st, 1927.

Report prepared for

Mr. E. F. McCrossen

82 Beaver Street, New York City,

Appraiser for Various Insurance

Companies under agreement dated

June 21st, 1926.

JAMES J. HASTINGS & CO.

CERTIFIED PUBLIC ACCOUNTANTS

FEDERAL TRUST BUILDING

COMMERCE ST.,

Newark, N. J.

May 24, 1927.

Mr. E. F. McCrossen,
Appraiser for the Insurance Companies,
82 Beaver Street,
New York, N. Y.

Igoe Brothers
Newark, New Jersey
Use & Occupancy Loss
Fire:—April 9th, 1925.

Dear Sir:-

We have examined the report of April 29th 1927 prepared for the assured by Messrs. Courter and Rhyne, Accountants and Auditors, 30 Church Street, New York City.

Attached to the report of the assured's accountants is a revised claim signed by Mr. Peter Igoe wherein he claims that the net profit per day in the manufacture of wire and nails is $573.47, while the fixed charges per day, incidental to the manufacture of wire and nails, are $297.63 making a total of the amount claimed per day of $871.10.

The $573.47 is arrived at as follows:-

Net profit per day in the manufacture of wire and nails, as determined by the assured's accountants (which said net profit per day is not in accord with the books)	$289.91
Additional amount arising by reason of increased gross profit for the period Jan. 1st to April 9th 1925 (as set forth in Page 7 of their report)	168.87
	$458.78
25% of this amount representing anticipated increase in net profits for 1925 (as set forth in Page 12 of their report)	114.69
Total	$573.47

The facts necessary for a determination of the amount of the loss are as follows:-

1. The net profit per day for each of the following departments of the Igoe Brothers business:-

   (a)—Manufacture of wire and nails (Manufacturing Department).

   (b)—Jobbers in nails, etc, (Jobbing Department).

(c)—Jobbers in mental bars used in reinforcing concrete work (Reinforcing Department).

Because of the failure to keep records segregating the sales of the manufacturing and jobbing departments, it was necessary to determine what percentage of the total business represented transactions of the manufacturing and jobbing departments respectively.

2. The fixed charges per day in each of the following departments:-

(a)—Manufacturing Department.

(b)—Jobbing Department.

(c)—Reinforcing Department.

The fire did not interfere in any way with the operation of the jobbing or reinforcing departments and, therefore, the question of the net profit and fixed charges in the manufacturing department is one of the main points at issue.

3. The length of time necessary for the assured to restore the manufacturing department is a point of issue to be determined by the engineers.

4. The prospects for profit making in the manufacturing department if there had

been no suspension of the manufacturing department.

The following is a comparative summary of the net profits and fixed charges per day as determined by the assured's accountants and ourselves, together with the difference between the figures:-

	Assured's Figures	Our Findings	Difference
Net Profits per Day			
Manufacturing Department	$289.91	$153.88	$136.03
Jobbing Department	91.33	92.33	1.00
Reinforcing Department	120.71	120.71	
Fixed Charges per Day			
Manufacturing Department	297.63	193.91	103.72
Jobbing Department	76.89	77.15	.26
Reinforcing Department	32.15	32.15	

Before going into a detailed discussion and explanation of the differences that exist between the figures of the assured's accountants and ourselves, we wish to point out the following facts:-

Messrs. Courter and Rhyne, the firm of accountants who prepared the revised claim from which the assured's figures (as shown on Page 1 of their report) have been taken, have been auditing the accounts of Igoe Brothers, and Igoe Brothers and Cooney for a number of years and have submitted each year a statement of the operations of the above names companies, and said annual statements are in accord with the books of the companies.

We quote from Page 1 of the accountants' report, dated June 27th 1925, covering the operations of Igoe Brothers, Newark, New Jersey, for the year ended December 31st 1924:-

"Messrs. Igoe Brothers,
Newark, N. J.

Dear Sirs:

In accordance with instructions we have made an audit of the books and records of your company as kept at 61-73 Metropolitan Avenue, Brooklyn, N. Y., for the year ended December 31, 1924. We submit herewith the following described Exhibits and Schedules:

Exhibit "A" Comparative Balance Sheet as at December 31, 1924 and December 31, 1923.

Exhibit "B" Comparative statement of Income and Profit and Loss for the Years ended December 31, 1924 and December 31, 1923.

Schedule 1—Comparative Statement of Selling Expenses for the years ended December 31, 1924 and December 31, 1923.

Schedule 2—Comparative Statement of Administrative Expenses for

the Years ended December 31, 1924 and December 31, 1923.

Exhibit "C" Reinforcement Department —Comparative Statement of Income and Profit and Loss for the years ended December 31, 1924 and December 31, 1924.

Exhibit "D" Analysis of Surplus Accounts for the Year ended December 31, 1924.

"The accompanying Exhibits and Schedules are in agreement with your records, and we believe correctly reflect the financial position of your company at December 31, 1924 and the result of operation for the year ended on that date."

The difference between our figure of net profit per day in the manufacturing department, and the assured's revised figure of net profit per day in the manufacturing department, is due to the following reasons:-

1. The assured uses a percentage of gross profit on sales for the manufacturing and jobbing departments of 20.729% for the year 1924 instead of 17.443% as shown by the books (refer to Exhibits "A" and "E" in the report of Messrs. Courter and Rhyne.)

2. The assured adds to the net profit of the manufacturing and jobbing departments, as shown by the books and their accountants' report, for the year 1924, the sum of $45.319.37.

The assured has divided the percentage of gross profit 20.729% between the manufacturing and jobbing departments as follows:-

Assured's Revised Percentage of Gross Profit by Departments (Not based on Book Figures) Year 1924

Percentage of Gross Profit in Manufacturing & Jobbing Depts. 20.729%
Percentage of Gross Profit in Manufacturing Department 22.380%
Percentage of Gross Profit in Jobbing Department 17.963%

Our Percentage of Gross Profit by Departments. (Based on Book Figures)

Percentage of Gross Profit in Manufacturing & Jobbing Depts. 18%
Percentage of Gross Profit in Manufacturing Department 18%
Percentage of Gross Profit in Jobbing Department 18%

Assured's Original Cliam
Percentage of Gross Profit on Sales

Percentage of Gross Profit in Manufacturing & Jobbing Depts. 18.31%

The 18.31% gross profit on sales is greater than 17.44% as shown by the books because the assured has failed to include certain expenses shown by the books, the inclusion of which would make the percentage 17.44%.

The assured prepared the statement of merchandise loss which has been settled and in that statement used 18.31% gross profit on sales. In the final settlement of the merchandise loss 17.44% gross profit on sales, as per the books and accountants' report was used and accepted by the assured.

In the last analysis the difference in percentage of gross profit is due to the difference in gross profit which in dollars and cents is $45,319.37. The amount is made up as follows:

$14,878.75 Manufacturing Labor now capitalized in revised claim.
387.34 Electric Light & Power portion now charged to Reinforcement Department.
15,958.32 Repairs to Machinery now capitalized.
12,872.29 Repairs to Building now capitalized
30.22 Depreciation Machinery portion now charged to Reinforcement Department.
674.64 Depreciation Building portion now charged to Reinforcement Department.

23.15 Water portion now charged to Reinforcement Department.
494.66 Insurance portion now charged to Reinforcement Department.

$45,319.37 *Total as above*

It will be noted that the above items come under two classes:-

(a) Items charged to expense in the books for the year 1924 and so audited and approved by the assured's accountants, which are now capitalized by the same accountants.

(b) Items charged to Manufacturing and Jobbing Departments in the books for the year 1924 and so audited and approved by the assured's accountants which are now transferred to the Reinforcing Department by the same accountants.

The three major items in the above list are as follows:-

$14,878.75 Manufacturing Labor
15,958.32 Repairs to Machinery
12,872.29 Repairs to Buildings
$43,709.36

The following is a copy of Journal entries appearing in the books of Igoe Brothers, at December 31, 1924:-

Transcript of Journal Entry on Page 123.
December 13, 1924

Expense Ledger—N	$21,783.01	
New Construction—N		$21,783.01

to write off sundry charges to latter account, which upon analysis by Mr. Peter Igoe, are found to be proper charges to following accounts:-

Manufacturing Expenses

520 General Supplies	$ 664.86
522 Repairs to Machinery	14,079.65
523 Repairs to Buildings	7,038.50
	$21,783.01

Journal Page 127

December 31, 1924

Machinery	11,134.45	
New Construction		11,134.45

to transfer cost of machinery charged to New Construction—per auditor's schedule 12/31/24.

Vou. 1024333	$5,042.00
323309	572.45
1223267	600.00
1223285	1,270.00
1223303	225.00
423007	3,425.00
	$11,134.45

Journal Page 127

December 31, 1924

Buildings	17,538.85	
New Construction		17,538.85
to transfer balance in latter a/c at December 31, 1924 to Buildings a/c		

From an examination of these Journal entries it is quite evident that the auditors—Messrs. Courter and Rhyne—and Mr. Peter Igoe, Treasurer of the company, arrived at the decision reflected in the above Journal entries after due and careful consideration and we see no reason for the capitalizing of items originally charged to expense and so audited, other than an effort to arbitrarily raise the net profit per day in the manufacturing department.

We believe we have now satisfactorily explained the difference in net profit that exists between the assured's accountants' figure $289.91 and our figure of net profit in the manufacturing department $153.88 and we turn to a consideration of the two items Mr. Peter Igoe adds to his accountants' figure of net profit per day in the manufacturing department.

The first item $168.87 per day is entirely based on the following paragraph from Page 7 of his accountants' report as follows:

> "The assured also contends that in the computation of the gross profit of Igoe Brothers for 1924, adjustment should be made for an

item of $44,313.55 which represents the excess of the sale price of $214,433.16 over the cost price of $170,119.61 for wire and wire products sold by Igoe Brothers & Cooney which were purchased from Igoe Brothers. If the control of both of these companies had not been vested in the same stockholders, the assured contends that Igoe Brothers would have sold this merchandise to customers and realized the profit thereon which Igoe Brothers and Cooney received."

His whole contention is based on the theory that if he did not sell the merchandise to Igoe Brothers & Cooney, he would have sold it to others which would have resulted in greater profit.

We are only interested in facts in connection with this claim and we do not believe that such an argument merits consideration.

With regard to the item of $114.69 which is 25% of the sum of $289.91 plus $168.87 above explained, we offer the following:

Earnings that might be expected
during the period of suspension

The assured in the revised claim expresses an opinion that the business of 1925 would result in 25% more profit than 1924 (See Pages 8-9-10-11-12 of report of Messrs. Courter and Rhyne).

Our answer to such a contention is stated on Pages 8 and 9 of our report as shown by "Iron Age":

"While it would appear that we have now shown that 18% is a fair and equitable percentage of gross profit in both departments prior to the fire, some consideration should be given to the conditions in the trade after the fire. We have communicated with the magazine "Iron Age" and have received from that publication the following information with regard to trade conditions in wire and nails as reflected in prices for the years 1925, 1924 and 1923:

Average Prices

Year	Wire Rods Pittsburgh per Gro. Tons	Plain Wire, Base Pittsburgh Cents per Pound	Wire Nails Pittsburgh Dollars per Keg of 100 lb.	Cut Nails Philadelphia Dollars per Keg of 100 lb.
1919	$ 53.98	3.11 cents	$ 3.41	
1920	69.55	3.53 "	4.09	
1921	45.94	2.78 "	2.96	
1922	40.49	2.31 "	2.51	$ 3.82
1923	50.39	2.70 "	2.94	3.92
1924	48.31	2.64 "	2.89	3.69
1925	46.05	2.52 "	2.72	3.47

"It will be noted that the prices for the year 1925 were considerably less than those for the year 1924 and conditions as set forth in the trade paper "Iron Age" show a marked decrease in the demand for wire nails and wire products, as illustrated by the following comments:

IRON AGE - 1925

April 30 - Trend toward reduction in stocks. De-

mands on mills do not amount to much in tonnage.

May 31 - Wire products industry operating only 50 to 55 per cent of capacity. Price cutting.

June 18 - Keen competitive market.

June 25 - Lower prices; 40 to 45 per cent capacity.

July 16 - Market comparatively quiet. 50 per cent capacity production.

Aug. 27 - Business gaining due to low prices.

Sept. 17 - Brisk demand.
65 to 70 per cent of capacity.

Nov. 12 - Strengthening in demand for wire products.

"This indicates that the year 1925 would evidently have shown a decrease in profits over the year 1924 had no fire occurred. A chart prepared by "Iron Age" is included herewith. (See Exhibit "F")".

We direct attention to the above figures which show a steady decline in price from 1919 to 1923 which is also reflected in the comparative percentages of gross profit of Igoe Brothers & Company as per the books of 1925 - 1924 - 1923:

Percentage of Gross Profit

Igoe Brothers & Cooney

1925	17.33%
1924	18.81%
1923	21.36%

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FIXED CHARGES

The difference of $103.72 per day between the assured's revised fixed charges for the manufacturing department and our fixed charges in the manufacturing department is represented by an amount of $31,035.92 wages paid for work done from the date of the fire.

Our investigation of the payroll after the fire shows that the workmen's wages were paid on the basis of actual working hours and, therefore, we do not consider them fixed charges. The workmen were not engaged steadily after the fire and were only employed on the days when needed and only paid for those days when they worked. The assured was compensated for these wage payments by the services rendered by the men to whom the wages were paid.

After careful consideration of the report submitted by the assured, we do not find that he has present-

ed anything which proves our report to be anything other than the facts which are as follows:-

1. The net profit per day in the manufacturing department, as per the books, $153.88.

2. The fixed charges per day in the manufacturing department, as per the books, $193.91.

3. Business conditions in this particular line were no better in 1925 than in 1924.

Respectfully submitted,

_____

Certified Public Accountants.

EXHIBIT D-20

	Production in Pounds	Production Tons for Month	Tons per Day
1925 April	.....	.....	.....
1925 May	.....	.....	.....
1925 June (8 days)	88,400	22	2-¾
1925 July	311,500	156	6
1925 August	258,691	129	5
1925 September	402,750	201	8
1925 October	368,285	184	7
1925 November	446,100	223	9

EXHIBIT D-21

The assured should produce 17 tons per day to meet all overhead.

The fixed charges of $194 per day divided by 17 tons gives $11.40 fixed charges per ton.
The insurance compaines should pay fixed charges of $11.40 per ton on every ton less than 17 tons that the assured could produce per day.

Month 1925	Days	Production Should be	Actual Production per day	Production Lost per Day on which the fixed chgs. were $11.40 per Ton	Fixed Charges Lost
April	16	17 tons per day	.....	17	$3,100
May	25	" " " "	.....	17	4,845
June	25	" " " "	2¾	14¼	4,058
July	25	" " " "	6	11	3,155
August	25	" " " "	5	12	3,420
September	25	" " " "	8	9	2,565
					$21,143

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