Document No. 15.

EIGHTH ANNUAL REPORT

OF THE

INSPECTOR

OF

Factories and Workshops

OF THE

STATE OF NEW JERSEY,

1890.

OFFICERS.

CHIEF INSPECTOR.

L. T. FELL, ... Orange.

DEPUTY INSPECTORS.

E. R. WHITE,	First District,	Vineland.
JOHN D'ARCY,	Second District,	Trenton.
FRANCIS SAYRE,	Third District,	Elizabeth.
J. S. WEINTHAL,	Fourth District,	Hoboken.
THOMAS COGAN,	Fifth District,	Passaic.
P. CALLAN,	Sixth District,	Newark.

FACTORY DISTRICTS.

FIRST DISTRICT.

Camden, Atlantic, Gloucester, Salem, Cumberland and Cape May counties. Ocean county south of Toms River. Burlington county south of Beverly.

SECOND DISTRICT.

Burlington county north of Beverly. Mercer, Hunterdon, Warren and Sussex counties. Morris county west of Boonton.

THIRD DISTRICT.

Monmouth, Middlesex, Somerset and Union counties.

FOURTH DISTRICT.

Hudson county.

FIFTH DISTRICT.

Passaic and Bergen counties. Morris county east of Denville.

SIXTH DISTRICT.

Essex county.

REPORT.

OFFICE OF
INSPECTOR OF FACTORIES AND WORKSHOPS,
STATE OF NEW JERSEY.
ORANGE, N. J., October 31st, 1890.

Hon. Leon Abbett, Governor State of New Jersey:

SIR—In compliance with the law, I herewith submit the annual report of the Inspector of Factories and Workshops for the year ending October 31st, 1890. At a conference held with the Deputy Factory Inspectors, November 1st, 1889, at which the work of the department for the year ending October 31st, 1889, was carefully reviewed, it was decided, after due deliberation, that it would be to the advantage of the department to have the Deputy Inspectors report by districts, holding each Inspector responsible for the district assigned to him. I have divided the State into six factory districts, thereby giving each Inspector a certain territory to cover. I find that this has been a great advantage to this department.

The reports of the Deputies are hereby annexed, with their suggestions as to what legislation is necessary to make the department more efficient in the future.

The Inspectors have not had the support that they should have had from the city and township authorities for the enforcement of the Compulsory Education law. I find that the cities of Newark, Orange and Hoboken are the only ones that have complied with the law, and have efficient truant departments.

I would recommend that the law be so amended as to make it mandatory upon the authorities of every school district to have truant officers appointed, so as this most important law can be enforced. It is true that many will say that it is useless to appoint truant

officers in every school district to enforce a compulsory attendance at school, when there are many districts that have not sufficient school-room to accommodate all the children of school age. There is not near the lack of school accommodation as there appears to be. A comparison between the census of the children between five and eighteen years of age and the school capacity is not a fair one. It would be nearer correct to make the comparison between seven and fourteen years of age, deducting from the number ascertained by such a comparison, the children attending private or parochial schools, and the number of boys between twelve and fourteen years at work, and it will be found that many districts that are classed as not having sufficient school accommodation for all the children, can accommodate all who are compelled by law to attend school; but, even if this is not so, there should be a compulsory law and means to enforce it, even if some districts have to introduce the half-day system for all primary classes, thereby doubling the accommodations immediately. Let the law be enforced, and the people will see that the school authorities provide the school accommodation. In connection with this matter I beg to suggest that the law provide for an examination of all boys and girls up to sixteen years of age who apply for work in factories, said examination to consist of the primary studies. If such a law was enforced, it would, in a great measure, do away with truancy, as we have found in our experience many boys and girls who were dismissed from factories, as being under the legal age, simply loafed for the year or more, then returned to work. This would not happen if they had to pass an examination in the primary studies, before getting a certificate permitting them to work.

The city of Newark has an organized truant department. Mr. Haynes, the truant officer, has rendered valuable services to this department in the enforcement of the Compulsory Education law, as the following figures show: Notice of truants received from truant officer by Deputy Inspector Callan, and discharged from factories and returned to school, 112; number returned to evening school, 507. I commend the truant departments of the cities of Newark and Orange to the municipalities of the State.

I am informed by counsel that the Factory act, approved May 13th, 1889, is defective in its title. I would respectfully recommend that it be so amended that the provisions of the law can be enforced. This act referred to, and all other laws relating to this department,

will be found in the Appendix. I would further recommend that the General Factory act be so amended that all elevators shall be supplied with safety catches, and that all hatchways and elevators shall have automatic gates or doors, and that the Inspectors shall have authority to test all elevators when deemed necessary by them, and condemn them for use when not in proper order.

In conclusion I wish to say, in justice to this department, that in the last printed report a large number of errors and omissions were made, thereby making it rather incomplete. I was denied an opportunity to examine the proof of the printer before the report was issued.

I also desire to call your attention to the Fourth Annual Convention of the Factory Inspectors of North America, held in New York City, August 27th–30th, 1890. The following States were represented: Maine, Massachusetts, Connecticut, New Jersey, New York, Pennsylvania, Ohio, Rhode Island and Canada. The important papers read before the convention by the New Jersey delegation were on "Model School-Houses," "Stopping Machinery Quickly," "Accidents in Factories" and "Compulsory Education." These papers appear in full in the Appendix.

The Committee on Resolutions made the following report, which was adopted:

"NEW YORK, August 30th, 1890.

"The International Association of Factory Inspectors of North America, in convention assembled, view with extreme gratification and hearty approval the progress made by the respective States here represented in the enactment of factory or industrial laws which, while imposing additional duties on us as Inspectors, have afforded us greater latitude for operation and provided for the more effectual prosecution of the beneficent provisions of such legislation. We recognize, in connection with our labors, a growing disposition among employes to conform to the spirit and intention of the factory laws, and the commendable humane effort on the part of so many to provide for the physical comfort and the mental improvement of their employes beyond what the State requires of them. We are justly proud of the work accomplished through factory legislation for the amelioration of the condition of working people, and the influences wielded thereby for promoting the best interests of society. In consideration of what has been achieved in that direction we commend to the attention of the people of the United States and Canada the necessity of adopting a system of factory inspection in every State and Province,

and to the States and Provinces here represented we suggest the wisdom of additional legislation, as follows:

"To prevent the employment of children in factories, workshops and mercantile establishments under fourteen years of age, and compelling all children of such age, and all unable to read and write intelligibly the English language under the age of sixteen years, to attend some public or private school until so qualified. To prevent the employment of any child under sixteen years of age at any hazardous occupation, or at which its health is liable to be impaired, or its morals corrupted, and the employment of any minor under eighteen years of age or of any woman later than nine P. M. or earlier than six A. M. of any day, and that no minor under eighteen years of age or woman shall be employed more than sixty hours in one week; and we recommend that all legislation for regulating the hours of labor, and the employment of women and minors, be made uniform in the several States, excepting in the Province of Quebec, where French is spoken generally, where the same degree of efficiency should be required in the French or English language, here represented. That laws be enacted in all States and Provinces requiring that at least 250 cubic feet of air space be provided for each person employed in workshops during the day-time, and 400 cubic feet during the night-time, and that adequate means for free ventilation be provided, and we deem it advisable that children in our public schools be taught the importance of the preservation of health in all conditions of life, and a knowledge of the laws of hygiene and sanitation.

"We recommend laws compelling the guarding of machinery, protection of elevators and hoistways, and the erection of fire-escapes where necessary, and that full power be granted to Inspectors in every State and Province to guard all unprotected machinery and parts of machinery which may be deemed necessary in the judgment of the Inspector. Laws, also, compelling the erection of school-houses upon scientific hygienic principles, and prohibiting the erection of any school building more than two stories in height; also providing that all tenements, public halls, hotels, factories and workshops shall be constructed as nearly fire-proof as possible with proper sanitary provisions, and that the plans and specifications thereof be submitted to State or local officers for their approval before building operations are commenced.

"We submit to the people that such enactments would be in the direction of sound public policy, and would tend to elevate and guard society in general against the evils of ignorance in our toilers, ill health in our children, unsafe work-rooms for our industrial population, and protect the lives, limbs and property of all; therefore be it

"*Resolved*, That copies of the foregoing be given to the Telegraphic Press Association for circulation, and sent to the presiding

officers of the legislative bodies and Governors of the various States and Provinces, and we respectfully urge them to aid in engrafting such laws on their statutes.

"EVAN H. DAVIS, JOHN FRANEY,
"L. T. FELL, ROBERT BARBER,
"JOS. M. DYSON, W. S. SIMMONS."

I have every reason to be satisfied with the work of the department during the past year. The laws have been enforced so far as practicable, and with the additional legislation asked for, the department will be more efficient in the future.

Respectfully submitted,

L. T. FELL,
Inspector Factories and Workshops.

APPENDIX.

FIRST DISTRICT.

To L. T. Fell, Esq., Chief Inspector of Factories and Workshops:

The result of the work done in the First District, comprising the counties of Atlantic, Cape May, Gloucester, Salem and Camden, Ocean county south of Toms River, and Burlington county south of Beverly, will show quite a notable change over that of former years. The ventilation and sanitary arrangements of a number of large mills have been much improved. The manufacturers, as a rule, have given the Deputy every assistance they could in ascertaining the correct ages of children employed. The result has been 68 discharges for being under the legal age and for non-attendance at school.

Of the 78 changes ordered, such as guarding machinery and elevators, additional water-closets and toilet accommodations, whitewashing buildings, &c., all but four have been complied with, and these will be before this report is published. Thirteen permits have been granted to orphan children to work in factories and 13 accidents have been reported, all of which have been investigated. Many of them have been caused by carelessness on the part of the persons injured. A list of accidents will be found appended to this report.

All of which is respectfully submitted,

E. R. WHITE,
Deputy Inspector, First District.

FACTORIES INSPECTED—FIRST DISTRICT.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Bridgeton	Burges, Montelious & Co	Shirts	5	55	.....	.....
"	Perfecting Funnel Works	Perfecting funnels	13	4	.....	.....
"	B. S. Ayars	Canned tomatoes	40	100	12	.....
"	Ferricute Machine Co	Machine shop	90	1	.....	.....
"	W. J. Smith	Earthenware	4	.....	.....	.....
Fairton	Gibson, Horton & Co	Glass	65	11	.....	.....
Newport	Stathen, Cosier & Co	Canned goods	50	100	12	5
Br dgeton	Cumberland Packing Co	Canned tomatoes	50	125	20	.....
"	Probasco & Lanning	" "	50	100	3	.....
"	John W. Stout	" "	30	100	10	.....
"	West Jersey Packing Co	" "	60	140	25	.....
"	J. F. Brady	" "	45	130	6	6
"	Bridgeton Mills	Enameled cloth	29	6	.....	.....
"	Parker Bros	Glass	27	.....	.....	.....
"	Cox & Son	Machine works	80	.....	.....	.....
"	Canners' Supply Co	Can factory machinery	30	.....	.....	.....
"	Trenchard, Crickler & Co	Bottle moulds	12	.....	.....	.....
"	Cohansey Glass Mfg. Co	Glass	450	.....	60	.....
"	Getsinger & Son	"	150	1	8	.....
"	More, Jonas & More	"	155	.....	15	12
"	Cumberland Glass Co	"	248	2	30	.....
"	J. L. Rice & Co	Shoes	37	23	2	.....
"	East Lake Woolen Mills	Woolen cloth	75	50	7	.....
"	Kirbey & McBride	Glass	80	.....	16	.....
"	Cumberland Nail and Iron Works	Nails and iron pipe	325	.....	4	.....
"	Sol. Miller & Co.	Shirts	10	45	.....	.....
"	East Lake Glass Works	Glass	80	.....	16	.....
Camden	Acroyd & Scull	Worsted yarns	45	60	13	.....
"	New Jersey Knitting Mills	Knitted underskirts	2	12	3	.....
"	Pacific Steam Laundry	Laundry	7	18	1	.....
"	Chas. F. Hollingshead	Machine works	32	.....	.....	.....
"	R. H. & B. C. Reeves	Oilcloths	100	.....	.....	.....
"	W. Wharton Fisher	Dye stuffs	35	.....	.....	.....
"	New Jersey Chemical Co	Fertilizers	35	.....	.....	.....
"	Camden Chemical Works	Chemicals	60	.....	.....	.....
"	T. S Wheatley	Shoes	18	12	.....	.....
"	Camden Iron Works	Iron pipe and hydraulic machinery	650	.....	.....	.....
"	Lobe & Schoenfield	Embroidered skirts	4	31	.....	.....
"	George Simmer & Boyer	Woolen yarns	11	22	.....	.....
"	Over Brook Mills	Woolen cloth	125	75	10	2
"	Consolidated Electric Storage Co	Storage batteries	23	.....	.....	.....
"	Browning Brothers	Dye stuffs and chemicals	70	.....	1	.....
"	Francis & Taylor	Shoe lasts	12	.....	.....	.....
"	R. H. Comey	Straw dye works	12	.....	.....	.....
"	Isaac Ferris, Jr	Shoes	39	19	2	.....
"	Spraunce & Birkhead	Woolen yarns	14	6	1	.....
"	W S. Scull	Coffee roasting	6	6	.....	.....
"	Cottrell & Wolfenden	Hosiery	40	80	8	.....
"	Monroe & Martin	Shoes	6	4	.....	.....
"	C. P. Coles	Sash and blinds	50	.....	.....	.....
"	American Dredging Co	Steam dredges	90	.....	.....	.....
"	L. L. Craign	Soap	11	4	.....	.....
"	Wm. Conlin	Shoes	6	3	.....	.....
"	J. B. Vansciver & Co	Furniture	42	3	1	.....
"	Far & Bailey	Oilcloth	130	.....	.....	.....
"	Highland Worsted Mills Co	Worsted yarns	50	200	50	.....
"	Camden Woolen Mills	Woolen cloths	150	75	2	.....
"	Linden Worsted Mills	Worsted yarns	170	150	80	.....
"	West Jersey Paper Mills	Paper	80	2	.....	.....
"	Legal Paper Mfg. Co	"	25	.....	.....	.....

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FACTORIES INSPECTED—FIRST DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Camden	Keystone Chemical Co	Chemicals and phosphates	45	.....	.....	.....
"	R. Esterbrook & Co	Steel pens	60	200	8	.....
"	Clay & Tarbenson	Electric machinery	8	.....	.....	.....
"	United States Chemical Co	Acid and alum	40	.....	.....	.....
"	Joseph Campbell & Co	Canned goods and preserves	45	80	10	.....
"	Loeb & Wolf	Matches	40	30	.....	.....
"	Brighten Mills	Elastic webbing	53	17	3	.....
"	D. B. Murphy	Files	7	1	.....	.....
"	E. G. Locke	Coated paper	18	.....	.....	.....
"	H. B. Anthony Shoe Co	Shoes	65	60	6	2
"	Scudder & Son	Sash and blinds	60	.....	.....	.....
"	American Nickel Works	Nickel	60	.....	.....	.....
"	Cook Mining Machinery Co	Mining machinery	10	.....	.....	.....
"	I. M. Hoey	Shoes	9	3	2	.....
"	Kiffery Morocco Co	Morocco	100	2	.....	.....
"	F. M. McAdams	Shoes	30	20	2	.....
"	Dorrel & Seymoure	"	20	10	1	.....
"	Richter Electric Light Co	Dynamos	11	1	.....	.....
"	Domestic Conserve Co	Preserves	10	1	.....	.....
"	A. Priestley & Co	Woolen cloth	70	50	3	.....
"	A. M. Furbush & Son	Woolen machinery	250	.....	.....	.....
"	Samuel P. Wright & Co	Printers' ink	8	1	.....	.....
"	Anderson Preserving Co	Preserved fruit	50	200	25	.....
"	Thomas Kelley	Shoes	60	15	3	.....
"	C. C. Hitchner & Co	"	18	12	.....	.....
"	Camden Glass Mfg. Co	Glass	125	.....	9	.....
Williamstown	Monroe Glass Works	"	30	.....	2	.....
"	Bodine, Thomas & Co	"	200	.....	39	.....
Egg Harbor	Julius Heim & Co	Parchment paper	8	.....	.....	.....
" "	John J. Gardner	Canned goods	7	30	4	.....
" "	G. Fordtran	Carpets	6	2	.....	.....
" "	Chas. Kraus & Son	Canned goods	5	20	3	.....
" "	John Ramish	Cigars	10	4	.....	.....
" "	Charles Winterberg	Clothing	3	6	.....	.....
" "	Jacob Obert	"	3	2	.....	.....
" "	Jacob Ruetch	"	2	6	.....	.....
" "	Andrew Beok	"	2	4	.....	.....
" "	Segal & Son	"	2	3	.....	.....
" "	Henry Byer	"	2	6	.....	.....
" "	George Shoemaker	"	2	6	.....	.....
" "	I. Berenstine	"	3	5	.....	.....
Gloucester	Seimens Lungran Co	Gas Lamps	20	.....	.....	.....
"	United Electric Improvement Co.	Storage batteries	18	.....	.....	.....
"	The Electric Storage Co	" "	24	.....	.....	.....
"	Wells Novelty Wrench	Novelty wrench	8	.....	.....	.....
"	Incandescent Gas Light Co	Incandescent burners	20	49	.....	.....
"	Washington Mfg. Co	Cotton goods	351	387	61	1
"	Gloucester Mfg. Co	Calico print works	240	60	1	.....
"	Gloucester Gingham Mills	Ginghams	300	200	60	1
Glassboro	Warrick Glass Works	Window glass	110	.....	.....	.....
"	Whitney Glass Works	Glass	300	.....	96	3
Hammonton	Wm. Burnshouse	Sash, doors and blinds	27	.....	.....	.....
"	John T. French	Paints	6	.....	.....	.....
"	C. F. Osgoods	Shoes	60	20	.....	.....
"	Wiffen Bros. & Co	"	75	25	2	.....
Elmer	Luke M. Smith	Canned goods	25	100	15	.....
"	Charles Cotting	Spindles	12	.....	2	.....
"	Thomas W. Brooks	Shoes	35	20	2	.....
"	Butcher & Waddington	Glass	40	.....	.....	.....
Mount Holly	Kiner & Co	Shoes	24	17	1	.....
" "	F. S. Davis & Co	"	19	11	1	.....
" "	R. W. Bowker	"	25	25	3	.....

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FACTORIES INSPECTED—FIRST DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Mount Holly	Mount Holly Mills Co	Carpets	65	60	1	.....
" "	Mount Holly Box Factory	Paste-board boxes	3	16	.....	.....
" "	W. D. Troth	Shoes	10	12	2	.....
" "	Mount Holly Shoe Co	"	41	39	2	.....
" "	J. L. Anderson	Canned goods	50	80	6	4
" "	E. B. Jones & Co	" "	100	100	2	.....
Millville	R. D. Wood & Co	Iron pipe	160	.....	.....	.....
"	Manantico Bleach and Dye Works	Bleach and dye works	175	25	10	.....
"	J. C. Wheaton & Co	Glass	98	9	15	.....
"	Whital-Tatum Co	"	1650	48	192	3
"	Millville Mfg. Co	Cotton goods	150	200	50	1
"	G. S. Bennett & Co	Window glass	40	.....	.....	.....
"	F. M. Pierce & Co	Glass	110	.....	25	.....
"	Moore Bros	"	156	.....	23	.....
Newfield	R. J. Morrell	Rattan baby coaches	14	6	2	.....
Pleasantville	Composing Machine Co	Composing machines	15	.....	.....	.....
Mays Landing	Mays Landing Cotton Works	Cotton goods	150	125	30	.....
Atco	Atco Glass Co	Glass	50	.....	.....	.....
Medford	Starr Glass Co	"	40	.....	8	.....
Malaga	Fred Fries	Rugs	23	6	2	.....
Riverside	Tauble Bros	Hosiery	50	60	19	.....
"	Christian Dick	"	15	15	3	.....
"	Leech Bros	Shoes	20	15	2	.....
"	Frank Lambert	"	65	35	.....	.....
"	J. J. Hennig	Paper boxes	1	9	.....	.....
"	F. Pfeifer & Son	Hosiery	10	5	1	.....
"	Pfaul Bros	Shoes	18	12	.....	.....
Beverly	L Leach	"	7	5	.....	.....
"	T. Birkhead	Hosiery	35	40	4	.....
"	Davis & Bros	Shoes	24	11	.....	.....
"	George Birkhead	Shirts and skirts	4	32	.....	.....
Salem	Harry Lambert	Canned tomatoes	75	100	5	4
"	Jones & Ayars	Canned goods	70	130	16	6
"	Chew & Billerback	" "	50	100	10	6
"	William Morris	Oil cloth	75	.....	.....	.....
"	Hiles & Hilliard	Canned goods	50	120	12	9
"	Starr & Bros	" "	70	130	3	.....
"	John Gayner	Glass	102	4	3	.....
"	Craven Bros	"	350	.....	25	.....
"	Hires & Co	"	100	.....	.....	.....
Winslow	Winslow Glass Works	"	200	20	5	.....
Vineland	Holmes, Prince & Co	Shoes	82	20	1	.....
"	George A. Cheever	Paper boxes	2	10	.....	.....
"	Kimble, Prince & Co	Sash, doors and blinds	12	.....	.....	.....
"	Rob't Pond	Packing boxes	4	.....	.....	.....
"	E O. Miles & Co	Pearl buttons	30	.....	2	.....
"	Fire-Proof Brick Co	Fire-proof brick	45	.....	.....	.....
"	Daggett & Co	Patent baking pans	12	.....	.....	.....
Cedarville	W. L. Stevens & Co	Canned goods	48	87	5	3
"	John E. Diamet	" "	45	75	14	12
Vineland	Armstrong Sons	Iron foundry	14	.....	.....	.....
"	Gage Tool Co	The gage plane	9	1	.....	.....
"	Tillier & Bros	Glass	100	.....	.....	.....
"	Leach Bros	Saw mill	12	.....	.....	.....
"	Thomas Hirst	Rugs	98	28	4	.....
"	Harry Chandler	Shoes	35	20	.....	.....
"	Adam Weber	Brass foundry	6	.....	.....	.....
"	Chas Keighley	Shoes	91	29	1	.....
"	Wm. Procter	"	20	10	.....	.....
"	Joseph Mason	"	18	12	2	.....
"	John Northrop	"	18	12	.....	.....
Woodbury	Standard Window Glass Co	Window glass	64	.....	.....	.....

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REPORT OF THE INSPECTOR OF

FACTORIES INSPECTED—FIRST DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Woodbury	Woodbury Novelty Works	Novelties	14	.....	.....	.....
"	Hope Mfg. Co	Iron, glass and paper show cards.	170	30	.....	.....
"	John Wyeth & Bro.	Extract of malt	10	13	.....	.....
"	G. G. Green	Patent medicines	50	25	.....	.....
"	Woodbury Glass Works	Glass hollow ware	198	6	45	2
"	Gloucester County Glass Co.	" " "	30	.....	8	1
Greenwich	Job Bacon	Canned goods	140	160	.....	.....
"	B. F. Maul & Co.	" "	50	70	8	.....

CHANGES ORDERED AND CONDITION OF FACTORIES—FIRST DISTRICT.

Location and Name of Company.		Changes Ordered.	Disposition of previous orders.	Health and safety.
Bridgeton—				
J. F. Braidy	1	Discharge six girls; cover gearing on capping machine	Complied with.	Good.
West Jersey Packing Co	1	Bars on all doors leading to elevator shaft	Complied with.	Good.
Bridgeton Mills	1	Box belts and gearing of elevator hoist	Complied with.	Very Good.
Cox & Son	2	Bars in front of hoistway, and rail in front of window between engine and stairway	Complied with.	Good.
Trenchard & Crickler	2	Gates for elevator and box driving belts	Complied with.	Good.
More, Jonas & More		Discharge one boy	Complied with.	Good.
J. L. Rice & Co	1	Arrange doors to swing outward	Complied with.	Good.
Beverly—				
L. Leach	3	Box all shafts under sewing machine bench; box countershaft and driving belts; cover opening in floor near sewing machine	Complied with.	Fair.
T. Birkhead	3	Cover set-screws on sewing machine shaft; box belts on end of knitting shaft; clean and whitewash privies	Complied with.	Good.
Riverside—				
F. Peifer & Son	2	Extra water-closet, six buckets for water, in case of fire		Fair.
Pfaul Bros	1	Box coupling of shaft under sewing bench	Complied with.	Good.
Egg Harbor—				
Chas Kraus & Son	2	Box shaft and drive belt	Complied with.	Good.
Camden—				
F. McAdams	1	Box end of engine shaft	Complied with.	Good.
Adolf Segal	1	Arrange doors to swing outward		Fair.
N. J. Knitting Mills	1	Box shaft under knitting bench	Complied with.	Good.
Charles T. Hollingshead	3	Box three belts	Complied with.	Good.
Camden Iron Works	2	Fence balance and gear wheel on large power punch; box gearing or horizontal puuch	Complied with.	Good.
Overbrook Mills		Discharge one boy and girl	Complied with.	Good.
Browning Brothers	1	Box engine shaft	Complied with.	Very good.
Priestley & Co	1	Better ventilation	Complied with.	Very good.
Levy Backerack	1	Extra water-closet	Complied with.	Fair.
J. B. Vansciver & Co	1	Automatic doors for elevators	Complied with.	Good.
West Jersey Paper Co	1	Rail in front of large pulley		Good.
Legal Paper Mfg. Co	1	Fence balance wheel on cutting machine	Complied with.	Good.
Spraunce & Birkhead	2	Cover gearing on carding machine, and guard-rail on elevator	Complied with.	Good.
Keystone Chemical Co	1	Fence balance wheel on crusher	Complied with.	Fair.
United States Chemical Co	2	Box belts on grinding machine; guard-rail around engines	Complied with.	Fair.
Loet & Wolf	1	Fence in elevator	Complied with.	Good.
H. B. Anthony Shoe Co	1	Discharge one boy	Complied with.	Good.
R. H. & B C. Reeves	1	Box driving belt	Complied with.	Very good.
Consolidated Electric Storage Co	2	Put railing on stairway and bars around elevator shaft	Complied with.	Fair.
Francis & Taylor	2	Box gearing end of shaping machine; guard circular saw	Complied with.	Fair.
R. H. Corney	1	Fence balance wheel on engine	Complied with.	Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—FIRST DISTRICT—Continued.

LOCATION AND NAME OF COMPANY.		CHANGES ORDERED.	Disposition of previous orders.	Health and safety.
Camden—				
Isaac Ferris, Jr.	2	Fence balance wheel on engine; arrange for better escape in case of fire	Complied with.	Fair.
Northrop Mfg. Co.	1	Extra water-closet		Good.
Gloucester—				
Seemens Lungru Co.	2	Box belts on two drill presses, and gate between engine and draw-bench	Complied with.	Very good.
United Electric Improvement Co.	12	Box counter-shaft of saw-bench, and box dynamo of counter-shaft.	Complied with.	Very good.
Washington Mfg. Co.		Discharge one girl	~~Complied with.~~	Very good.
Gloucester Mfg. Co	1	Box main shaft in cellar	Complied with.	Excellent.
Gloucester Gingham Mills.		Discharge one boy	Complied with.	Very good.
Glassboro—				
Whitney Glass Works		Discharge three boys	~~Complied with.~~	Good.
Hammonton—				
Wm. Burnshouse	1	Box counter-shaft of circular saw	Complied with.	Good.
J. T. French	1	Fence balance wheel of engine	Complied with.	Good.
Wiffen Bros & Co	1	Clean and whitewash privies	Complied with.	Fair
C. F. Osgood	1	Clean and whitewash privies	Complied with.	Good.
Elmer—				
Luke M. Smith	1	Whitewash outbuildings	Complied with.	Good.
Chas. M. Cotting	1	Bars on doors of second floor	Complied with.	Good.
Thomas W. Brooks	1	Clean and whitewash privies	Complied with.	Good.
Mount Holly—				
Kiner & Co.	1	Box large pulley on engine shaft	Complied with.	Good.
F. S. Davis & Co.	2	Box end of shaft under sewing bench; bars over elevator	Complied with.	Fair.
R. W. Bowker	1	Box end of shaft under sewing bench	Complied with.	Good.
Mount Holly Mills Co.	3	Box three driving belts; box weight on elevator gearing; put bars in front of doors on landing	Complied with.	Good.
Mount Holly Shoe Co.	1	Fence balance wheel of engine	Complied with.	Good.
J. S. Anderson & Co.		Discharge four girls	Complied with.	Good.
Millville—				
R. Wood & Co.	1	Cover gear wheels on core-making machine	Complied with.	Fair.
Manantico Bleach and Dye Works	1	Box end of shaft on small engine in dye-house	Complied with.	Good.
T. C. Wheaton & Co	2	Whitewash factory; clean and whitewash privies	Complied with.	Good.
Whital-Tatum Co.		Discharge three boys	~~Complied with.~~	Very good.
Millville Mfg. Co		Discharge one girl	~~Complied with.~~	Very good.
G. S. Bennett	1	Fence elevator	Complied with.	Good.
Winslow—				
Winslow Glass Works		Discharge five boys	~~Complied with.~~	Good.
Malaga—				
Fred Fries	1	Box gear-wheel on cutting machine	Complied with.	Good.
Vineland—				
John Northrup	2	Rail on outside landing; box driving belts	Complied with.	Very good.
Holmes, Prince & Co.	1	Box coupling on shaft of sewing bench	Complied with.	Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—FIRST DISTRICT—Continued.

Location and Name of Company.	Changes Ordered.	Disposition of previous orders.	Health and safety.
Vineland—			
Philadelphia Fire Brick Co. 2	Guard belts and large pulleys; put rails on stairway	Complied with.	Very good.
Newport—			
Stathen, Cosier & Co.	Discharge five girls	Complied with.	Very good.
Cedarville—			
John E. Diament 2	Discharge twelve girls; box large pulley and belt on engine	Complied with.	Very good.
W. L. Stevens	Discharge three girls	Complied with.	Very good.
Woodbury—			
Hope Mfg. Co. 2	Box counter-shaft and box saw belts.	Complied with.	Excellent.
Woodbury Glass Works	Discharge two boys	Complied with.	Good.
Gloucester County Glass Co.	Discharge one boy	Complied with.	Fair.
Williamstown—			
Bodine, Thomas & Co. 3	Guard elevator; whitewash buildings; clean and whitewash privies	Complied with.	Good.
Salem—			
Harry Lambert	Discharge four girls	Complied with	Good.
Jones & Ayars 2	Box belt on conveyor; put gate between engine and tank; discharge four girls and two boys.	Complied with.	Good.
Chew & Billerback 1	Box two driving belts; discharge four boys and two girls	Complied with.	Good.
William Morris 2	Guard elevator; put rail on stairway in paint-room	Complied with.	Good.
Hiles & Hilliard	Discharge five girls and four boys	Complied with.	Good.
John Gayner 2	Guard driving belt; clean and whitewash privies	Complied with.	Good.

REPORT OF ACCIDENTS—FIRST DISTRICT.

LOCATION.	NAME.	NAME OF COMPANY.	NATURE AND RESULT OF ACCIDENT.
Vineland.....	Arthur Shinn.....	Dagget & Co.....	Thumb and index finger mashed on drying machine; were amputated.
Mays Landing..	Lewis Peachy.....	Mays Landing Cotton Mills	Hand crushed in spinning machine.
Vineland.....	Joseph Borden....	Tillier Bros.' Glass Works..	Cut by piece of hot glass.
Gloucester.....	John Osborn.....	Walsbach Incandescent Co.	Piece of timber fell on him and fractured his skull.
"	John Snap.....	Gloucester Iron Co	Burned with hot iron, and died of lockjaw.
Elmer	Willie Robinson..	Collings Spindle Works.....	Left arm caught in belt and broken.
Camden	Jno. Killian	Keystone Chemical Co	Arm caught in gearing of burr mill; mashed in such a manner that amputation was necessary.
"	James Smith.....	Vansciver & Co.....	Fell down elevator shaft; broke leg and two ribs.
"	E. Shround.....	Camden Iron Works.....	Fell overboard while rolling pipe on wharf, and was drowned.
"	R. Mathues.....	" " "	Feet burned with hot iron.
"	Joseph Huble.....	" " "	Finger crushed in gear wheels; was amputated.
"	Frank Weis.....	" " "	Rolling pipe on wharf, both legs got caught and were broken.
Bridgeton.....	David Ayers.....	Cumberland Nail and Iron Works.....	Pipe caught clothing while in cutting machine; was injured in the groin.

SECOND DISTRICT.

L. T. Fell, Inspector:

SIR—I herewith submit my annual report as Deputy Inspector of the Second District for the year ending October 31st, 1890.

The Second District consists of Burlington county north of Beverly, Mercer county, Hunterdon county, Warren county, Sussex county, and Morris county west of Boonton. The work in this district has been of a routine character, and very little opposition has been encountered in the enforcement of the factory laws. Almost every order given has been complied with, and manufacturers generally are willing to act in accordance with the law, and the results have been most gratifying. The same cannot be said of the Compulsory Education law, which is among the most important which we are called upon to enforce. There seems to be a feeling of indifference existing in some of the municipalities about the enforcement of this law, and little or no assistance is given the department from this source. The Board of Police Commissioners of the city of Trenton have been communicated with, calling their attention to the law and asking their co-operation in the enforcement of its provisions, but no action has been taken by them on the subject.

The only matter which I desire to specially mention is the numerous violations of the seventh section of the General Factory act, which prohibits the employment of children under sixteen years of age more than ten hours per day. While the violations were numerous, yet in every instance, when the attention of the employers was called to it, they immediately ceased to violate the law, and there has been no cause for further complaint, although in one instance twenty children under sixteen years were being employed.

In addition to the factories where ten or more persons are employed, which are enumerated in the Appendix, numerous small factories in which less than ten persons are employed have also been inspected, the number of inspections of the several factories varying from one

to eight, the factories employing the largest number of children receiving the most attention.

There have been eleven permits granted to orphan children under the legal age to work in factories, and one permit granted last year revoked.

Yours respectfully,

JOHN D'ARCY,
Deputy Inspector, Second District

FACTORIES INSPECTED—SECOND DISTRICT.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Trenton	The Ceramic Art Co	Beleek china, &c	18	8	1	.....
"	Hamilton Rubber Co	Rubber hose and packing	100	.....	.....	.....
"	Pope & Lee	China decorators	15	7	1	.....
"	Swann & Whitehead	Lamps	125	100	40	2
"	Dean Decorating Co	China decorators	15	25	4	.....
"	Eagle Pottery Co	Pottery	100	60	12	.....
"	Trenton Spring Mattress Co	Spring mattresses	.....	.....	.....	.....
"	Phœnix Iron Co	Structural iron	200	.....	.....	.....
"	Trenton Vise and Tool Co	Tools	80	.....	.....	.....
"	Davis Soap and Chemical Co	Soap and candles	10	.....	.....	.....
"	Capitol Cracker Co	Crackers	12	....	3	.....
"	Bloom & Godley	Mattresses and bedding	25	10	3	.....
"	Cole & Stoll	" "	8	2	.....	.....
"	Trenton Watch Co	Watches	25	30	.....	.....
"	Zimri West	Crackers	12	2	.....	4
"	Equitable Pottery Co	Sanitary pottery	115	11	3	.....
"	John Watson	Machinery	38	.....	.....	.....
"	Jos. Crossley	"	25	.....	.....	.....
"	Peter Wilkes	"	32	.....	.....	.....
"	Wm. Thropp	Steam engines	20	.....	.....	.....
"	Murray, Whitehead & Murray	Rubber shoddy	25	.....	2	.....
"	Whitehead Bros	Rubber hose and packing	50	.....	1	.....
"	Thos. Maddock & Sons	Sanitary ware	275	75	13	1
"	John Moses	Pottery	225	45	20	4
"	Greenwood Pottery	Vitrified china	200	40	10	.....
"	Trent Tile Co	Glazed tile	110	40	9	1
"	Providential Tile Co	" "	40	18	2	1
"	Fell & Baker	Bricks	60	.....	10	1
"	Fell & Heil	"	125	.....	14	.....
"	Fell & Heath	"	90	.....	10	1
"	H. C Kafer & Co	"	90	...	8	2
"	H. H. Garwood	Shoes	20	16	2	.....
"	Donohue & Nolan	Bricks	100	.....	12	3
"	B. F. Walton	"	120	.....	10	1
"	Applegate & Co	"	100	...	8	1
"	Operative Pottery Co	Pottery	30	11	4	.....
"	Trenton Rubber Co	Rubber hose and packing	175	....	.....	.....
"	E. Darlington Decorating Co	China decorators	3	9	1	.....
"	International Pottery Co	Pottery	165	25	7	2
"	Fell & Roberts	Bricks	100	.....	11	4
"	W. C. Hendrickson & Co	China decorators	15	20	3	.....
"	H. Leigh	Paper boxes	3	20	3	.....
"	John E. Thropp	Machinery	50	.....	.....	.....
"	Chas. W. Donaghue	Pottery stilts	3	7	3	1
"	Enterprise Pottery Co	Sanitary pottery	120	15	2	.....
"	Israel Lacy	Pottery	165	35	12	1
"	East Trenton Pottery Co	"	110	40	9	.....
"	John O'Dowd	" stilts	12	6	3	2
"	Trenton Oil Cloth Co	Oil cloth	35	.....	5	1
"	Fisher & Norris	Anvils	50	.....	.....	.....
"	Trenton China Co	Vitrified china	90	30	8	1
"	O. O. Bowman & Co	Terra cotta and fire-brick	60	.....	.....	.....
"	N. J. Steel and Iron Co	Structural iron	900	.....	.....	.....
"	Alpaugh & Magowan	Sanitary pottery	160	60	3	.....
"	W. Kimble	Vitrified china	10	15	2	.....
"	Star Rubber Co	Rubber hose and packing	175	...	4	.....
"	Mercer Pottery Co	Pottery	160	90	25	3
"	Home Rubber Co	Rubber hose, &c	85	15	1	.....
"	Trenton Iron Co	Wire	850	.....	2	.....
"	Duncan McKenzie	Machinery and boilers	75	.....	.....	.....
"	N. J. Agricultural Co	Agricultural implements	20	.....	.....	.....

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FACTORIES INSPECTED—SECOND DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Trenton	American Saw Co.	Saws	75	.....	.....	.....
"	Dibble Mfg. Co	Hemacite goods	35	.....	.....	.....
"	Ott & Brewer	Pottery	210	90	20	3
"	Dale & Davis	"	115	40	10	.....
"	Oliphant & Co.	Sanitary pottery	190	15	.....	.....
"	J. A. Roebling's Sons	Wire	1400	100	40	1
"	N. J. Wire Cloth Co	Wire cloth	70	80	.....	.....
"	S. K. Wilson (Factory St)	Woolens	275	450	70	6
"	S. K. Wilson (Fair St.)	Woolens and worsted yarns				
"	J. S. Thorn	Crackers	21	.....	7	.....
"	A. Golding & Sons Co.	Ground flint and spar	35	.....	.....	.....
"	B. W. Titus' Sons	Flannels	90	60	13	1
"	N. J. Match Co.	Matches	15	75	20	3
"	Crescent Pottery Co.	Sanitary pottery ware	250	50	10	1
"	Adam Exton & Co.	Crackers	50	.....	25	3
"	N. J. School and Church Furniture Co.	School and church furniture.	45	.....	.....	.....
"	Fell & Throp Pottery Co.	Pottery	130	15	10	2
"	W. H. Tatler Decorating Co.	China decorators	12	17	5	.....
"	Trenton Woolen Co.	Woolens	50	60	8	1
"	Jos. Mayer Pottery Co.	Majolica ware	65	30	7	.....
"	Brook, Oliphant & Co.	Rubber hose and packing	80	.....	1	.....
"	Geo. W. Davis	Locks and hardware	20	.....	3	.....
"	Skillman Hardware Co.	" "	.....	.....	.....	.....
"	G. H. Stevenson & Son	Sash and blinds	25	.....	.....	.....
"	Trenton Cracker Co.	Crackers	20	.....	4	.....
"	Willetts Mfg. Co.	Sanitary pottery	200	50	10	1
"	Trenton Rubber Valve and Spring Co.	Rubber goods	12	.....	1	.....
Lambertville	Lambertville Spoke Mfg. Co.	Spokes, hubs and wheels	90	.....	.....	.....
"	Ben Frazer	Shoes	13	9	.....	.....
"	Chadwick Copying Book Co.	Copying books	6	9	1	.....
"	O'Brien Bros. & Co.	Paper	25	.....	.....	.....
"	Wm. Mann & Co.	"	13	9	.....	.....
"	Lambertville Rubber Co.	Rubber goods	100	40	2	.....
"	J. C. Weeden & Co.	Paper	15	5	.....	.....
Flemington	Fulper Bros.	Stone ware	15	.....	2	.....
"	—— Williamson	Baskets	.....	.....	.....	.....
Bordentown	Jacob Miller's Sons Co.	Shirts	5	195	1	.....
"	W. R. Flynn & Co.	Collars and cuffs	5	25	2	.....
Hamilton Square	Mercer Rubber Co.	Rubber goods	50	.....	3	.....
Port Oram	Ross & Baker	Silk	.....	.....	.....	.....
Burlington	Rogers & Bro.	Shoes	18	12	.....	.....
"	R. T. Wood & Co.	"	75	75	4	.....
"	G. W. Lewis & Son	"	50	50	4	.....
"	Isaac S. Kimble	"	11	11	1	.....
"	W. B. Bunting Est.	"	74	38	7	1
"	J. L. Wilson & Co.	"	8	4	.....	.....
"	G. Y. Van Sciver	"	31	14	1	1
"	H. Lippincott	"	Refused		.....	.....
"	C. B. Spencer	"	33	17	1	.....
"	J. Lippencott	"	8	8	2	.....
"	G. A. Latta	"	22	13	1	.....
"	Wm. Adams	"	30	20	2	.....
"	J. F. Budd	"	100	75	3	.....
"	G. R. Apple	Drain pipe	12	12	.....	.....
"	Burlington Iron Co.	Iron castings	35	.....	.....	.....
"	John Stokley	Shoes	25	15	1	.....
Groveville	Morris Bros.	Cotton duck	70	70	26	6
Yardville	James Vogst	" batting	8	6	1	.....
Phillipsburg	Standard Silk Co.	Silk	150	225	30	.....
"	Warren Foundry and Machine Co.	Cast iron pipe	400	.....	.....	.....

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FACTORIES INSPECTED—SECOND DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Phillipsburg	Phillipsburg Stove Co.	Stoves	40	.....	.....	.....
"	American Sheet Iron Co.	Sheet iron	75	.....	.....	.....
"	T. P. Howe	Bar iron	90	.....	.....	.....
Washington	Cornish & Co	Organs	70	5	.....	.....
"	C. P. Bowlby	"	25	.....	.....	.....
"	H. W. Alleger	"	35	.....	.....	.....
"	The Beethoven Organ and Piano Co.	"	125	5	1	.....
Rockaway	C. H. Wilcox	Cardigan jackets	20	45	10	.....
Newton	Sussex Shoe Co	Shoes	70	30	3	.....
"	H. W. Merriman Shoe Co.	"	220	125	12	.....
Dover	Geo. Singleton	Silk	62	95	39	3

CHANGES ORDERED AND CONDITION OF FACTORIES—SECOND DISTRICT.

LOCATION AND NAME OF COMPANY.	CHANGES ORDERED.	Disposition of previous orders.	Health and safety.
Trenton—			
Trenton Woolen Co.		Complied with	Fair.
Jos. Mayer Pottery Co.	Guard belt in slip-house	Complied with	Fair.
Brook, Oliphant & Co.	Guard mill gearing and elevator	Complied with	Good.
Skillman Hardware Mfg. Co.	Ventilate plating-room; guard belt in polishing-room	Moved out of building	
Willetts Mfg. Co.			Fair.
Trenton Rubber Valve and Spring Co.	Guard gearing of grinders	Complied with	Good.
Lambertville—			
Lambertville Spoke Mfg. Co.		Complied with	Good.
O'Brien Bros.	Guard belt of beater	Complied with	Good.
Lambertville Rubber Co.		Complied with	Good.
Burlington—			
Rogers & Bro.	Repair stairway	Complied with	Fair.
G. W. Lewis & Son.	Put fire-escape in condition		Good.
W. B. Bunting Est.	Put up fire-escape		Good.
J. L. Wilson & Co.	Guard coupling on shaft	Complied with	Good.
H. Lippencott	Repair stairway		Bad.
Trenton—			
East Trenton Pottery Co.			Fair.
Trenton Oil Cloth Co.	Guard belt in stock-room; guard gearing of calenders	Complied with	Fair.
Trenton China Co.			Good.
Alpaugh & Magowan			Good.
Star Rubber Co.	Guard gearing of grinders		Good.
Mercer Pottery Co.		Complied with	Fair.
Home Rubber Co.		Complied with	Fair.
Ott & Brewer		Complied with	Fair.
Dale & Davis			Good.
Oliphant & Co.			Good.
J. A. Roebling's Sons	Guard fly-wheel of engine	Complied with	Fair.
N. J. Wire Cloth Co.	Guard elevator opening	Complied with	Good.
S. K. Wilson (Factory St.)	Guard belt in machine shop; swing all doors outward	Partially complied with	Fair.
B. W. Titus' Sons		Complied with	Fair.
J. S. Thorn.	Guard gearing of rollers	Complied with	Good.
N. J. Match Co.		Complied with	Good.
Crescent Pottery Co.			Good.
N. J. School and Church Furniture Co.	Guard elevator opening	Complied with	Good.
Fell & Throp Pottery Co.		Complied with	Fair.
Ceramic Art Co.			Good.
Hamilton Rubber Co.		Complied with	Fair.
Pope & Lee			Good.
Swann & Whitehead			Fair.
Dean Decorating Co.		Complied with	Fair.
Eagle Pottery Co.		Complied with	Good.
Bloom & Godley			Good.
Trenton Watch Co.		Complied with	Good.
Equitable Pottery Co.			Good.
Murray, Whitehead & Murray	Guard gearing of grinder	Complied with	Good.
Whitehead Bros.			Good.
Thos. Maddock & Sons	Open stairway to top floor		Good.
John Moses		Complied with	Good.
Greenwood Pottery			Fair.
Trent Tile Co.	Guard elevator opening	Complied with	Good.
Providential Tile Co.			Good.
Operative Pottery Co.			Fair.
Trenton Rubber Co.			Good.
International Pottery Co.			Fair.
W. C. Hendrickson & Co.	Guard elevator opening	Complied with	Fair.
Enterprise Pottery Co.	Guard around stairway	Complied with	Good.
Israel Lacy			Fair.

REPORT OF ACCIDENTS—SECOND DISTRICT.

LOCATION.	NAME.	NAME OF COMPANY.	NATURE AND RESULT OF ACCIDENT.
Trenton	H. Eisenbach.....	Trenton Iron Co.....	Fell off an elevator; killed.
"	—— Cheadle.....	J. A. Roebling's Sons.....	Burned with an iron rod from the rolls.
"	Wm. Eisenbach.....	S. K. Wilson.....	Caught in a pulley while putting on a belt; killed.
"	John Green.....	Trenton Woolen Co.....	Fell into a tub of hot dye while skylarking; died.
"	Geo. Pauch.....	Thos. Maddock & Sons.....	Opened the door of an elevator shaft and walked into it; severely bruised.
Port Oram.....	Jas. Mitchell.... / Frank Duffey...	Hurd Mines.....	Killed by fall of ground in drift.
Hibernia	John Dowd.....	Andover Mines.....	Killed by fall of ground from hanging wall.
"	Mich'l Dempko / Jas. Kheily.....	" "	Killed while riding out of mines on a car; this is prohibited.

COMPULSORY EDUCATION.

Inspector D'Arcy, of New Jersey, read before the Convention the following paper on "Compulsory Education:"

MR. PRESIDENT, LADIES AND GENTLEMEN OF THE CONVENTION —The statement that education is the chief safeguard of our liberties has become a platitude, from oft repetition. Every intelligent mind recognizes the fact that the beneficence, wisdom and purity of our law-making bodies fluctuates with the intellectual status of the people; that the prevalence of education is a bulwark against which the seas of corruption may beat in vain; and that where ignorance holds sway, corruption flourishes in all forms. For the intelligent man is an intelligent voter, incapable of being intimidated or influenced in the exercise of his right of franchise. The intelligent voter elects the intelligent legislator, and the intelligent legislator knows that his preference depends upon his honesty, and his acts are in accordance therewith. This being true the necessity of educating the masses becomes apparent.

In the early stages of our history the only difficulty to be overcome in diffusion of knowledge was the lack of educational advantages. In a new country whose heterogeneous population had ever and only before them the acquisition of wealth and untrammeled freedom, it is but a small wonder that we find few school-houses and fewer capable instructors. But what was lacked in knowledge was supplied in zeal for its acquisition, and in a short time, through the untiring diligence of our forefathers, and their wise legislative enactments, compelling every township to support a school, our country became dotted with these strongholds of intelligence and morality. But an increase in the population of our country brought with it changed conditions of life.

The early settlers of our country were engaged principally in agricultural pursuits. To such a people the winter was a season of forced

inactivity, and this opportunity of educating the children was not neglected by the provident farmer. But in the growth of our country came diversified interests; manufacturing in all its forms engaged the attention of our people, and as a necessary evil, which inevitably accompanies a dense population, the struggle for existence was aggravated. Every nerve and sinew must be strained in our large cities to hold together the soul and body, and thus a premium is placed on child labor. The winter was no longer a season of respite from toil, but summer and winter alike the never-ceasing struggle for the means of subsistence must be kept up. The little mite that the children can earn is magnified by poverty, and the advantages of an education on the other hand are entirely lost sight of.

As we have seen in the agricultural period of our history the only inducement necessary to the spread of education was the diffusion of school-houses. Willingly did the farmer of the early part of the nineteenth century send his children during the winter months to the district school, but the mechanic of the latter half needs some further inducement than the mere erection of a school-house within his sight. What shall it be?

The Legislature of New Jersey made an effort to solve the question in 1885, when they had enrolled upon the statute-books the Compulsory Education law.

We say made an effort, because in some of the large cities of New Jersey the municipal authorities failed to furnish adequate accommodations to educate the children; they thus have the effect of nullifying the law, and to-day it lies upon our statute-books a dead letter, as a general compulsory education law, for it depends solely on the municipality, the opportunity of enforcing the law.

We need the enforcement of this law for several good and efficient reasons. The first and primary one is the safety of our government requires it. It is no chimerical fantasma that leads men to say that education is a protection against political corruption. It is a hard and fast fact; go to any of the polls in your city during an election, and you will have ample evidence of the truth of this statement. It is not the educated voter whom you will see casting his vote at the dictates of others, but the illiterate, whose pride and honor of the right of franchise he values not. But leaving out this argument there are still left better reasons for the enforcement of the law. Morality demands it. The man who, during his youth, has been

forced to grind the vitality out of his young life, becomes warped and narrow, his intellect is bounded by the walls between which he labors, his associates are of the same character, and his animal nature predominates, and, as a result, he becomes a vicious and dangerous citizen. There are exceptions to this rule, but they merely give force to the argument by contrast. They crowd our jails and prisons, they make our drunkards and criminals of all grades. Their ideas of the law and of obedience to it, would be laughable if they were not so dangerous.

The enforcement of the Compulsory Education law, however, would not be a panacea for all the ills and crimes; to claim so much for it would be folly. But if illiterates compose the majority of our criminals, would not a proper educational law strictly enforced materially lessen the calendars of our criminal courts?

Then, again, we are enforcing the Child-labor law, we are turning the children out of the factories who are too young to work, and by the non-enforcement of the Educational law we throw them on the streets, which hastens the spread of crime among minors, and paves the way for a life of lawlessness and vice. These are only a few of the many arguments in favor of the enforcement of compulsory education laws, but they are general in their character.

Let us consider the objections that are held by some to the enforcement of such a law. It is not practicable to enforce it. What is there impracticable about it? True, it is impracticable and impossible to compel a child to attend school if you have no school for him to attend. But with ample facilities there is not the slighest flavor of impracticability about the law.

The provision of proper school facilities for the education of our children should be imposed upon us whether we enforce the law or not.

It is true the enforcement of the law will necessitate the increasing of the school facilities, thus increasing the cost of maintaining the school system, but is this not just; if provision is to be made for the free education of one child, does not impartial justice demand that we provide for the education of all? Are we to discriminate between one child and another? It would be tyranny of the worst type to erect a school-house in which only one-half of the children of the district could be educated, while the other half would grow up in ignorance and vice. If education is to be free, let all be educated, both the willing and obdurate.

The provision of adequate schools and the enforcement of the compulsory education laws will inevitably result is a higher standard of intelligence and morality among our youth, and aid in the work of governing our great republic, since it would improve the standard of our population.

THIRD DISTRICT.

ELIZABETH, N. J., December 3d, 1890.

L. T. Fell, Esq., Chief Factory Inspector:

DEAR SIR—I herewith respectfully submit my annual report for the year ending October 31st, 1890, comprising the counties of Monmouth, Middlesex, Somerset and Union.

Changes ordered and complied with during the year, eighty-five; number of children discharged, eighty-four; number of permits granted to orphan children, nineteen; number of accidents, nine.

Respectfully submitted,

FRANCIS SAYRE,
Deputy Factory Inspector.

FACTORIES INSPECTED—THIRD DISTRICT.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Woodbridge	Salamander Works	Fire brick	72	.....	8	4
"	Wm. H. Barry	Brick	45	.....	6	.....
"	Vallentine Bros.	Fire brick	50	.....	6	1
"	Spa Spring Brick Works	Building brick	200	.....	4	.....
"	Anniss & Lyle Mfg. Co.	Tile and fire brick	200	.....	16	1
"	Boynton & Co.	Tile and brick	40	.....	.....	.....
Tremley	Standard Chemical Co.	Chemicals	175	.....	.....	.....
"	Carteret Brick Works	Building brick	35	.....	2	.....
"	Standard Fertilizer Works	Fertilizer	50	.....	.....	.....
South Amboy	Swan Hill Pottery	Stone ware	40	8	7	2
" "	South Amboy Tile Co.	Tile	27	1	.....	.....
Sayreville	Moses Higbie	Refining asphalt	43	.....	2	.....
"	Sayre & Fisher & Co.	Brick	700	.....	4	.....
"	Wm. F. Fisher & Co.	"	260	.....	.....	.....
"	E. A. & C. W. Fisher.	"	60	.....	4	.....
Spottswood	Hoblinger & Dizian	Shirts	14	40	3	1
South River	John Whitehead & Co.	Brick	60	.....	.....	.....
" "	Mark Davison & Co.	Shirts	6	24	.....	.....
" "	Herman Aukman & Co.	Handkerchiefs	100	300	26	8
" "	Thomas Willett & Co.	Bricks	110	.....	.....	.....
Rahway	Gordon Press Works	Printing presses	30	.....	.....	.....
"	Henry Rosenbaum	Shirts	50	125	20	2
"	William L. Mershon	Printing	105	35	.....	.....
"	William L Mershon	"	48	12	2	.....
"	Laforge Wheel and Spoke Works	Wheels and spokes	20	.....	.....	.....
"	Housman & McManus	Carriages	12	.....	.....	.....
"	Charles Grube	"	20	.....	.....	.....
"	Howard & Co	Dye works	9	.....	.....	.....
"	Williams S Pickering	Carriages	15	.....	.....	.....
"	E. Graves & Co.	"	12	.....	.....	.....
"	Frederick Eyer	"	10	.....	.....	.....
"	Van Campen & Bros.	Novelties	40	50	5	2
"	D. B. Dunham & Co	Carriages	50	.....	.....	.....
"	Taylor & Bloodgood	Tar paper	170	30	4	.....
"	Johnson R. R. Signal Co.	Railroad signals	40	.....	1	.....
Raritan	Raritan Woolen Mills	Woolen goods	410	150	32	2
"	Somerset Mfg. Co.	" "	285	75	40	1
"	Kenyon Bros.	Machinery	40	.....	.....	.....
"	R. Vegte	Flour and feed	13	.....	.....	.....
"	William McNair & Co.	Paints	10	.....	.....	.....
Red Bank	C. C. Reagles	Billiard balls	9	.....	.....	.....
" "	L. P. Conklin	Sash and blinds	12	.....	.....	.....
" "	J. Broadmeadow	Canned goods	22	35	13	5
" "	C. L Davis	Sash and blinds	13	.....	.....	.....
" "	J. W. Mount & Bros.	Carriages	13	.....	.....	.....
" "	J. W. Stout	Canned goods	75	100	8	4
" "	Rogers & Walling	Carriages	10	.....	.....	.....
" "	E. R. Roberts	Safety boilers	20	.....	.....	.....
" "	John Whitehead & Co.	Bricks	60	.....	.....	.....
" "	G. T. Hook	Sash and blinds	16	.....	1	.....
" "	Root & Gibben	" "	8	.....	.....	.....
" "	John N. Hoffmeyer	" "	10	.....	.....	.....
" "	James Walsh	" "	8	.....	.....	.....
" "	American Mfg. Co.	Billiard balls	9	.....	.....	.....
Perth Amboy	Henry Maurer & Son	Fire brick	190	.....	9	.....
" "	Amboy Terra Cotta Works	Terra cotta ware	400	.....	4	.....
" "	Arthur Buel & Co.	Paris white chalk	25	.....	1	.....
" "	United Refiners and Export Co	Oil refinery	75	.....	2	.....
" "	Henry White	Foundry	14	.....	.....	.....
" "	Rosseler & Hassbacker	Chemicals	16	.....	2	.....
" "	Ashland Emery Co.	Emery paper	20	.....	.....	.....
" "	Thomas Lingley	Machinery	15	.....	.....	.....

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FACTORIES INSPECTED—THIRD DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Perth Amboy	Raritan Power Co.	Pressed brick	125	.....	4	1
" "	John Hornsby & Co.	Fire brick	35	.....	5	1
" "	William King	Corks	17	.....	.....	.....
" "	Mathiason & Hansen	Terra cotta ware	45	.....	2	.....
" "	Gleason & Co.	Machinery	21	.....	.....	.....
Plainfield	Van Deventer & Co.	Carpets	10	45	4	.....
"	Pond Tool Co	Tools	400	.....	4	.....
"	Potter Printing Press Works	Printing presses	220	.....	4	.....
"	Walter Scott & Co.	" "	160	.....	2	.....
"	Central Company	Table oil cloth	60	.....	2	.....
New Brunswick	Consolidated Fruit Jar Co.	Fruit jars	302	48	13	.....
" "	New Jersey Lamp and Bronze Co.	Bronze goods	73	7	1	.....
" "	Janeway & Co.	Wall paper	150	.....	3	.....
" "	New Jersey Rubber Co.	Rubber shoes	250	250	31	1
" "	Washington Rubber Co.	" goods	254	149	1	.....
" "	Janeway & Carpenter	Wall paper	223	27	13	2
" "	Adam Green	Earthen ware	15	.....	.....	.....
" "	George Butler & Sons	Sash and blinds	42	.....	.....	.....
" "	Cranke & Voorhees	" "	37	.....	.....	.....
" "	John Guible	Shoes	17	.....	.....	.....
" "	J. B. Archer & Co.	"	18	7	1	.....
" "	J. Messrole	Shirts	75	18	1	.....
" "	Norfolk and N.B. Hosiery Co.	Knit goods	300	500	40	12
" "	L. J. Ives & Co.	Machine needles	50	.....	.....	.....
" "	Johnson & Johnson	Medicinal plasters	50	90	4	1
" "	Middlesex Shoe Co.	Shoes	97	53	4	.....
" "	S. B. Vannise	Carriages	10	.....	.....	.....
" "	J. D. Watson & Co.	Paints	8	.....	.....	.....
" "	F. Felter & Co.	Shoes	48	28	2	.....
" "	C. Hingher & Son	Pearl buttons	75	25	4	.....
" "	Rob't Flieder	Paper boxes	14	12	.....	.....
" "	Mosquito Netting Co.	Mosquito netting	15	.....	.....	.....
" "	C. L. Davis & Co.	Cigars	5	145	.....	.....
Manasquan	Wm. B. Taylor	Sash and blinds	10	.....	.....	.....
"	Thomas Vahn	Shirts	2	34	1	.....
"	R. V. Van Shoick	Sash and blinds	12	.....	.....	.....
"	Wm. M. Stout & Son	Canned goods	10	20	7	3
"	D. B. Wyckoff & Sons	Flour and feed	36	.....	.....	.....
Milltown	Meyer Rubber Co.	Rubber boots and shoes	250	200	12	6
Matawan	J. L. Rue	Sash and blinds	40	.....	.....	.....
"	R. C. Winters	Horse collars	16	.....	.....	.....
"	Dunn & Dunlap	Earthen ware	32	16	3	.....
"	Wm. D. Bailey	Sash and blinds	10	.....	1	.....
"	Bushnell & Co.	Brick	60	.....	.....	.....
"	T. M. Antesell & Co.	Pianos	25	.....	.....	.....
Menlo Park	Ceramic Works	Volkmar tile	18	3	.....	.....
Long Branch	Peddington Bros.	Sash and blinds	11	.....	.....	.....
" "	L. D. Edwards	" "	120	.....	2	.....
" "	John M. Davis	Stair builder	11	.....	1	.....
" "	C. D. Reid & Co.	Carriages	14	.....	.....	.....
Linden	Lion Silk Mfg. Co	Silk goods	20	26	6	.....
Little Silver	E. G. Hazard & Co.	Catsup	50	30	6	2
Keyport	Tillton & Cherry	Carriages	14	.....	.....	.....
"	C. B. Bucklin	Canned goods	25	100	9	5
"	Jacob Lorillard	Bricks	350	.....	4	1
"	Keyport Brick Tile Mfg. Co.	"	40	.....	.....	.....
Jamesburg	Wm. H. Martin	Shirts	2	45	.....	.....
"	Middlesex Mfg. Co.	"	4	32	.....	.....
"	State Reform School	.....	320	.....	215	.....
"	Downs & Finch	Shirts	100	125	3	.....
Helmetta	G. W. Helm & Co	Tobacco and snuff	152	46	6	.....
Freehold	Henry Rothild.	Shirts	150	200	10	2

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FACTORIES INSPECTED—THIRD DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Freehold	J. W. Allen	Cigars	3	9	.....	.....
"	Holmes & Bowden	Machinery	48	3	.....	.....
"	Stokes Bros.	Files	25	.....	.....	.....
"	Jos. Blakely	Canned goods	50	75	8	.....
"	Wm, Curley	Laundry	8	12	1	.....
Elizabeth	Washington Rubber Works	Rubber goods	28	50	2	.....
"	Peter Briedt	Brewery	28	.....	.....	.....
"	Patrick Sheridan	Planing mill	14	.....	.....	.....
"	Charles Forsyth	Drain pipe	14	.....	.....	.....
"	City Flour Mills	Flour and feed	12	.....	.....	.....
"	Pacific Rubber Co.	Rubber goods	8	36	1	.....
"	Chas. Miller & Co.	Hardware	11	.....	.....	.....
"	Elizabeth Nickel Plating Co.	Novelties	10	.....	.....	.....
"	Lambert Machine Works	Machinery	16	.....	.....	.....
"	J. S. Waddell	Plumbing supplies	9	.....	.....	.....
"	D. B. Churchill	Shirt manufacturing	4	51	4	3
"	Union Oil Cloth Co	Oil cloth	17	1	.....	.....
"	A. & F. Brown	Machinery	114	...	.....	.....
"	Elizabeth Cordage Works	Rope and twine	300	200	16	2
"	Heywood & Co.	Clothing	8	32	3	2
"	Isaac Worrall	Machinery	13	.....	.....	.....
"	Samuel L. Moore & Sons	"	225	.....	.....	.....
"	William H. Rankin	Felt roofing	16	.....	.....	.....
"	G. M. Graft & Co.	Stoves	44	.....	.....	.....
"	Elizabeth Oil Cloth Co	Table oil cloth	205	.....	2	.....
"	Eugene Munsell & Co.	Stoves	100	.....	.....	.....
"	William O. Smith	Shears	9	.....	.....	.....
"	Rising Sun Brewing Co.	Brewery	22	.....	.....	.....
"	L. B. Beerbower & Co.	Pottery	100	18	16	3
"	N. J. Dry Dock Planing Mill	Planing mill	75	.....	.....	.....
"	New York Fire-Proof Paint Co.	Paints	10	.....	.....	.....
"	Borne, Scrymser & Co.	Oil refining	125	.....	.....	.....
"	Bowker Fertilizer Co.	Fertilizer	125	.....	.....	.....
"	New Jersey Extraction Works	Copper and silver	100	.....	.....	.....
"	Singer Mfg. Co.	Sewing machines	3400	300	200	4
"	Central R. R. Shops	Car repairing	500	.....	.....	.....
"	Thomas H. Smith	Hats	12	37	.....	.....
"	Joseph Blatz	Tannery	60	3	3	.....
"	Frederick Artz	Toys	1	18	.....	3
"	Zululave & Co	Shirts	18	65	2	1
"	E. J. Blakely & Co.	Foundry	75	.....	.....	.....
"	Howson & Son	Stair building	17	.....	.....	.....
"	American Gas Furnace Co.	Furnaces	20	.....	.....	.....
"	Henry Rosenbaum	Shirts	1	55	1	.....
"	B. & S Strauss	Carriages	28	.....	.....	.....
"	Heidritter & Sons	Planing mill	22	.....	.....	.....
"	Heidritter & Sons	Sash and blinds	50	.....	.....	.....
"	William Earl	Canned goods	8	40	.....	.....
Carteret	Colwell Iron Works	Machinery	148	.....	4	.....
"	Williams, Clark & Co.	Fertilizer	50	2	2	.....
"	Leibig Mfg. Co.	"	80	.....	.....	.....
Bound Brook	Bound Brook Woolen Mills	Woolen goods	185	90	11	1
" "	Hickman Hose Coupling Co.	Gas fixtures	51	18	.....	.....
" "	Hartford Air-Pump Co.	Compressed air pumps	32	.....	.....	.....
" "	Standard Paint Co.	Roofing paint	17	.....	.....	.....
" "	Shackleton Car Heating Co.	Steam radiators	50	.....	.....	.....
" "	W. W. Anderson	Planing mills	12	.....	.....	.....
" "	W. H. Bache	Carriage and axle boxes	16	.....	.....	.....
" "	American Paint Co.	Paints	14	.....	.....	.....
Asbury Park	H. J. Rogers & Rogers	Sash and blinds	35	.....	2	.....

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CHANGES ORDERED AND CONDITION OF FACTORIES—THIRD DISTRICT.

Location and Name of Company.		Changes ordered.	Disposition of previous orders.	Health and safety.
Woodbridge—				
Salamander Works	1	Main shaft and elevator guarded		Good.
Wm. Berry	1	All stairs and elevator guarded		Good.
Valentine Bros	1	Fan and elevator guarded		Good.
Boynton & Co				Good.
Tremley—				
Standard Chemical Co	1	Fly-wheel on grinding machine guarded		Good.
Standard Fertilizer				Good.
Sayreville—				
Moses Higbie & Co				Good.
Sayre & Fisher	2	One belt and fly-wheel guarded		Good.
Wm. E. Fisher	1	Fly-wheel guarded		Good.
E. A. & C. W. Fisher				Good.
South River—				
John Whithead	1	Fly-wheel guarded		Good.
Mark & Davidson	1	Shafting guarded		Good.
Herman & Aukurn	1	Shafting guarded		Good.
Theo. Willet & Co				Good.
Spottswood—				
Hablinger & Dazian	4	Three main belts and shafting guarded		Good.
South Amboy—				
Swan Hill Pottery				Good.
South Amboy Tile Works				Good.
Raritan—				
Raritan Woolen Mills	2	Two belts boxed		Good.
Somerset Mfg. Co				Good.
Kenyon Bros				Good.
R. Vighte	1	Floor shafting guarded		Good.
Wm. N. Adair	3	Three belts boxed		Good.
Rahway—				
Henry Rosenbaum	1	Shafting guarded	Done	Good.
W. L. Mershon	1	Fly-wheel guarded	Done	Good.
Gordon Press Works				Good.
Laforge Wheel Works				Good.
Taylor & Bloodgood				Good.
Turner Mfg. Co	1	Shafting guarded	Done	Good.
Johnson Signal Co	1	Fly-wheel guarded	Done	Good.
Van Campen Bros	3	Three pulleys on printing presses guarded	Done	Good.
Houseman & McManus				Good.
Chas. Grube	1	Fly-wheel guarded	Done	Good.
Howard & Co				Good.
Wilkins & Pickering				Good.
E. Graves				Good.
Fredrick Eyer				Good.
Mershon Bros	1	Main belts boxed	Done	Good.
Red Bank—				
L. B. Conklin				Good.
C. C. Reagles	1			Good.
J. Broadmeadow		Rail on stairs		Good.
C. L. Davis				Good.
J. W. Marsh	1			Good.
J. W. Stout	1	Rail on fly-wheel		Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—THIRD DISTRICT—Continued.

LOCATION AND NAME OF COMPANY.		CHANGES ORDERED.	Disposition of previous orders.	Health and safety.
Red Bank—				
Rogers & Walling				Good.
Root & Gibbens				Good.
G. T. Hook	2	Fly-wheel and pulley on saw table guarded		Good.
John M. Hoffmire				Good.
C. Aug. Rodgers				Good.
James Walsh				Good.
American Mfg. Co				Good.
Perth Amboy—				
Spa Brick Works	2	Elevator and stairs guarded	Done	Good.
Anness & Lyle Mfg. Co.		Main belt and shafting guarded.		Good.
Henry Maurer	2	Small elevator and main belt guarded		Good.
Amboy Terra Cotta Works				Good.
Arthur Buel Mfg. Co.				Good.
United Refining Oil Co				Good.
Henry White				Good.
Rosseler & Hasslacker				Good.
Ashland Emery Co				Good.
Raritan Porous Brick Co.	1	Pulley and all stairs guarded	Done	Good.
Thos. Lingle	2	Rail on stairs and main belt guarded	Done	Good.
John Hornsby & Co	1	Gearing on grinding machine guarded.	Done	Good.
Wm King	1	Floor shafting guarded	Done	Good.
Mathiaeren & Hansen				Good.
Gleason & Co				Good.
Plainfield—				
Van Deventer & Co				Good.
Pond Tool Co				Good.
Potter Printing Press Works				Good.
Walter Scott & Co				Good.
Central Stamping Co				Good.
Old Bridge—				
Tile Mfg. Co				Good.
New Brunswick—				
Norfolk and N. B. Hosiery Co.	2	Fly-wheel in yard and shafting guarded	Done	Good.
Middlesex Shoe Co	1	Shafting guarded	Done	Good.
J. B. Van Nise				Good.
J. J. Watson				Good.
F. Felter & Co	1	Shafting guarded	Done	Good.
C. Hingner & Son				Good.
Rob't Flieder				Good.
Mosquito Netting Co				Good.
Chas. C. Davis & Co				Good.
Empire Machine Co				Good.
Consolidated Fruit Jar Co.	1	Gearing and two belts guarded	Done	Good.
N. J. Lamp and Bronze Co.	1	Rail on elevator	Done	Good.
Janeway & Co				Good.
N. J. Rubber Co	1	All gearing and floor shafting boxed		Good.
Middlesex Rubber Co	1	Two fly wheels and all gearing boxed		Good.
Janeway & Carpenter	2	Two belts and tower elevator guarded; second, third and fourth floors to be ventilated		Good.
Adam Green	1	Rail on hatchway		Good.
Geo. Bettler	2	Two belts and rail on back stairs guarded		Good.
J. B. Archer	1	Shafting guarded		Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—THIRD DISTRICT—Continued.

Location and Name of Company.	Changes ordered.	Disposition of previous orders.	Health and safety.
New Brunswick—			
Cronk & Voorhees			Good.
John Guible & Son			Good.
J. Merserolle	Shafting guarded	Done	Good.
L. T. Ives	One belt guarded	Done	Good.
Johnson & Johnson			Good.
Menlo Park—			
Menlo Park Ceramic Works	Two belts boxed		Good.
Matawan—			
J. L Rue			Good.
R. C. Winters			Good.
Dunn, Dunlap & Co	Stairs repaired		Good.
Wm. Bailey			Good.
Bushnell & Co			Good.
J. M. Antsell	Bars on elevator		Good.
Milltown—			
Meyer Rubber Co	All gearing and one belt guarded		Good.
Manasquan—			
Wm. F. Taylor			Good.
Thos. Vauhn	Guard belt on saw-table	Done	Good.
R. V. Van Schork			Good.
W. W. Stout	Guard fly-wheel		Good.
D. B. Wyckoff	Fly-wheel, three belts and all gearing guarded		Good.
Long Branch—			
Peddington Bros	Guard saw-belt		Good.
L. D. Edwards			Good.
John M. Davis			Good.
C. D. Reed			Good.
Little Silver—			
E. E. Hazard	Guard fly-wheel and main belt		Good.
Linden—			
Lion Silk Mills			Good.
Keyport—			
C. S. Bucklin	Guard fly-wheel		Good.
Tilton & Chenny	Guard hatchway		Good.
Lorillard & Co	Guard all gearing and two belts		Good.
Keyport Brick and Tile Co	Three belts boxed		Good.
Jamesburg—			
Wm. H. Martin	Guard fly-wheel and shafting	Done	Good.
Middlesex Mfg. Co	Guard shafting	Done	Good.
Downs & Finch			Good.
Helmetta—			
Geo. Helm & Co	Ventilate grinding-room; rail on elevator	Done	Good.
Freehold—			
Henry Rotchild	Shafting boxed	Done	Good.
John W. Allen			Good.
Combs & Bowden			Good.
Stokes Bros			Good.
Jos. Blakely	Fly-wheel guarded; new stairs in tin department		Good.
W. E. Curley	Fly-wheel guarded		Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—THIRD DISTRICT—Continued.

LOCATION AND NAME OF COMPANY.	CHANGES ORDERED.	Disposition of previous orders.	Health and safety.
Elizabeth—			
Henry Rousenbaum	Guard shafting	Done	Good.
B. S. Strauss			Good.
Heidritter & Son			Good.
" "	Guard saw belt	Done	Good.
Eugene Munsell & Co			Good.
Wm. O. Smith			Good.
L. B. Beerbower	Stairs to be screened and railed	Done	Good.
Rising Sun Brewing Co	Bar on hatchway	Done	Good.
N. J. Dry Dock and Planing Mill			Good.
N. Y. Fire Proof Paint Co			Good.
Borne, Scrymser & Co			Good.
Bowker Fertilizer Co	Ventilate grinding-room	Done	Good.
Staten Chemical Co			Good.
N. J. Extraction Works			Good.
C. R. R Shops			Good.
Jos. Blatz			Good.
Frederick Artz			Good.
Zululove & Co	Shafting to be boxed	Done	Good.
E. G. Blakely			Good.
Howson & Son			Good.
American Gas Furnace Co			Good.
Elizabeth Cordage Works	Two belts boxed and floor in spinning-room repaired	Complied with.	Good.
Heywood & Co	Shafting on stretching machine guarded		
Isaac Worrall			Good.
S. L. Moore & Son	Guard belt and gearing	Done	Good.
Wm. H. Rankin	Belt on rolling machine to be guarded	Done	Good.
J. M. Graft & Co			Good.
Elizabeth Oil Cloth Co			Good.
Singer Mfg. Co	Four belts in cabinet department guarded; all gearing in wheel department, all shafting on polishing machine guarded; main belt and four small belts in screw department to be guarded; two belts in carpenter department to be guarded	Done	Good.
Washington Rubber Co	Shafting on stretching machine covered; all gearing boxed; main stairs screened		Good.
Peter Briedt Brewing Co			Good.
Patrick Sheridan			Good.
Chas Forsyth			Good.
City Flour Mills	Rail on hatchway	Complied with.	Good.
Pacific Rubber Works	Shafting on stitching machine guarded, and all gearing guarded	Complied with.	Good.
Chas. F. Miller	Shafting boxed	Complied with.	Good.
Elizabeth Nickel Plating Co		Complied with	Good.
Lambert Machine Shop		Complied with.	Good.
James Waddell		Complied with.	Good.
C. B Churchill	Shafting boxed	Complied with.	Good.
Union Oil Cloth Co			Good.
A. L. Brown			Good.
Carteret—			
Colwell Iron Works	Box belt on planing machine	Complied with.	Good.
Wm. Clark & Co	Railing and main belt in mixing-room to be boxed	Complied with.	Good.
Carteret Brick Works	Rail on elevator	Complied with	Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—THIRD DISTRICT—Continued.

LOCATION AND NAME OF COMPANY.	CHANGES ORDERED.	Disposition of previous orders.	Health and safety.
Carteret—			
Leibig Fertilizer and Mfg. Co. 4	Box three belts; rail on elevator		Good.
Bound Brook—			
Bound Brook Woolen Mills. 2	Cover on oil pit; ventilate rag-picking room	Complied with.	Good.
Hickman Hose Coupling Co. 1	Guard-rail around fly-wheel	Complied with.	Good.
Hartford Compressed Air Pump Co.			Good.
Standard Paint Co.			Good.
Shuckleton Car Heating Co.			Good.
Wm. W. Anderson. 1	Fly-wheel and main belt to be boxed		Good.
Wm. H. Bache. 2	Two belts to be boxed		Good.
American Paint Co. 5	Rail on stairs and four belts to be boxed; fly-wheel and belts in cellar to be guarded; fly-wheel on engine to be guarded		Good.
Asbury Park—			
H. J. Rodgers			Good.

REPORT OF ACCIDENTS—THIRD DISTRICT.

LOCATION.	NAME.	NAME OF COMPANY.	NATURE AND RESULT OF ACCIDENT.
Elizabeth	James Smith	Singer Mfg. Co	Foot burned with hot metal.
"	James Handlane	" "	Killed by explosion of steam-pipe.
"	Patrick O'Neill	" "	Casting fell on foot and crushed it.
"	Peter Link	" "	Broke his leg by falling.
Carteret	William R. Rapp	Colwell Iron Works	Wrist broken; caught in belt.
New Brunswick	John Faulkner	J. B. Archer Shoe Factory	Lost two fingers in stamping machine.
" "	Martin Cauley	Johnson & Johnson	Lost his arm in beating machine
Sayreville	Anthony Wilonofsky	J. R. Crossman Clay Pit	Killed by clay car.
Rahway	Henry Rhodes	Van Campen Bros.	Arm broken by press.

ACCIDENTS IN FACTORIES.

With Suggested Measures to Alleviate their Results.

BY FRANCIS SAYRE, DEPUTY FACTORY INSPECTOR OF NEW JERSEY.

Inspector Sayre read the following paper before the Convention:

"Accidents will happen in the best regulated families." Even well-conducted factories and shops are not exceptions to this trite old rule.

Notwithstanding the safeguards the State throws around the machinery or tools used by its subjects, the number of accidents still remain very large. Belts slip and break, cogs catch the dress, fingers fail to keep out of the way of the descending punch, hot liquids spill or sputter, a thousand-and-one things happen in spite of all precautions, resulting in injury more or less serious, a loss of time and suffering to the workman, extending from hours to weeks and months, sometimes years. This may mean to the employer a loss of valuable help, with more or less liability for wages; to the injured workman, loss of wages, and expense for surgical attendance during sickness. In grave or simple cases no small aggregate if summed up for a district or State for a year or term of years. While the province of the State is to prevent mishaps, or in their happening to place the responsibility upon whom it may belong, we are forced to admit that a great number of injuries occur with great regularity in spite of us.

We might for a moment consider if something could not be done to, as far as possible, ameliorate the results. Sometimes a trifling injury becomes of serious import. A small sliver may produce a festering sore that is years in healing. The gouge of a rusty nail or tool, tetanus (or lock-jaw); a cut artery, death from loss of blood. In the writer's district a simple sliver was picked out by the workman with a corroded pin, blood-poisoning ensued, resulting in a loss of two fingers, and rendering the man practically a cripple for two years. A workman stepped on a rusty-pointed punch, cutting slightly

into his flesh. Nothing was thought of it, and he continued his work for the day. In three days he died from lock-jaw.

A case of severe burn at a factory the injured had to wait some hours before any aid and final removal to the hospital could be secured. The result was much against the sufferer in the subsequent results. Prompt aid, even if not skilled surgical, would have been of great service. In our State there are but few hospitals, and many factories and works are located as remote as forty miles from a hospital, and many from surgical aid and supplies. These could be multiplied, and many cases cited where from causes such as lack of or improper surgical attendance, serious results have followed not to be expected from the immediate extent of the injury.

Surgical science has made great advancement in these days, and while it has done much to save the injured workman from suffering from loss of life and limb (in capital wounds, such as liable to occur in factories, or from any machinery, good results are the rule where in former years they were the exception), yet good surgery, hospitals and modern treatment are not always to be had when wanted most, and in many so-called minor cases of injury are not sought, from wrong judgment, lack of means, or other reasons, so that suffering, loss of time, wages, and all accompaniments still go on.

As a rule, the more grave the injury the more untimely the hour in which it happens. After office hours for the surgeons, all away to a camp-meeting or convention, hospital closed for the summer or repairs, something sure to cause delay. When a surgeon, doctor or one passing under the name is finally obtained, he arrives empty-handed, the shop does not afford so much as a clean rag; and, while on a pinch he may improvise something for his purpose, delays too often result. As the injury goes down the scale in importance, it is likely to be considered as not amounting to much. Home-made or quack agents are applied, and in time it enlarges to greater proportions than capital cases. Under good surgery and hospital treatment, difficult amputations will heal in seven to fourteen days with perfect results; a trifling scratch or cut, under bad treatment, will run into months and years. In a word, lives and limbs are lost or rendered useless that should not even be imperilled. So much so is this the case that many railroads, for their own protection against loss or damage, provide surgical attendance and supplies at convenient points, so that

delays or lack of means for proper treatment are avoided; and they require all injuries to be at once attended to by methods of their provision, not the patients' selection. Without entering too far into the domain of surgery, we can for our part perhaps apply a few common-sense rules that may be of service. Prof. Eswach, of Germany, says that the fate of an injured man depends upon the person in whose hands he first falls.

In accidents, the old rule, "Delays are dangerous," well applies. "Run for a doctor" is on everybody's tongue when a hand or foot is mashed, but it may take longer to find him than to read this paper, and if the reader survives the sufferer may not. If it is only a little one it is left alone, and see how it is to-morrow, or so-and-so's healing salve is applied; and to-morrow, when it comes, finds a festering sore or a useless limb. If we glance in one of our surgical friend's books, we will find that the instant the flesh of a being is in any way injured, a host of agents (millions that no man can number) are more active and alert than Factory Inspectors ever dream of being, go for that injury; and, with unpronounceable names attached to them, they set up actions that produce poisonous changes, suppuration, inflammations, septicæmia and other formidable conditions. The dirt of the machinery and benches, on the workman's hands and clothing, and the well-laden air of the factory, but multiply their forms and hasten the destructive work, so much so that, figured in cash, seconds are dimes, minutes are dollars and hours are hundreds of dollars in the extent of damages accrued when medical agencies are applied. Not only the enemy's work who struck the first blow, but the work of legions of strikers still at work must be met.

We need not further discuss the principles that underlie these facts. It is sufficient to state that in accidents such as are of very frequent occurrence under our observation, we can aid in mitigating the results by seeing that the best possible methods are applied.

Some factories now either have at hand, or within call, one or more surgeons, and provide proper appliances, but they are a rarity. In their absence or neglect of their use means may and should be applied to secure recovery with the least amount of suffering and loss. Modern surgeons now treat wounds and injuries of every nature by what is termed "Antiseptic Method," or methods which prevent poisonous inflammations liable to occur when the flesh is cut, bruised or torn. Progress in the treatment of such injuries, as we observe, has

made it possible for persons of ordinary intelligence to aid in their prompt and effective application, and while lay treatment can never supplant the surgeon, it can do much to aid him. Neglect, entire or partial, has resulted in grave disaster, but misdirected attempts to do something, or direct wrong application, are so far apart as not worthy of consideration. Give a person fitted to have charge of a room or apartment, without previous knowledge or skill as to what to do in a small or great accident, and place in his hands proper appliances, and the chances are one thousand to one he will do just what he ought to do. The emergency and opportunity will inspire him to a fitting course. In fact, for the purpose here outlined, proper cleansing of the injured part, and doing it up in a simple, ready-prepared dressing, is effectual and very important progress, and is so simply applied and will give such satisfactory results as to be worthy of serious consideration.

To carry out the suggestions here outlined, manufacturers of surgical dressings, at the writer's suggestion, after consulting competent surgeons, have devised a case of appliances so arranged that any person with ordinary sense can use them with the most satisfactory results. In fact, the nature of the articles suggests their use at sight. For instance, bandages to arrest the flow of blood when an artery is cut; tablets to make a wash to cleanse a wound; sponges to wash it with; soft lints, cottons and gauzes to cover it with; dressing for burns or scalds; bandages so cut and shaped that if a person picks them up he will at a glance see what they are for. The case includes pins, fastenings, scissors, bandages, dressings and appliances all properly put up to preserve them in good condition, and have them always at hand just when wanted, and as has been pointed out, if surgical assistance is called there is at hand without delay just what is needed for the first dressing. Accompanying the case are explicit and plain directions for the use of the articles. It is designed that at least one such case or box shall be placed in every factory, under charge of a Superintendent, foreman or other suitable person, where its use cannot fail to result in good.

FOURTH DISTRICT.

Lawrence T. Fell, Esq., Chief Inspector of Factories:

I desire to submit to you my annual report, giving my views and submitting the work done by me in my district since my appointment as one of your Deputies. I have made careful and diligent efforts to have the provisions of the law strictly enforced. I find that the factory laws now upon our statute-books are important as well as popular, and have caused employers to be more careful in the treatment of their help, and endeavor to make improvements that will make life more pleasant in our factories and workshops, and also have a tendency for the better protection of life and limb. The Fourth District comprises the whole of Hudson county, and has within its boundary 300 factories, employing from 4 to 3,000 hands in some of them. During my experience as a Factory Inspector, I have found invariably that the factory laws were mostly violated in the smaller factories; in the larger ones, I find in most cases that the law was complied with, and any recommendations as to changes would be carried out at once. The Fire-escape law is the only law that the manufacturers try to evade, as you will see in my report that I have ordered a number of them to be erected on factories which I considered very dangerous buildings. In most cases they flatly refused to erect them; in some cases they were erected. Among those who erected them were the Brooklyn Cooperage Works, Hall's Glove Works, Jersey City, and Baumgartner's Works, Town of Union. The only reason I can give for their refusal to erect the fire-escapes is that they seem to be under the impression that our law is not good. I have a suit pending in court against James Leo, for refusing to erect a fire-escape on his factory. The termination of this suit will certainly be of great value to this department as to the legality of the law.

The sanitary arrangements in most factories I have found most satisfactory. In every instance where I found females employed with

male help, and only one closet for the use of both sexes, the owner's attention was called to this abuse of decency, and orders were immediately issued that only females were to use the closets, and separate ones should be erected for the males. In all such cases, these orders were complied with without resorting to law.

The employment of minors in factories is fast diminishing. During my first year in office, as my last report shows, a large number of children were employed under fourteen years of age. I can safely say that it has decreased 50 per cent. this year. I find that a great many manufactories does not want such small help, and when we find them in the factories, as a rule, they misrepresent their age. In some of the larger factories they get into the shops through some trick or device, and I might say a great many of them are taken into the workshops by their parents under a misrepresentation. On a recent inspection in Clark's O. N. T. Factory at Kearny, I found twelve girls under fourteen years of age. On questioning them I ascertained their right age, and asked them how they managed to get employment in the factory. In a great many cases they told me that their parents told them to tell the Superintendent that they were fifteen years old. I also found about eighty-five girls employed there. I thought their ages were doubtful. In those cases certificates were demanded by me. The most astonishing revelations of the employment of child labor that ever came under my observation as Inspector, was in the barrel department of the Standard Oil Works. I found fifteen boys, their ages ranging from eight to eleven, employed there, and most of them earning eighty-five cents per week. These boys are employed by the coopers, and their labor consists of carrying heads of barrels to the finishers. It was very difficult for me to make them understand me that they were violating the law by employing those children. Most of them are Hungarians and Poles. These boys were discharged by me, and notice served on the Superintendent that this department will hold the company liable in future for the employment of minors by their men.

Guarding of machinery and elevators has received my special attention.

During my inspections throughout my district, I have been very courteously received by the manufacturers at all times. I have always found them willing to comply with the law, and carry out any reasonable demand made by me that would insure better health and safety to their employes.

Acting under your instructions, I have been assisted in some of my inspections by other Inspectors, and I have found it a great advantage in having these double inspections in the large factories of our State.

The various accidents reported to me during the year have been investigated by me, and a detailed account of each one of them has been submitted to you.

In conclusion, I wish to express myself as well pleased with the manner in which the law has generally been accepted by manufacturers and employes in my district. All agree that its effect is good, and in not a few cases have manufacturers expressed themselves to me that they are more than pleased with all the factory laws enacted.

Yours,

J. S. WEINTHAL.

FACTORIES INSPECTED—FOURTH DISTRICT.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—Females.	Under sixteen years.	Children discharged.
Jersey City	John Karcher & Co	Chemicals	5	.....	.....	.....
" "	Hog Abattoir	Slaughter-house	75	.....	.....	.....
" "	U. S. Fuel Co	Fuel	10	.....	.....	.....
" "	N. J. Sheep and Wool Co	Tannery	35	.....	1	.....
" "	H. Wilkens	Tanks	10	.....	.....	.....
" "	Columbia Rolling Mill	Metal	6	.....	.....	.....
" "	Corcoran & Co	Wind mills	50	.....	.....	.....
" "	J. J. Donohue	Corsets	.....	13	2	.....
" "	Cockburn Mfg. Co	Machinery	25	.....	.....	.....
" "	N. J. Stone Crushing Co	Crusher	10	.....	1	1
" "	Emil Morel	Dyeing	15	.....	.....	.....
" "	Winter-Ball Mfg. Co	Canes, &c	225	.....	75	3
" "	N. J. Car Heating Co	Heaters	45	.....	.....	.....
" "	N. J. Car Lighting Co	Lamps	40	.....	1	.....
" "	Brady Metal Co	Metal	18	.....	.....	.....
" "	Oakley's Soap Co	Soap	20	50	15	.....
" "	Thos. J. Stewart	Carpet cleaning	12	.....	.....	.....
" "	N. J. Paint Works	Paints	9	1	.....	.....
" "	B. Mills & Sons	Oakum	15	.....	4	1
" "	J. C Paper Co	Paper	36	4	2	.....
" "	Stratfords Oakum Co	Oakum	50	.....	5	.....
" "	Colgate & Co	Soap	398	2	125	.....
" "	F. G. Otto & Son	Surgical instruments	86	.....	5	.....
" "	Pattberg Bros	Brass goods	125	50	35	.....
" "	Heppenheimer's	Lithographing	235	.....	40	.....
" "	O. Dowey & Sons	Oakum	20	.....	4	.....
" "	Mathiesens & Wichers	Sugar	1200	.....	.....	.....
" "	Chas. Brauman	Paper boxes	5	17	5	.....
" "	N. J. Embroidery Co	Embroidery	1	21	5	1
" "	L. B. Shaffer	Silk	5	10	.....	.....
" "	John Lazier	"	5	10	.....	.....
" "	C Stohn	"	31	4	.....	.....
" "	Chapman Bros	Rufflings	4	4	.....	.....
" "	Poidabards Silk Co	Silk	200	400	74	1
" "	A. Jonas	Machinery	15	.....	.....	.....
" "	O. P. Brown	Medicines	5	2	.....	.....
" "	R. Hillers & Son	Chemicals	22	.....	.....	.....
" "	Garvey Bros	Machinery	20	.....	.....	.....
" "	A. Holmes	"	10	.....	.....	.....
" "	Edison Phonograph Co	Phonographs	10	.....	.....	.....
" "	A. B Cushing	Machinery	25	.....	.....	.....
" "	Wallis Bros	"	200	.....	.....	.....
" "	Vulcan Iron Works	"	35	.....	.....	.....
" "	F. Smith & Bros.	"	60	.....	.....	.....
" "	Heidt & Son	Barrels	25	.....	.....	.....
" "	Brooklyn Cooperage Co	"	200	.....	15	3
" "	Frazer Axle Grease Co	Grease	12	.....	.....	.....
" "	J. C. Iron Works	Machinery	30	.....	.....	.....
" "	Consolidated Iron Works	"	25	.....	.....	.....
" "	A. King & Co	"	75	.....	.....	.....
" "	L. & M. Rubber Co	Rubber	100	10	10	.....
" "	Springer Balance Co	Scales	50	.....	.....	.....
" "	Geo. Mathers	Ink	40	.....	.....	.....
" "	Douglass & Sons	Machinery	15	.....	.....	.....
" "	Hudson Foundry	"	25	.....	.....	.....
" "	Ribbon & March	"	125	.....	.....	.....
" "	A. Gross & Co	Candles	25	.....	.....	.....
" "	N J Wheel Co	Wheels	100	.....	.....	.....
" "	J. C. Galvanizing Co	Galvanizing	25	.....	.....	.....
" "	W. Ames & Co	Spikes	75	.....	7	1
" "	McKnight & Chichester	Mouldings	25	.....	.....	.....
" "	U. S. Machine Co	Machinery	25	.....	.....	.....
" "	Steel & Condict	"	25	.....	.....	.....

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FACTORIES INSPECTED—FOURTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Jersey City	J. C. Wheel Co.	Wheels	25	.....	.....	.....
" "	Barnes & Co.	Machinery	20	.....	.....	.....
" "	Eagle Tube Co.	Tubes	25	.....	.....	.....
" "	Fulton Boiler Co.	Boilers	10	.....	.....	.....
" "	Delaney Spring Works.	Springs	10	.....	.....	.....
" "	E. Gorthberg	Brass goods	24	.....	.....	.....
" "	O'Brien & Williams	Gas fixturers	6	.....	1	.....
" "	Detweller & Street.	Fireworks	40	80	20	.....
" "	Ban-Dinividdie	Bookbinding.	45	45	5	.....
" "	Eureka Hose Co.	Hose	10	.....	.....	.....
" "	Woodhouse & Co	Bronze	20	.....	.....	.....
" "	Spear & Co.	Bandages	4	4	.....	.....
" "	Passaic Zinc Co.	Zinc	200	.....	.....	.....
" "	J. J. Hines	Sashes	10	.....	.....	.....
" "	Caniste Sash Works	"	20	.....	.....	.....
" "	Lorillard & Co.	Tobacco and snuff	500	2500	260	1
" "	Tarter Chemical Works	Chemicals	30	.....	.....	.....
" "	A. A. Griffing Iron Works.	Radiators	600	.....	.....	.....
" "	Bergen Hair Works	Hair	3	2	2	1
" "	Boynton Furnace Co.	Stoves	150	.....	.....	.....
" "	N. J. Standard Watch Co.	Watches	103	100	5	.....
" "	Hitchings & Co.	Sashes	15	.....	.....	.....
" "	Liberty Soap Co.	Soap	8	.....	.....	.....
" "	Cosgrove William	Ventilators	25	.....	1	.....
" "	J. Toms	Oils	8	.....	1	.....
" "	John C. Fox.	Mantels	10	.....	1	.....
" "	M. Gross.	Machinery	9	.....	1	.....
" "	Baker Castor Oil Co.	Oil	50	.....	.....	.....
" "	Standard Wood Co.	Wood turning	35	.....	.....	.....
" "	U. S. Cocoanut Co.	Essence	9	6	3	1
" "	H. Turner.	Sashes	25	.....	.....	.....
" "	Frank Hall	Gloves	15	35	20	.....
" "	Dodge & Bliss	Boxes	75	.....	20	3
" "	J. McDonald	Desks	20	.....	.....	.....
" "	Hepe, Koven & Co.	Boilers	40	.....	.....	.....
" "	Reinecke Bros.	Vinegar	10	.....	.....	.....
" "	Wessels & Co.	Hats	40	30	.....	.....
" "	N. J. Steel Mat Co.	Mats	15	.....	.....	.....
" "	J. C. Desk Co.	Desks	30	.....	.....	.....
" "	Mehl & Co.	Pocketbooks.	210	100	50	3
" "	James Leo	Paper boxes	80	95	15	.....
" "	A. Goldman.	Hats	10	30	.....	.....
" "	Dixon's Crucible Works	Lead pencils.	199	148	125	.....
" "	J. Thorp	Woodwork	8	.....	.....	.....
" "	J. Cranshaw	Machinery	10	.....	.....	.....
" "	John Maslin	"	10	.....	.....	.....
" "	C. R. James	"	15	.....	.....	.....
" "	Wustran's Dry Plate Co.	Dry plates	20	3	.....	.....
" "	Carnes & Collins.	Machinery	50	.....	.....	.....
" "	Woolsey Paint Co.	Paint	100	5	.....	.....
" "	Stool & Co.	Brooms	10	.....	.....	.....
" "	Waldeck & Co.	Paper boxes	45	13	.....	.....
" "	Standard Oil Clothing Co.	Oil clothing	60	80	10	.....
" "	Hyderleine Soap Co.	Soap	6	6	.....	.....
" "	Daft Electric Co.	Motors	125	.....	.....	.....
" "	Royal Chemical Co.	Medicines	6	6	.....	.....
" "	R. H. Steel	Laundry	10	40	5	.....
" "	Greenfield Machine Co.	Machines	50	.....	.....	.....
" "	A. Hamil	Railings	20	.....	.....	.....
" "	Brown & Miller	Cleats	40	.....	.....	.....
" "	J. H. Gautier Co.	Bricks	100	.....	.....	.....
" "	Hudson Steam Laundry	Laundry	30	45	10	.....
" "	R. Hillers & Sons	Licorice	8	.....	.....	.....

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FACTORIES INSPECTED—FOURTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Jersey City	J. Taylor & Co	Dyeing	10	.....	.....	.....
" "	Pioneer Slate Co.	Mantels	10	.....	.....	.....
" "	N. J. Steam Laundry	Laundry	10	35	5	.....
" "	H. C. Knitting Co	Worsted goods	10	25	10	3
" "	A. Maloney	Wood turning	10	.....	.....	.....
" "	Gould & Headley	Machinery	10	.....	.....	.....
" "	Billington Bros.	Soap	8	.....	.....	.....
" "	M. Bemer	Cameras	10	.....	.....	.....
Town of Union	Swiss Embroidery	Embroideries	16	30	6	1
" "	A. Baumgartner	Hats	4	3	1	1
" "	Simon Bros	Silk	200	400	25	.....
" "	Bergenwood Silk Co	"	25	12	2	.....
" "	Clifton Silk Co.	"	35	65	26	1
" "	F. Rotherman	Worsted goods	.....	12	5	1
" "	H. Herold	Silk	7	15	10	.....
" "	M. Sontag	"	4	14	3	.....
" "	Union Granite Co	Tubs	15	.....	.....	.....
" "	B. Alt	Fishing tackle	4	.....	3	.....
" "	Oscar Rockpecke	Caps	7	2	.....	.....
" "	A. Haggi	Watch cases	50	.....	.....	.....
" "	Givernaud Bros.	Silk	300	300	25	.....
" "	Haffenstein	"	5	20	2	.....
" "	Town of Union Silk Mills	"	120	105	10	.....
" "	John Erskine & Co	"	135	65	10	.....
" "	Ware & Son	Shirts	10	70	.....	.....
" "	Peters' Brewery	Lager Beer	70	.....	.....	.....
" "	L. Inderkoff	Shirts	15	30	7	4
West Hoboken	John Comby	Silk	40	85	5	1
" "	Givernaud Bros.	"	350	150	20	.....
" "	Oesman & Co.	"	40	60	5	.....
" "	Palisade Mfg. Co.	Oil	4	4	.....	.....
" "	W. J. Alexander	Feathers	2	8	3	.....
" "	A. H. Alexander	Flowers	3	16	4	1
" "	J. J. Kennedy	Gloves	5	25	.....	.....
" "	G. A. Helf & Son	Brushes	30	.....	.....	.....
" "	G. Rowell	Silk	3	3	.....	.....
" "	Jos. Rath	"	15	30	5	2
" "	B. Fontaine	Fancy boxes	17	18	3	.....
" "	A. Bondell	Lamp shades	3	10	3	.....
" "	Favorite Silk Co.	Silk	20	130	10	.....
" "	Schwarzenbach & Co	"	350	150	40	1
" "	Bergenwood Paper Box Co	Paper boxes	10	30	4	1
Bayonne	McFarland & Co.	Silk	35	85	38	.....
"	Wm. McGregor	Plumbers' supplies	15	.....	.....	.....
"	Finch Stove Co.	Stoves	25	.....	.....	.....
"	Tide Water Oil Co.	Wax department	15	10	.....	.....
"	" " "	Refinery department	164	.....	.....	.....
"	" " "	Paraffine department	168	.....	.....	.....
"	" " "	Barrel department	271	.....	.....	.....
"	" " "	Mechanical department	288	.....	.....	.....
"	" " "	Case department	227	.....	10	.....
"	Standard Oil Co.	Shipping department	200	.....	20	.....
"	" "	Refinery department	327	.....	.....	.....
"	" "	Paraffine department	130	.....	.....	.....
"	" "	Mechanical department	250	.....	.....	.....
"	" "	Barrel department	900	.....	60	15
"	Oxford Copper Co	Copper	350	.....	.....	.....
"	Columbia Oil Co.	Oil	25	.....	.....	.....
"	Constable Hook Oil Co	"	35	.....	.....	.....
"	C. F. Reynolds	Paint	60	.....	.....	.....
West New York	Landrau Silk Co.	Silk	42	33	10	.....
" " "	L. & R. Wilcox	Lard	150	.....	5	.....
" " "	Lutz & Co	Surveyors' implements	20	.....	2	.....

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FACTORIES INSPECTED—FOURTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
West New York	American Thread Co	Thread	4	1	.....	.....
" " "	Contruat & Co.	Silk	20	60	.....	.....
Arlington	Arlington Mfg. Co.	Collars and cuffs	65	18	5	.....
"	Hoyt's Metal Co.	Metal	10	.....	.....	.....
"	Beckert's Machine Co.	Machines	80	.....	.....	.....
"	Standard Flint Co..	Flint paper	18	2	.....	.....
Harrison	Lagowitz & Co.	Trunks	300	7	25	.....
"	N. J. Adamant Co.	Plaster	10	.....	.....	.....
"	Durie & Davidson	Stone yard	50	.....	.....	.....
"	Kerr & Co.	Thread	70	25	10	.....
"	Hollingsworth & Co.	Steel	100	.....	.....	.....
"	Carr & Ball	Stone yard	25	.....	.....	.....
"	Herold & Co.	Cutlery	30	.....	.....	.....
"	Stewert & Hartzsohn	Shades	140	.....	22	1
"	Harrison Tannery	Leather	30	.....	4	.....
"	Hauck's Brewery	Beer	70	.....	.....	.....
"	Edison Lamp Co.	Lamps	300	115	40	2
Kearny	Clark's O. N. T. Thread Co.	Thread	300	1100	112	12
"	John Randell & Co	Sashes..	50	.....	.....	.....
"	Newark Machine Co.	Machines	60	.....	.....	.....
"	G Winnas	Hats..	40	20	4	.....
"	Marshall's Thread Co.	Thread	230	400	52	2
"	Nairn Linoleum	Linoleum	220	.....	30	.....
"	Clark's Mile End Thread Co.	Thread	200	600	50	2
"	Kearny Wire Works	Wire	30	5	5	.....
Hoboken	Meyenberg's..	Silk	125	75	10	.....
"	Keuffel, Esser & Co.	Surveying instruments	94	6	10	.....
"	American Lead Pencil Co.	Lead pencils	125	200	30	.....
"	Lehman & Clark	Pocketbooks	75	50	15	.....
"	Barnes & Hogan..	Paper	10	.....	.....	.....
"	James Reynolds	"	28	7	.....	.....
"	R. Neuman & Co	Leather	75	.....	.....	.....
"	N. Randell	Planing mill	8	.....	.....	.....
"	R. P. Francis, Jr.	" "	15	.....	.....	.....
"	Gahagan Bros.	" "	12	.....	.....	.....
"	Coogan & Co.	Laundry	8	8	.....	.....
"	Villar Bros	Corks	10	10	4	.....
"	R. Lowry	Paste	5	3	.....	1
"	A Redlinger	Leather	15	.....	.....	.....
"	Kitz & Grenfeler	Chemicals	8	.....	.....	.....
"	Mansfield & Fagan	Iron railings, &c.	75	.....	.....	.....
"	Progressive Iron Works.	" "	15	.....	.....	.....
"	Rob't Meyer	Ink	10	.....	.....	.....
"	Chapel, Chase & Maxwell	Coffins	75	15	.....	.....
"	John Boyle	Oil cloth	8	.....	.....	.....
"	George Fussel	Shades	25	.....	.....	.....
"	John Brown	Stone yard	200	.....	.....	.....
"	G. Hauser	Segars	25	.....	.....	.....
"	Demerest & Stagg	Stairs	10	.....	.....	.....
"	Hotop & Co	Varnish	10	.....	.....	.....
"	George Foecht	Iron buckets	50	.....	.....	.....
"	John McLaren	Boilers	75	.....	.....	.....
"	Snyder & McGran	Tallow	10	.....	.....	.....
"	Hoboken Land and Imp. Co.	Machine shops	75	.....	.....	.....
"	Fletcher & Co.	Machinery	350	.....	.....	.....
"	Steneck & Co	Soap	10	.....	.....	.....
"	Penna. R. R. Shops	Boat department	100	.....	.....	.....
"	Elysian Machine Shops	Machines	25	.....	.....	.....
"	Wm. Schremper	Brass goods	175	25	10	.....
"	Wetter & Blumstehli	Embroideries	21	7	2	.....
"	A Lankering	Segars	20	.....	.....	.....
"	James Harksen	Steam laundry	3	15	.....	.....

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CHANGES ORDERED AND CONDITION OF FACTORIES—FOURTH DISTRICT.

Location and Name of Company.	Changes Ordered.	Disposition of previous orders.	Health and safety.
Jersey City—			
John Karcher & Co. 1	Fan to carry dust off, &c	Partly	Not good.
Hog Abattoir 3	Guard belts, elevators and erect ventilators.	Carried out	Fair.
U. S. Fuel Co. 1	Guard fifty openings	Carried out	Not good.
N. J. Sheep and Wool Co. 2	Guard belts and stair openings	Carried out	Good.
J. J. Donhue 1	Guard shafting	Carried out	Good.
Oakley's Soap Works 1	Fire-escapes	Not erected	Fair.
W. O. Davey 1	Guard fly-wheel	Carried out	Good.
Mathiesen & Wichers 1	Fire-escapes	Not erected	Fair.
L. B. Schaffer 1	Keep main door unlocked	Carried out	Good.
John Lazier 1	Erect toilet-room for females		Fair.
C. Stohn 1	Guard fly-wheel and shaft	Carried out	Good.
Edison Phonograph Co. 1	Guard one belt	Carried ou	Good.
A. B. Cushing 2	Guard one belt; erect fire-escape	Not erected	Fair.
Brooklyn Cooperage Co. 2	Guard elevators and erect fire-escape	Carried out	Good.
L. & M. Rubber Co. 1	Guard belts	Carried out	Good.
Mathers' Sons 1	Guard belts	Carried out	Good.
A. Gross & Co 1	Guard hatch openings	Carried out	Good.
Ames & Co. 1	Guard fly-wheel		Good.
O'Brien & Williams 1	Guard shafting		Good.
P. Lorillard Co. 2	Guard shafting under sewing machines and four elevator openings	Carried out	Good.
N. J. Standard Watch Co. 1	Erect fire-escapes	Not erected	Fair.
Liberty Soap Co. 1	Guard fly-wheel and belt	Carried out	Fair.
Baker Castor Oil Co. 3	Guard belts, shafting and fly-wheel	Carried out	Good.
U. S. Cocoanut Co. 3	Guard belts, shafting and erect toilet-room for females	Carried out	Fair.
Frank Hall 2	Guard shafting under sewing machines, and erect fire-escape	Carried out	Good.
Dodge & Bliss	To discontinue working minors over sixty hours per week	Carried out	Good.
J. C. Desk Co. 1	Whitewash toilet-room	Carried out	Good.
Mehl & Co	To discontinue working minors over sixty hours per week	Carried out	Good.
James Leo 1	Erect fire-escape	Case pending in court	Fair.
A. Goldman 2	Guard fly-wheel; clean toilet-rooms	Carried out	Fair.
Dixon's Crucible Works 8	Guard eight belts	Carried out	Good.
Daft Electric Co. 1	Guard hatch openings	Carried out	Good.
R. H. Stell 1	Guard fly-wheel	Carried out	Good.
J. H. Gautier 1	Guard belts		Good.
Town of Union—			
A. Baumgartner 1	Erect fire-escape	Carried out	Good.
Clifton Silk Mills 1	Erect fire-escape	Not erected	Fair.
H. Wallace 1	Guard shafting under sewing machines	Carried out	Good.
L. Inderkoff 2	Guard belts and shafting	Carried out	Good.
West Hoboken—			
John Comby 1	Guard shafting	Carried out	Good.
Oesman & Co 2	Guard fly-wheel and erect fire-escape	Partly carried out	Fair.
J. J. Kennedy 1	Toilet-room for females	Pending	Fair.
Jos. Ratte 1	Guard gearing	Carried out	Good.
B. Fontaine 1	Guard one belt	Carried out	Good.
Favorite Silk Mill 1	Guard one belt	Carried out	Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—FOURTH DISTRICT—Continued.

LOCATION AND NAME OF COMPANY.		CHANGES ORDERED.	Disposition of previous orders.	Health and safety.
Bayonne—				
Tide Water Oil Co.	2	Guard fly-wheels and hatch openings	Carried out	Good.
Standard Oil Co.	21	Guard three fly-wheels, eighteen belts and shafting	Pending	Good.
West New York—				
Landran Silk Co.	1	Main door to open out	Carried out	Good.
L. & R. Wilcox Co.	2	Guard fly-wheel and vats	Carried out	Good.
Arlington Mfg. Co.	1	Guard shafting	Carried ont	Good.
Harrison—				
Lagowitz & Co.	3	Guard stair openings, shafting; erect fire-escapes	Not carried out	Not good.
Edison Lamp Co	1	Guard fly-wheel	Carried out	Good.
Stewart Hartzsohn	1	Guard stair openings	Carried out	Good.
Kearny—				
Clark's O. N. T. Co.	1	Box all exposed mules in spinning-room	Carried out	Good.
G. Winnas	1	Guard shafting under sewing machines	Carried out	Good.
Nairn Linoleum Co.	3	Blower in cork-room; guard one belt and erect fire-escape	Partly carried out	Fair.
Clark's Mile End Co.	1	Box all exposed mules in spinning-room	Carried out	Good.
Hoboken—				
Barnes & Hogan	1	Toilet-room for females	Pending	Not good.
R. Lowry	2	Erect fire-escape and remove obstructions from stairways	Partly carried out	Not good.
A. Reddlinger	1	Guard belts	Carried out	Good.
James Reynolds	1	Guard one belt		Good.
Wetter & Blumstehli	1	Toilet-room for females		Good.

ACCIDENTS REPORTED—FOURTH DISTRICT.

LOCATION.	NAME.	NAME OF COMPANY.	NATURE AND RESULT OF ACCIDENT.
Harrison.....	Maggie McDonald.....	Marshall Thread Co.....	Caught in spinning machine; scalp wound.
"	Catherine Lacey..	" " "	Caught in carding machine; loss of arm.
"	James Hayes.....	Clark's Mile End Works..	Caught in spinning machine; loss of arm.
Jersey City....	Eugene Kelly.....	Mattheson & Wichers.....	Fell in chimney; suffocated to death.
" "	Frederick Kissig. / Frederick Klohid	E. A. Gross.....	Explosion of a digester; flesh wounds.
" "	Fred. Greenwald.....	" "	Explosion of a digester; killed.
" "	Paul Kohelbars.....	Stuhm's Silk Works.....	Caught on shaft; broken arm.
Hoboken.....	A. Bastgan..... / G. Siples.....	Erkenbach Chemical Co..	Explosion of condenser; severely burned.
Harrison.....	John Manning.....	Clark's Mile End Works..	Caught in spinning machine; loss of arm.
Jersey City....	Godfrey J. Guenthal..	U. S. Fuel Co	Fell through a vent-hole; killed.
" "	Patrick Killian.....	Stratsfords Oakum Co.....	Caught in cylinder; loss of arm.
" "	Thos. Rafferty.....	Lorillard & Co.....	Adjusting a belt on a pulley; loss of arm.
" "	Michael Bender.....	Pattberg Bros.....	Caught in a circular saw; flesh wound.
" "	August Feidler	Mattheson & Wichers.....	Struck in the stomach by a shovel thrown by a machine; killed.
" "	Henry Doake..... / Patrick Kelly.....	Hirstler's Packing House	Bursting of an air chamber; killed.

MODEL SCHOOL-HOUSES.

Inspector J. S. Weinthal read the following paper before the convention :

MR. PRESIDENT, LADIES AND GENTLEMEN OF THE CONVENTION—The present age is one in which questions concerning the education of the masses may be said to demand considerable attention. To obtain this end, the important step is to provide buildings suitable for the needs of every branch of education, and so arranged as to facilitate the workings of the several departments.

It is certain that the more these matters are understood, the greater will be the importance attached to them.

The subject of this paper is an all-important one, and it is the purpose of the writer to deal briefly with the several heads which follow, and are without question important factors in the erection of an edifice to be devoted to educational training.

Investigation has shown most conclusively that improved dwellings mean increased length of life and a greater capacity for usefulness and enjoyment. Sound food and pure water are essential to good health. To a much greater extent is it the case with the air we breathe. A deficient or impure supply of air means failing energy of mind and body and general incapacity for the performance of the duties of life; this is particularly so in the case of the young, who need fresh, wholesome food, pure air and moderate exercise.

The selection of a site is of great importance. Let it be in a good, dry, healthy location, where there are but few sewer lines, factories or workshops, which emit noxious gases and pollute the air, and where the noisy clang of hammer and anvil cannot disturb the exercises or thought for study.

The soil should be dry and sandy, not loose, earthy material, from which spring foul gases to permeate the entire building. Low or swampy ground should be avoided; such ground requires additional

cost to provide proper foundation, which expense could with better economy be expended towards a suitable site.

Much study and care are required in the planning or arrangement of the several parts of a well-devised school building. The general plan should be as simple and straightforward as possible; all irregular rooms, passages or eccentricities of plan for purpose of exterior effect, should be avoided.

The main entrance and exits to be wide and on a direct line with staircases. In all cases the doors to open outward and lead direct to main street or to yard or passages which communicate with street.

The school or class-rooms should be of ample size for a maximum capacity of 60 pupils, with an allowance of at least 1,200 cubic feet of air space for each pupil. The arrangement of these rooms to be in direct communication with the main corridors and convenient to staircases for exit.

The question of isolating the class-rooms is dependent on the grade of instruction, and also on the needs of the locality in which the building is erected. In small towns or cities where it is necessary to economize, the class-rooms may be arranged for assembly puposes by means of large, glazed sliding doors, so as to form an assembly-room on each floor.

It is desirable, however, to have a separate room sufficiently large to accommodate the entire school, which shall be used for assembly purposes only.

Play courts for exercise should be provided where the site will not allow of an out-door recreation-ground. These courts should be, if possible, placed on a level with the grade, and well lighted and partly opening into uncovered yard at rear, so as to allow thorough ventilation, and afford, in some measure, the benefits of out-door exercise.

The plumbing and other sanitary work should be as simple and complete as modern improvement can devise.

The system of closets should be of the best manufacture. For this purpose I would recommend an open sink of iron, porcelain lined, with proper valves to regulate an automatic supply from a large tank, and connected on a direct line with main sewer. The space for location of closets to be enclosed in masonry, and not open directly into play courts. Special means of ventilation should be made by flues connected direct to main vent shaft.

Any complicated traps or contrivances which hinder the rapid dis-

charge of sewage are dangerous to health. Every soil-pipe to be carried full size above roof, and will act as ventilator to main sewer line.

It is to be noted that no provision is made for vent of street mains, except openings, which in many cases are placed near windows, thereby allowing foul gases to enter premises.

The traps in all cases to have back air vent, and should open, where practicable, into a common stack.

The supply for school fixtures and for drinking purposes to be independent.

A main water-supply of at least two-inch pipe should be run at two points of building with outlet on each floor, and with a sufficient length of fire-hose coiled ready for use in case of fire. The means at hand and prompt action may avoid a calamity.

Ample wardrobes, placed so as to be accessible and without interfering with the discipline of school, are necessary for each class-room. Separate rooms and wardrobes should be provided for teachers' use.

The suitable and convenient disposition of a staircase has always been regarded as a difficult problem in the planning of a building. Its situation depends on the object of the building and the purposes it is intended to serve.

The location of staircases in many buildings of a public character is too often overlooked; it is often a convenience of plan rather than the convenience and safety of the public.

The stairs in many cases are cramped with awkward landings, and poorly lighted. For a school building, they should be ample in affording speedy exit from each floor, and with more than one entrance, if possible, to stair platform.

By all means have the staircases for pupils fire-proof. These may be of slate or iron (the former, in the writer's opinion, is better), enclosed in brick walls or fire-proof partition blocks, and should be with easy rise and wide platform, and without winders, and with double turn. This latter method has been used in several late improvements in school buildings, and the advantage over long runs will be readily seen.

The staircases should not be narrow; four feet six inches is sufficiently wide, and five feet as a maximum width, unless a central rail is provided. Where staircases of the above width will not permit a speedy exit, it becomes a necessity to provide additional staircases rather than increase the width of one or two.

The staircases, and especially at start and landings, should be well lighted. Dark staircases prove to be veritable stumbling-blocks. A main or public stair should be placed convenient to central portion of building for the public or teachers, and if needed, may be used as an additional exit.

The building in all its parts should be of safe and thorough construction, and of such design as will at first sight clearly indicate its purposes and use.

Owing to necessary economy in many cases, it is quite out of the question to build what is known as a fire-proof building, having iron-beam construction and fire-proof arches, and brick or fire-proof partition walls; but, as already made mention, the stairs should be fire-proof and as little wood-work as possible made use of.

It would be well to consider the method of slow-burning construction, which consists of heavy girders and planking to floor, with concrete filling and fire-stops to prevent spread of fire from floor to floor. Where the necessary funds will allow, the furrings to walls and ceilings and all partitions should be of fire-proof blocking, or at least all plaster put on wire lathing instead of wood laths.

The finish of walls should be in cement, and so as to be made a smooth surface and washable, in order to clean down without injury; the finish of ceiling, if not on fire-block furrings, should be of metal, which is now inexpensive and of pleasing design.

The wall surfaces, where same occur between windows and on partitions, to be finished for blackboard use from sill of window to height of three feet six inches.

In place of the usual wainscot of wood, a finish of mould, on line with the window-sill and the wall, to floor, to be done with Keene's cement, in color, which would not only be durable, but prove effective in checking spread of fire.

The doors from class-rooms to open into spacious corridors; these doors, as well as outside doors, to open outward.

The principal requirements of a school building are light, heat and ventilation. A well-arranged building must necessarily have proper light. The light is dependent upon the location of building, but the arrangement of rooms should be so devised that the light be distributed to the furthest sides of the room, and at the left of the pupil.

The windows should be as wide as construction will permit, and about three feet six inches above floor level, and within a few inches of the ceiling.

Special attention should be given to the lighting of all corridors, and from windows opening into the outer air, or large ventilating skylights.

The subject of heating, or more properly speaking, heating and ventilation, has received much attention, and to-day, in the hands of many, is purely experimental in practicable uses. That the subject is not fully understood, is one reason for the many failures to successfully heat and ventilate buildings of a public character.

Before proceeding to discuss the difficulties of ventilation, let us consider the laws which govern the gases of the atmosphere—seventy-nine per cent. nitrogen, twenty-one per cent. oxygen and one volume of carbonic acid in 2,500 volumes of atmospheric air. Oxygen is the most important, being the sustaining power of animal life, nitrogen acting as a diluent. Air having passed through the lungs becomes changed, the oxygen lessened three to five per cent., and this is replaced by carbonic acid; the nitrogen remains unchanged. An ordinary person makes about twenty respirations a minute, passing at least a pint of air from the lungs at each expiration.

Thus will be seen the necessity of changing the air by which we are surrounded.

The air breathed is warmed, and becomes lighter, and consequently rises and passes away from us.

Carbonic acid gas is about one and one-half times heavier than ordinary air, and the tendency is to separate from the vitiated air and fall to the lower part of the room; this, however, is not always the case, for when mixed with other gases, as air expelled from the lungs and warmed, its property is to rise.

The object of ventilation is to restore the air to its natural purity; that is, to remove the vitiated air and supply fresh air. In some respects this can easily be accomplished, but to do so thoroughly, and without inconvenience to the pupils, is not an easy task.

Ventilation may be considered of two methods—the mechanical and the natural. The former may be successfully carried out where power is provided, and is generally conceded to be the more positive and efficient. With natural ventilation it must be understood that the two columns of air, one warmer and lighter than the other, the lighter ascends and the colder, or heavier, descends.

The air to be expelled must have room supplied by a like amount of air to take its place. There must be an inlet in order that the outlet may work. The problem is the location of these openings.

Experiments have proved that the vitiated air invariably rises to the highest part of the building, and that when proper inlets and outlets are provided the rate at which the air passes through the building is increased in proportion to the height and difference in temperature of the internal column of air over that of the external. The longer and narrower the shaft for carrying off the vitiated air, the better its operation.

The air to be taken from as low a point as convenient, and then discharged into the building as near the floor as shall been found expedient, the vitiated air being taken away at the highest point.

To overcome the difficulty of inconvenience to pupils of taking the air in at floor level, the openings should be conical or wedge-shaped, so as to distribute the air over a large space and without draught.

For large class-rooms, where it is necessary to remove a quantity of air, a large ventilating cowl or a number of cowls should be placed on the roof, with discharge ducts leading to the same from the flues in the rooms. The ventilators to be of such design as will effectually keep out rain and snow, and not merely arranged to prevent down draught, but to be movable and assist by means of the wind-power in drawing off the vitiated air in rooms. Where the motive power is not sufficient the quantity of air passing through may be increased by means of gas jets or coils of steam pipes, placed at base of main stack.

The usual method of heating by means of a chamber in basement having the required heating surface and bringing fresh air in contact with it before it is allowed to enter school-room, is not altogether successful; the air entering rooms is not always fresh and cool, but oppressive, being robbed of its invigorating qualities, because heated in excess of the temperature required to make up loss of heat through the cold surface of pipes, windows and other openings.

The air, by a natural law, rising to the ceiling, its place being filled by cold currents below, the floor is cold, on the principle of the old fire-place.

One of the best systems of direct radiation is by means of small pipes and a series of radiators placed under the windows of the class-rooms and in corridors and other apartments.

In the basement, locate one or two tubular boilers with steam pressure of about five pounds, the steam being conveyed through pipes run along basement ceiling and connected to radiators on each floor, the radiators to have valves for turning off steam at pleasure. The lower

part of the window sash to have a small frame to fall inward and allow the fresh air to enter clear above radiator; this inlet to be regulated so as to diffuse air over the room and to take an upward course, it then falls in gentle volumes, fresh and pure, while the floors and walls on the coldest sides are warmed by direct radiation.

The vitiated air escapes through flues as before suggested, and is carried to shaft or ducts in roof.

In the system of mechanical ventilation, the flues may be constructed on the above principle, and connected to ducts either at ceiling of basement leading into large shaft opening above highest point of roof, or by means of the roof space used as an exhaust chamber. At the outlet of these shafts, either in basement or roof, as the case may be, an exhaust-fan or air-propeller to be placed, and the capacity of flues, ducts or air shaft dependent on the amount of air to be removed, which should not be less than 1,200 to 1,500 cubic feet per hour for each pupil.

The wardrobes, corridors, toilet-rooms, play-courts to be also ventilated as above, and if possible, the wardrobes to have open-air ventilation by means of window.

The upper or transom sash-work of windows should have sash hung at bottom and open inward, so as to give an upward current to the air, and transom sash should be provided to doors and windows, so as to allow cross-ventilation.

Much more could be said in the matter of the several methods now in use for the heating and ventilation of buildings. A simple and inexpensive method has been suggested, which would meet ordinary requirements and prove effectual and serviceable.

The class of building which the author of this paper has in mind would be such as is now being erected in cities and towns throughout the country of from 10,000 to 20,000 population.

The same principles govern every building intended to be occupied by an assemblage of people, whether to be located in a small rural village or in the crowded precincts of a great city.

As before mentioned, let the building of a school-house be as simple in plan and construction as the site will allow. All excessive and costly ornaments should be omitted, and in their place good, enduring material, wrought by skilled artisans into a harmonious and pleasing design, should proclaim the greatness of our homes of free education.

FIFTH DISTRICT.

L. T. Fell, Esq.:

DEAR SIR—I herewith respectfully submit my second annual report, for the year ending October 30th, 1890, showing the many factories inspected, the number of children discharged, the number of accidents and their causes, and the number of permits granted to orphan children to enable them to obtain employment; and, also, the many requests made to have shafting, belts, elevators and machinery guarded, and fire-escapes erected, and the disposition of same. I wish to add here that the manufacturers, with very few exceptions, show a willingness to comply with all the requirements of the laws, that is truly commendable, and shows that they are in full sympathy with them.

I wish to call your attention to one matter that I deem of great importance as far as the Department of Factories, &c., and its relation to the Compulsory Education law are concerned. That is the compelling of children who have been in the very highest class or classes in our schools to attend day or night three months in each year. I think if the law was so amended that a certificate showing a proficiency in the branches taught in the higher classes would be sufficient to enable the holder of said certificate from attending school. I also think it would be a great help in the cause of education to allow no child to work in any mill or elsewhere, unless such child could read and write.

Respectfully submitted,

THOS. COGAN,
Deputy Inspector.

FACTORIES INSPECTED—FIFTH DISTRICT.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Paterson	R. & H. Adams	Cotton and silk	235	430	18	.....
"	Ashley & Bailey	Silk	350	350	25	.....
"	Australian Knitting Co	Hosiery	2	13	1	.....
"	Wm. Blackburn	Paper boxes	5	14	3	.....
"	Wm. Ball	Silk	10	5	2	.....
"	Henry L. Butler	"	7	23	1	.....
"	Bamford Bros	"	150	270	30	1
"	Butler Silk Mfg. Co	"	10	15	3	.....
"	Barbour's Mills	Thread	544	870	180	.....
"	P. & J. Bannington	Silk	25	50	3	.....
"	Beggs Steam Heating Co.	Steam heaters	30	.....	.....	.....
"	J. Brauns	Brewery	14	.....	.....	.....
"	Comforth & Marx	Silk	45	20	4	.....
"	Alfred Crew	"	24	8	2	.....
"	Cook's Locomotive Works	Locomotives	600	.....	.....	.....
"	Peter Casper	Silk	75	25	.....	.....
"	J. Crossly	Card cutter	5	.....	.....	.....
"	Cardinal & Becker	Silk	50	50	2	.....
"	Columbia Silk Co	"	12	15	3	.....
"	Clay & Groococks	"	100	100	4	.....
"	Andre Cardinal	"	100	150	4	.....
"	Wm Cochran	Card cutter	7	.....	3	.....
"	Domestic Tapestry Co	Silk tapestry	39	11	2	.....
"	Dexter & Lambert	Silk	200	450	35	.....
"	Doherty & Wadsworth	"	175	175	3	.....
"	Dolphin Mill	Jute	300	500	175	.....
"	Equity Silk Co	Silk	...	.....	.....	.....
"	Enterprise Silk Co	"	10	20	.....	.....
"	Empire Silk Co	"	70	70	.....	.....
"	Benj. Eastwood	Machinery	300	.....	.....	.....
"	Frank & Dugan	Silk	54	56	10	.....
"	Florence Silk Co	"	50	50	4	.....
"	—— Fritch	"	10	20	.....	.....
"	B Feeney	Cigars	18	.....	.....	.....
"	Grimshaw Bros	Silk	335	400	17	2
"	Grimshaw Mfg. Co	"	44	31	5	.....
"	M. J. Green	"	8	17	2	.....
"	Gregory Silk Mfg. Co	"	15	40	1	.....
"	Graham & Co	Brewery	48	.....	.....	.....
"	John Grish	Silk	14	4	.....	.....
"	A. Giannette	"	50	30	5	.....
"	Hamil Mill	"	220	80	22	.....
"	Hamil & Booth	"	165	135	21	.....
"	Haley & Healy	"	21	19	10	.....
"	M. J. Hawkes & Co	"	45	30	1	.....
"	Hess, Goldsmith & Co	"	50	100	7	.....
"	Horandt & Son	"	75	175	11	.....
"	Hopper & Scott	"	75	75	30	.....
"	John Hand & Sons	"	42	42	4	.....
"	Helvetia Mill	"	73	57	3	.....
"	Thomas Henshall	"	26	20	7	.....
"	W. D. Holmes	"	50	25	11	.....
"	Hinchcliff Bros	Brewery	4	.....	1	.....
"	F. Harding	Paper boxes	8	17	12	5
"	I. A. Hall & Co	Mill supplies	50	80	12	1
"	Hassall & Co	Silk	4	16	2	.....
"	Hayes Mfg. Co	Copper and brass	8	.....	.....	.....
"	Imperial Tapestry Co	Silk tapestry	13	2	.....	.....
"	Jackson & Jacquard	Machinery	35	.....	.....	.....
"	Johnson, Cowdin & Co	Silk	175	175	14	2
"	Katz Bros	Brewery	54	.....	.....	.....
"	Kearny & Foote	Files	190	.....	.....	.....
"	Lyons Silk Co	Silk	25	5	1	.....

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FACTORIES INSPECTED—FIFTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Paterson	David Lyndsay	Silk	5	6	.....	.....
"	Mackay & Rawson	"	37	23	12	1
"	McAllister & Co	"	40	37	6	.....
"	R. Meick & Co	"	50	50	6	.....
"	C. R. Meding & Co	"	120	110	11	.....
"	Wm. F. Milton & Co	"	7	8	4	.....
"	McGill & Farnhurst	"	19	7	2	.....
"	McLaughlin Bros	Silk braid	2	33	2	.....
"	McNab & Harlan	Brass goods	282	18	15	.....
"	Geo. H. Meisterman	Ribbon blocks	18	.....	8	.....
"	Manhattan Shirt Mills	Shirts	125	200	25	.....
"	Nightingale Bros., old mill	Silk	50	50	18	.....
"	" " new mill	"	60	190	5	.....
"	New York Silk Co	"	32	33	2	.....
"	N. Y. Extract of Wool Co	Shoddy	20	25	3	.....
"	New Jersey Silk Co	Silk	40	75	7	.....
"	Newberger & Co	"	40	80	4	.....
"	Oldham Fabric Co	"	50	28	.....	.....
"	Paragon Silk Co	"	45	95	12	.....
"	Paris Silk Co	"	9	5	.....	.....
"	Pioneer Silk Co	"	300	300	50	.....
"	Phœnix Mill	"	300	300	32	.....
"	Progress Mill	"	50	50	5	.....
"	Pelgram & Myers	"	300	200	11	.....
"	Paterson Ribbon Co	"	85	40	2	.....
"	Peerless Plush Co	Plush	58	12	3	.....
"	Passaic Knitting Co	Hosiery	2	14	12	.....
"	M. Price	Shirts	90	128	20	.....
"	Ramsey & Gore	Silk	90	50	8	.....
"	J. C. Ryle & Co	"	20	53	.....	.....
"	Reid & Lovett	"	40	46	22	.....
"	Wm. Robertson	"	40	25	.....	.....
"	Rittger, Allen & Co	"	6	40	3	.....
"	Jno. Royl & Son	Machinery	40	.....	.....	.....
"	Rogers Locomotive Works	Locomotives, &c	700	.....	.....	.....
"	Riverside Plastic Co	Chess, dominoes and checkers	28	12	4	.....
"	C. F. Richer	Silk waste	2	22	4	.....
"	Star Silk Co	Silk	25	5	1	.....
"	Wm. Strange Co	"	450	400	30	.....
"	Jno. Simpson & Co	"	44	12	2	.....
"	Schultz & Swartz	"	12	33	2	.....
"	Silberman & Co	"	100	150	10	.....
"	Sutherland & Edwards	Jute	22	38	3	.....
"	Spratler & Menell	Brewery	19	.....	.....	.....
"	J. C. Todd & Co	Jute	15	12	3	.....
"	" " "	Machinery	200	.....	.....	.....
"	Samuel Thorpe	Silk	18	28	7	1
"	J. W. Taylor & Co	"	8	18	1	.....
"	S. B. Thompson	Paper boxes	12	.....	.....	.....
"	J. Tynan	Silk	4	12	1	.....
"	Union Silk Co	"	20	40	6	.....
"	F. Ulrich	Mill supplies	11	14	1	.....
"	Van Riper & Co	Silk	30	30	4	.....
"	" "	Mill supplies	25	.....	1	.....
"	Van Houten Bros	Saw-mill	40	.....	.....	.....
"	Watson Machine Co	Machinery	125	.....	.....	.....
"	J. Walder	Mill supplies	65	65	6	.....
"	J. B. Ward	Brushes	13	.....	.....	.....
"	Westerhoff & Co	Silk	11	3	1	.....
Passaic	A. N. Ackerman	Sash, blinds, &c	18	.....	.....	.....
"	Bottany Mill	Worsteds	50	250	18	.....
"	L. Binns	Foundry	10	.....	.....	.....

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FACTORIES INSPECTED—FIFTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Passaic	Dundee Chemical Works	Chemicals	40			
"	Dundee Woolen Co	Woolens	83	35	12	
"	A. Ehman	Cigars	16	2		
"	Manhattan Print Works	Satinets	120	5	3	
"	Andrew McLean Mill	Mosquito netting, &c	200	50		
"	N.Y. Belting and Packing Co.	Rubber goods	160	40	10	1
"	N. Y. Okanite Co	Electric wires and cables	200	85	20	
"	J. A. Oakly	Machinery	5			
"	Passaic Print Works	Calico prints	390	60	10	
"	Passaic Woolen Co	Woolen goods	55	50	5	
"	Passaic Electric Light and Heating Co	Electric light, cars, &c	13			
"	Pitkin & Holdsworth	Worsteds	135	50	10	
"	Reid & Barry	Cotton goods	635	115	11	
"	Rittenhouse Mfg. Co.	Shawls, blankets, &c	200	250	18	
"	R. B. Saunders	Machinery	6			
"	Domestic Gas Machine Co.	Gas machines	11			
Clifton	American Washable Wall Paper Co	Wall paper	18		1	
"	Goodlatte Oil-Cloth Co	Oil-cloth	25		2	
Butler	Butler Hard Rubber Co	Combs, &c.	375	200	50	
Little Falls	Beaty Carpet Mfg. Co	Carpets	75	100	8	
Boonton	Pelgram & Meyers	Silk	124	101	30	
Lodi	Armitage Oil Cloth Co	Oil-cloth	10			
"	Burns Bros	Bleachery	35	65	3	
"	Lodi Chemical Works	Chemicals	25			
Midland Park	Holt Bros. & Co	Silk	18	22		
" "	A. Hengerveldt, Jr	"	30	70	5	
Hackensack	Ben J. Cooper & Co	Brick	55			
"	Felter Bros	"	42			
"	J. F. Gillies	"	57			
"	M. J. Gardiner	"	45			
"	J. H. Handfield	"	38			
"	Walls & Brown	"	30			
"	S. A. Smults	"	43			
"	Givernaud Bros	Silk	170	80	10	
"	Riverside Planing Mill	Saw-mill	10			
"	Ackerman Planing Mill	" "	11			
"	Empire Tile Stove Co	Stoves	10			
Nordhoff	Opaque Cloth Co	Cloth	15	3		
Lyndhurst	Duckert Portable House Co.	Portable houses	40		3	
"	McKee & Harrington	Tricycles, &c	95	15	5	
Rutherford	Jaeger & Co	Tinware	10			
Carlton Hill	Standard Bleachery	White goods	100	50	5	
Wallington	Anderson, Nickerson & Co.	Saw-mill	20			
Carlstadt	Carlstadt Watch Spring Co.	Watch springs	8			
"	Christie & Nailer	Shoes	30	15	5	
"	Klabers Marble Works	Marble	50			

CHANGES ORDERED AND CONDITION OF FACTORIES—FIFTH DISTRICT.

LOCATION AND NAME OF COMPANY.	CHANGES ORDERED.	Disposition of previous orders.	Health and safety.
Paterson—			
W. H. Blackburn	Fire-escape on Progress Mill	Not complied with	Unsafe.
Andre Cardinal	Belts guarded	Not complied with	New mill.
M. J. Green	Fire-escape	Obeying orders	Good.
Horandt & Son	Fire-escape	Promised to comply	Good.
Helvetia Mill	Fire-escape	Promised to comply	New mill.
Johnson, Cowdin & Co.	Belt guarded	Complied with	New mill.
McNabb & Harlan	Guard elevator	Complied with	Good.
Newberger & Co.	New water-closets	Complied with	Fair.
Oldham Fabric Co.	Fire-escape or stairway	Promised to comply	New mill.
J. C. Todd & Co.	Guard elevator	Promised to comply	Fair.
Passaic—			
Rittenhouse Mfg. Co.	Guard belts	Promised to comply	Fair.
N. Y. Okanite Co.	Guard belts	Complied with	New mill.
Lodi—			
Burns Bros'. Bleachery	Guard belts and elevator	Complied with	New mill.
Carlton Hill—			
Standard Bleachery	Box shafting	Promised to comply	Fair.
Paterson—			
Peerless Plush Co	Fire-escape	Not complied with	New mill.

ACCIDENTS REPORTED—FIFTH DISTRICT.

LOCATION.	NAME.	NAME OF COMPANY.	NATURE AND RESULT OF ACCIDENT.
Paterson....	Michael Leonard...	Adams Mills	Hand injured in carding machine.
Passaic	H. McGill.....	N. Y. Belting and Packing Co..	Foot crushed in cracker machine.
"	A. Van Keuren.....	N. Y. Okanite Co.....	Thumb crushed in strip-cutting machine.

SIXTH DISTRICT.

L. T. Fell, Inspector:

SIR—I respectfully submit the annual report of the Deputy Inspector of Factories and Workshops of the Sixth District of this department, for the year ending October 31st, 1890.

There has been a general willingness shown during the past year by the owners of factories and workshops not only to comply with all the requirements of the factory laws, but also to co-operate with the Inspector in the strict observance of the Compulsory Education act.

Very few if any children can now evade it, as the increased attendance at evening schools can testify, the total number compelled to attend during the past year being over five hundred.

I take this occasion to return thanks to the truant officer, Albert J. Haynes, whose report is here appended, for the able assistance he has rendered me and for the prompt manner in which he has attended every case I have sent him for investigation. The workings of the truant department in this city should be commended to all communities where none now exists, and steps should be taken immediately to have truant departments established in all the towns and villages of this district.

The total number of accidents that occurred during the past year is twenty-four, several of them of a slight nature, and four of which resulted in death. The following list contains the names of persons injured:

Alexanderia Van Berg	Hand caught in iron rollers.
Wm. Keeley	Arm lost while attempting to put belt on pulley.
Pat'k Solomon	Side torn by metal spike in iron castings.
Max Baur	Hand crushed in cutting machine.
Tobias Komoritz	Arm broken while putting belt on pulley.
Theodore Debus	Burned by melted metal.
Robert Brown	Foot crushed between steam rollers.
Wm. Laughlin	Hand cut by circular saw.

John Greubzel	Foot crushed between steam rollers.
Andrew Walton	Fingers taken off in gearing.
Wm. Porter	Burned by falling on hot metal.
Edward Eckert	Hand taken off by circular saw.
Thos. Haythorn	Arm taken off in carding machine.
Haskill Weiss	Foot crushed in elevator.
J. O. Rend	Arm broken in elevator shaft.
Thos. Purcell	Fingers lost on stamping machine.
Christian Lutz	Crushed on elevator.
Chas. Whealing	Fingers lost on facing machine.
Chas. Lorenzo	Hand crushed between rollers.
John Moore	Fell down elevator shaft; killed.
James B. Gormon	Fell off step ladder; died in three days.
Henry Dolphin	Fell down elevator shaft; killed.
Adolph Hinderer	Caught in elevator; killed.
Sofus Olsen	Killed by elevator falling.

Number of children found at work in factories under legal age, and discharged by Inspector	34
Number of factories inspected	608
Number of orders given in factories	131
Number of orders complied with up to date	88

All of which is respectfully submitted,

P. CALLAN,

Deputy Inspector, Sixth District.

REPORT OF TRUANT OFFICER.

NEWARK, N. J., January 1st, 1890.

To the Honorable Board of Police Commissioners:

GENTLEMEN—I herewith submit my report of the business of this office from September 1st to December 31st, 1889.

There have been six hundred (600) names of truant children sent to me for investigation, from the following sources, viz.:

Number of truant children reported from public schools (day)	104
Number of truant children reported from public schools (night)	145
Number of truant children reported from private schools	140
Number of children reported from Factory Inspector	211
Total	600

These cases have been investigated by me, notices served on the parents or guardians of the children, as required by law, and were disposed of in the following manner, viz.:

Number of children returned to school	569
Number of boys arrested, returned to their parents and then to school	8
Number of children sent to City Home (boys)	19
Number of children sent to City Home (girls)	4
Total	600

Respectfully submitted,

ALBERT J. HAYNES,
Truant Officer.

FACTORIES INSPECTED—SIXTH DISTRICT.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Newark	Electric Accumulator Co	Accumulators	70	.....	.....	.....
"	Safety Alarm Co	Safety alarms	9	.....	.....	.....
"	Asphaltic Roofing Co	Asphaltic roofs	20	.....	.....	.....
"	Tucker Letter and File Co	Automatic suspension cabinets	15	.....	.....	.....
"	Wm. T. Mersereau	Brass bedsteads	220	10	18	.....
"	C. M. Theabreath	" mountings	40	.....	.....	.....
"	Cahoun & Barnett	" saddlery hardware	11	110	8	.....
"	B. Conlan & Co	" ornaments	30	40	10	.....
"	George Havell	" "	175	75	12	.....
"	Riley & Osborn	" "	300	100	20	.....
"	Richard Sims	" and metal goods	15	.....	.....	.....
"	Thomas H. Brown	" mouldings	10	.....	.....	.....
"	James E. Mergott	" frames	48	2	10	.....
"	M. Gould & Son	" stair rods	60	7	.....	.....
"	Goverts & Co	" frames	75	30	10	4
"	Defanz & Co	" saddlery hardware	25	5	.....	.....
"	Newark Novelty Co	" ornaments	20	4	.....	.....
"	C. P. Gould	"	10	10	4	.....
"	Schailing's	" frames	10	.....	.....	.....
"	Durning & Co	"	10	.....	.....	.....
"	Devlin Bros	" mouldings	5	.....	1	1
"	Heller & Co	Dyeing and coloring	10	5	.....	.....
"	Eggen & Co	Traveling bags	30	35	.....	.....
"	R. C. Jenkinson	Bag frames	100	.....	6	.....
"	Neuman & Co	" "	80	.....	10	.....
"	Mumberg & Co	Buttons	25	75	9	2
"	Thomas Davis	"	55	5	.....	.....
"	Hubner & Son	" and pearl jewelry	38	12	.....	.....
"	McCuthon & Crane	Metal buttons	30	30	.....	.....
"	Henry Smith	Buttons	14	4	.....	.....
"	Frank & Co	"	30	120	15	.....
"	Pearsols Button Co	"	50	.....	.....	.....
"	F. Frentz	"	13	19	4	1
"	Toms & Read	Metal buttons	6	15	.....	.....
"	William Donovan	" "	25	45	.....	.....
"	New Jersey Button Co	" "	70	75	10	2
"	H. M. Yates & Co	Buttons	12	8	.....	.....
"	Finan & Matthew	"	10	.....	.....	.....
"	Otto Breintz	Bell handles	15	.....	5	.....
"	Albrecht & Koch	Bookbinding	25	10	.....	.....
"	Godfried Kreuger	Lager beer	100	.....	.....	.....
"	Wm. Hill	" "	37	.....	.....	.....
"	Ballentine & Co	" "	60	.....	.....	.....
"	Ballentine & Co	Beer and ale	170	.....	.....	.....
"	Joseph Hensler	Lager beer	55	.....	.....	.....
"	Charles Trefz	" "	44	.....	.....	.....
"	George W. Weidemayer	" "	15	.....	.....	.....
"	F. J. Kastner	" "	50	.....	.....	.....
"	J. Feigenspan	" "	65	.....	.....	.....
"	Home Brewing Co	" "	25	.....	.....	.....
"	Fred. Lisensky	" "	23	.....	.....	.....
"	Lyon & Sons	Beer and ale	50	.....	.....	.....
"	Newark Purse Frame Co	Brass frames	40	12	10	.....
"	Wm. P. Mockridge	" goods and jewelry	9	7	.....	.....
"	Wm. Titus	Baking	100	.....	.....	.....
"	Mangle & Schmidt	"	80	.....	.....	.....
"	Fritsche's	"	40	.....	.....	.....
"	Adam Turkes	"	40	.....	.....	.....
"	U. S. Butter Extractor Co	Butter extractors	22	.....	.....	.....
"	J. D. Marquett	Packing boxes	30	35	.....	.....
"	Gauch & Co	" "	85	65	16	5
"	Charles Osborn	Paper boxes	15	30	2	.....

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FACTORIES INSPECTED—SIXTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Newark	John Davidson	Paper boxes	15	60	4	.....
"	Mergot, Howell & Co	Fancy boxes	20	.....	4	.....
"	Charles Appel & Son	Cigar boxes	10	14	.....	.....
"	E. T. Hart	Paper boxes	13	50	.....	.....
"	C. W. Conery	Brushes	5	12	.....	.....
"	E. W. Dixon's	"	23	30	5	.....
"	Joseph Baldwin	Bits and spurs	20	.....	6	.....
"	Wm. Blum	Buckles	6	.....	3	.....
"	Wm. A. Burtzenhoffer	Cigars	8	.....	.....	.....
"	Joseph G. Glutting	"	6	.....	.....	.....
"	H. Donaldson	"	10	.....	.....	.....
"	Fridenthal & Adler	"	11	.....	.....	.....
"	Wm. Salter	"	2	5	.....	.....
"	J. B. Axt	"	7	.....	.....	.....
"	Crawford & Co.	" and tobacco	5	45	7	.....
"	H. Howarth	"	8	22	.....	.....
"	Wm. Kraft	Clothing	20	130	8	1
"	Jacob Meyer	"	30	100	.....	.....
"	Hammerslough Bros	"	25	65	10	1
"	John B. Dieffenthaler	"	12	30	1	.....
"	Charles H. Curtis	"	7	18	1	.....
"	Wenzel Koska	"	14	28	10	2
"	Peter Geiger	"	40	100	4	.....
"	John Fleming	"	5	20	2	.....
"	A. Steiner	"	10	20	8	.....
"	Jacob Schmidt	"	3	10	.....	.....
"	George Miller	"	4	26	.....	.....
"	Chris. Arnold	"	3	8	1	1
"	William Leven	"	12	6	.....	.....
"	Joseph Hass	"	4	8	.....	.....
"	Martin Singer	"	4	9	.....	.....
"	M. Kogel	"	2	8	.....	.....
"	Philip Rothger	"	5	15	.....	.....
"	George Braun	"	2	8	.....	.....
"	George Heller	"	3	9	1	1
"	A. Brutchman	"	15	10	.....	.....
"	Philip McDonnell	"	5	10	.....	.....
"	John Heabley	"	8	8	.....	.....
"	M. Freeman	"	3	7	3	.....
"	John Fried	"	25	25	3	.....
"	Philip Berz	"	20	5	.....	.....
"	J. Thumo	"	39	6	.....	.....
"	Mrs. Van Riper	"	5	19	.....	.....
"	John H. Wheaton	"	4	11	.....	.....
"	F. H. Wismer	"	100	200	.....	.....
"	John Henning	"	5	20	3	.....
"	Continental Corset Co.	Corsets	15	385	10	2
"	James Bowers & Co	"	14	386	8	5
"	Ferris Bros.	"	12	188	2	1
"	Crotty Bros.	"	2	58	.....	.....
"	Wingarten Bros.	"	1	74	1	.....
"	Bristol Corset Co.	"	3	72	5	2
"	Whiting & Smartwood	"	1	24	1	1
"	Wright's	Corset steels	2	28	14	3
"	G. W. Jackson	Corsets	5	120	4	1
"	John Bea	Horse collars	28	.....	.....	.....
"	Newark Lime & Cement Co.	Cement	80	.....	.....	.....
"	John Kersing	Composition	5	20	.....	.....
"	D. S. Plumb	Clock-works	30	.....	.....	.....
"	Bannister's	Cutlery	30	20	10	.....
"	Robert Meyer	Chemicals	6	.....	.....	.....
"	Passaic Chemical Co.	"	30	.....	.....	.....
"	Union Chemical Co.	" cream of tartar	17	.....	.....	.....

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FACTORIES INSPECTED—SIXTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Newark	Charles Cooper & Co.	Chemicals	68	2	.....	.....
"	James Quimby.	Carriages	100	.....	.....	.....
"	Wm. Streby.	Carriage hardware	60	5	.....	.....
"	Celluloid Novelty Co	Celluloid	200	300	.....	.....
"	Celluloid Mfg. Co.	"	150	.....	.....	.....
"	Celluloid Brush Co	"	150	50	.....	.....
"	Storms' Factory.	Elevators	15	.....	.....	.....
"	Eureka Cement Co	Cement	5	.....	.....	.....
"	Central R. R. Car Co.	Cars	100	.....	.....	.....
"	Hiller & Co	Dyeing and coloring	10	5	.....	.....
"	Hemmer Bros.	Desks	60	.....	.....	.....
"	Benjamin Bros.	Dress extenders	1	59	5	.....
"	H. Borneman	Embroidery	8	59	5	2
"	Thomas & George Stone	Engraving	50	.....	.....	.....
"	A. Schluter & Co.	"	15	.....	.....	.....
"	U. S. Electric Light and Power Co.	Electric light and power	300	60	.....	.....
"	Elastic Hair Co	Elastic hair	20	.....	.....	.....
"	Bradley & Craig.	Engraving	20	.....	.....	.....
"	Spencer Optical Co	Eyeglasses	104	16	15	.....
"	Lister Bros.	Fertilizers	470	30	.....	.....
"	Wilkinson, Gaddis & Co.	Flour	15	.....	.....	.....
"	F. F. Lane.	Fertilizers	122	3	.....	.....
"	H. S Miller	"	160	9	.....	.....
"	Heller Bros.	Files and rasps	125	.....	.....	.....
"	John Ray	" "	30	.....	.....	.....
"	L. Schaff & Co.	Gilt mouldings	15	.....	.....	.....
"	Newark Gas Co.	Gas	60	.....	.....	.....
"	Citizens Gaslight Co.	"	50	.....	.....	.....
"	Baulback & Co.	Gold and silver smelting	62	.....	.....	.....
"	Lee Long Bros.	Gold refining	12	.....	.....	.....
"	Meyer Mercy	Hats	70	25	2	.....
"	Yates & Wharton	"	240	60	.....	.....
"	Wheeler & Russell.	"	175	25	.....	.....
"	Ferry & Napier	"	130	70	.....	.....
"	Meyer Mercy	"	235	65	.....	.....
"	Joseph Schuman	"	120	30	.....	.....
"	C. F. Seitz & Son.	"	90	35	.....	.....
"	J. Rummel & Son.	"	95	35	.....	.....
"	G. M. Espenscheid.	"	76	24	.....	.....
"	Wheeler & Russell.	"	85	15	.....	.....
"	Albert Seitz	"	26	14	.....	.....
"	David Wolf	"	35	25	.....	.....
"	Wm. H. Neary	"	50	25	.....	.....
"	James Flish & Co	"	35	25	.....	.....
"	James Robertson	"	35	25	.....	.....
"	C. M. Hedden & Co.	"	270	30	.....	.....
"	G M. Mason	"	80	20	.....	.....
"	Bernard Daly	"	63	10	.....	.....
"	C. M. Hedden, Park Ave	"	35	16	.....	.....
"	Tyler Parmly	"	15	5	.....	.....
"	T. S Carley	"	160	20	.....	.....
"	H. Fulcher	"	58	8	.....	.....
"	Thomas Nickols	"	30	30	.....	.....
"	Budich & Zudizky	"	40	.....	.....	.....
"	Fairchild's	"	88	35	.....	1
"	Joseph Mercy	"	70	20	.....	.....
"	Elliston's	"	60	24	.....	.....
"	Meyer Mercy Mfg. Co.	"	100	10	2	.....
"	Meyer Mercy, Scott St.	"	200	50	10	.....
"	George Zute	" and hat machinery	100	3	2	.....
"	Jarvis & Co.	"	70	35	.....	.....
"	Kohn & Mercy.	"	60	15	.....	.....

FACTORIES INSPECTED—SIXTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Newark	P. McKeon	Hats	36	12	2	.....
"	Mooney's Hat Factory	"	60	25	.....	.....
"	Hermon's Factory	"	50	20	.....	.....
"	McClair & Davis	Straw hats	10	40	.....	.....
"	Mirk & Romberg	" "	.....	.....	.....	.....
"	Rutan & Pond	" "	14	30	10	.....
"	Douglass Forming Mill	Hat forming	80	10	.....	.....
"	Phiffer & Co	" "	25	12	.....	.....
"	Oscar Welligerode	" "	27	10	1	.....
"	J. H. Herman & Co	" blocks	18	.....	.....	.....
"	R. C. Winters	Harness	80	.....	4	.....
"	Peter Calhoun & Co	"	235	15	.....	.....
"	Demerest & Co	"	90	.....	.....	.....
"	Wm. Crabb & Co	"	17	.....	.....	.....
"	F. F. Beck & Son	"	111	.....	1	.....
"	F. W. Bonneau	"	27	3	.....	.....
"	Butler & Ward	" trimmings	18	25	.....	.....
"	S. S. Sargeant & Co	" "	74	26	8	.....
"	A. Albright	" "	100	125	.....	.....
"	P. Hayden	" "	100	7	.....	.....
"	Mahony & Clark	Saddlery hardware	14	.....	.....	.....
"	Newark Star Heel Plate Co	Heel plates	10	4	.....	.....
"	Smith Brothers	Harness and saddlery	17	3	.....	.....
"	Wm. Crabb & Co	Hackle pins	20	10	8	4
"	Baeder, Adamson & Co	Hair felt	48	12	.....	.....
"	Tomkins & Manderville	Harness	100	.....	.....	.....
"	Kuhnhold & Co	" trimmings	30	2	.....	.....
"	Sloan & Chace	Instruments	70	.....	.....	.....
"	Pomeroy & Sons	Ink	20	.....	.....	.....
"	Carter, Sloan & Co	Jewelry	185	65	.....	.....
"	Krementz & Co	"	100	25	.....	.....
"	Day & Clark	"	78	12	3	.....
"	Durand & Co	"	65	15	.....	.....
"	M. Krouse	"	70	.....	.....	.....
"	Shoemaker, Pickering & Co	"	80	4	.....	.....
"	Thomas G. Brown & Co	"	75	25	.....	.....
"	W. Riker	"	60	15	.....	.....
"	W. C. Edge & Son	"	95	5	.....	.....
"	Wm. Rich & Co	"	31	3	.....	.....
"	Carr & Battan	"	42	3	.....	.....
"	M. Huger	"	18	1	.....	.....
"	Charles Schuets & Son	"	55	5	.....	.....
"	A. Alling Reeves	"	12	6	.....	.....
"	Chempenos & Co	"	35	10	.....	.....
"	Meyhen & Co	"	13	.....	.....	.....
"	Elcox & Co	"	44	6	.....	.....
"	William H. Ball & Co	"	20	5	.....	.....
"	A. P. Morris	"	15	35	6	2
"	T. W. Adams & Co	"	20	2	.....	.....
"	Charles Knoby & Co	"	9	6	.....	.....
"	King & Co	"	9	.....	.....	.....
"	Dorrance & Long	"	14	1	.....	.....
"	Uhrg Alworth	"	5	1	.....	.....
"	Block & Bergfls	"	13	.....	.....	.....
"	A. Jewleman	"	11	4	.....	.....
"	Rothschild	"	21	4	.....	.....
"	T. Bassett Jewelry Co	"	7	.....	.....	.....
"	O. E. Hendric & Co	" gold chains	12	10	.....	.....
"	Sinnock & Sherrill	Lapidary work	33	2	.....	.....
"	E. D. Regaa	" "	5	1	.....	.....
"	Cogswell & Boulter	Ladies' ruffles	.....	40	.....	.....
"	J. Malloy	Leather	10	.....	.....	.....
"	C. L. & R. E. Smith	"	15	.....	.....	.....

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FACTORIES INSPECTED—SIXTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Newark	Cummings Bros.	Leather	40			
"	M. Reardon	"	30			
"	Seidenbach & Mahon	"	120			
"	John Riley	"	40			
"	Conroy & Weyrach	"	10			
"	Hugh Smith	"	100			
"	Charles Smith	"	15			
"	R. P. Lester	"	15			
"	Patrick Reiley	"	200			
"	Blanchard Bros. & Lane	"	150			
"	Stengel & Rothschild	"	70			
"	J. H. & J. W. Dawson	"	160			
"	E. S. Ward	"	55			
"	Riley & Mackin	"	15			
"	S Halsey & Son	"	180			
"	Henry Lang	"	40			
"	Meis & Egner	"	24			
"	Henry Lang	"	20			
"	M. Strouse	"	65			
"	Smith Bros	"	73		3	
"	Lowenberg	"	59			
"	T. P. Howell	"	150			
"	J. H. Halsey & Smith	"	150			
"	C W. Meyer & Son	"	50			
"	Robert Dingnell	"	15			
"	M. J. Halpin	"	17			
"	M. Caffrey	"	25			
"	Reuben Trier	"	17			
"	Cowfare & Co	"	35			
"	Cashon & Flynn	"	30			
"	J. A. Schaffer & Co	"	25		2	
"	Bingham	"	14			
"	Shattoc & Bingham	"	60			
"	Bentz, Ditsch & Betz	"	200		4	
"	Phœnix Leather Co	"	16			
"	John N. Moore	"	20			
"	Newark Kid Works	"	20			
"	John Duyre	"	16			
"	Charles McEvoy	"	50			
"	Smith & Co	"				
"	R. G. Solomon	"				
"	C. H. & J. D. Harrison	"	110			
"	H. P. Witzel	"	20			
"	John W. Carr	"	20			
"	Palmer & Smith	"	40			
"	Louis Meyer	"	20			
"	Schaffer & Co	"	25			
"	Albert C. Friedlander	"	10			
"	L. M. Smith & Son	"	12			
"	R G. Solomon	"	252	18		
"	Wm. R. King	" soles	2	18		
"	Bellingham's	" "				
"	Smith & Co	" "				
"	Fred. Quntz	" sporting goods	11	14		
"	J. Malloy & Co	"	10			
"	Newark Steam Laundry	Laundry	5	30	3	
"	American Steam Laundry	"				
"	Sun Laundry	"	12	18		
"	Troy City Laundry	"	10	30		
"	Hausbrook's Laundry	"	2	10		
"	B. & M. Letter Co	Letters	20	5		
"	Tucker Letter and File Co	" and files	15			
"	C. N. Lockwood	Lamps	18			

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FACTORIES INSPECTED—SIXTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Newark	F. Moller	Lamps	15	.....	.....	.....
"	J. Hubel	Locks	10	.....	.....	.....
"	Romer & Co.	"	20	1	.....	.....
"	Thomas Sleight	"	10	.....	.....	.....
"	Phœnix Lock Co.	"	35	3	3	.....
"	Romer & Co.	"	20	1	.....	.....
"	Kellogg & Douglass	Lead pipe	20	.....	.....	.....
"	Newark Licorice Works	Licorice	140	.....	.....	.....
"	Cogswell & Boulten	Ladies' ruffles	.....	40	.....	.....
"	Watts-Campbell Co.	Machinery	175	.....	.....	.....
"	Hews & Phillips	"	300	.....	.....	.....
"	Domestic Sewing Machine Co.	Sewing machines	1000	.....	2	.....
"	Charles Felder	Machinery	9	.....	.....	.....
"	E. O. Chace	"	10	.....	.....	.....
"	Gould & Eberhardt	"	72	.....	.....	.....
"	Tirrell's Gas Machines	Gas machines	12	.....	.....	.....
"	C. H. Redmond	Machines	20	.....	.....	.....
"	George Ohl	Machinery	22	.....	.....	.....
"	Atlas Mfg. Co.	"	25	.....	.....	.....
"	John M. Hawkins	"	18	.....	.....	.....
"	John R. Williams	"	15	.....	.....	.....
"	Wm H. Chapman	"	8	.....	.....	.....
"	H. C. Clauson	Machines	30	1	.....	.....
"	Skinner & Leary	Machinery	16	.....	.....	.....
"	A. B. Pierce & Co.	"	25	.....	.....	.....
"	J. Ross & Co.	Needles	10	3	2	.....
"	E. C. Hay	Machine castings	32	.....	.....	.....
"	Seymour & Whitlock	Machinery	40	.....	.....	.....
"	J. S. Monday	"	60	.....	.....	.....
"	Charles E. Green	"	18	.....	.....	.....
"	Edward Yost	"	16	.....	.....	.....
"	Maher & Robertson	Iron moulding	65	.....	.....	.....
"	H H. Richmond.	Metal castings	10	.....	2	.....
"	Smith & Landwell	Machinery	10	.....	.....	.....
"	Crane & Co	Metal castings	.....	.....	.....	.....
"	Cyrus Currier & Sons	Machinery	100	.....	.....	.....
"	Van Vliet's	Malt	20	.....	.....	.....
"	E. C. Hay	Machinery castings	7	.....	.....	.....
"	T. J. Preston	Oils	.....	.....	.....	.....
"	Barnett & Co.	Paints	20	.....	.....	.....
"	Hedges	Plumbers' supplies	30	.....	.....	.....
"	H. Bidwell	Pasteboard	5	2	.....	.....
"	Snelling & Matthews	Paper ware	5	2	.....	.....
"	Chambers & Ansley	Plumbers' supplies	35	.....	.....	.....
"	E. R. Carhuff	Potash	38	.....	.....	.....
"	Fulcher's	Rules	12	.....	.....	.....
"	S. O. Smith	"	6	.....	.....	.....
"	C. Roberts	Rubber goods	20	20	1	.....
"	L. Joy & Co	" "	17	2	.....	.....
"	Atha & Hughes	" and japanned cloth	138	.....	.....	.....
"	Heath & Son	" " " "	20	.....	.....	.....
"	Newark Rivet Works	Rivets	25	.....	2	.....
"	Daniel Delany	Springs	20	.....	.....	.....
"	Tomlinson Spring Co.	"	80	.....	.....	.....
"	Richardson Bros.	Saws	183	10	9	.....
"	Bless & Drake	Smoothing irons	60	.....	3	.....
"	H. M. Richmond	Scales	9	.....	2	.....
"	Basch & Greenfield	Shoddy	8	42	1	.....
"	Tiffany & Co.	Silver-plated ware	70	.....	.....	.....
"	Strouss & Joseph	Silk embroidery	5	55	2	.....
"	Etrick Art Tile Stoves	Stoves	6	.....	.....	.....
"	Newark Pottery	Stoneware	6	.....	.....	.....

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FACTORIES INSPECTED—SIXTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Newark	Zipp's Pottery	Stoneware	13	.....	.....	.....
"	E. E. Hogan	Shoes	140	10	.....	.....
"	Johnson & Murphy	"	135	30	.....	.....
"	Wm. Dorisch & Son	"	126	30	10	.....
"	Ober & Miller	"	80	20	.....	.....
"	James A. Bannister	"	75	75	6	.....
"	John Burge & Bros	"	50	25	4	.....
"	August Lentz	"	65	15	.....	.....
"	Felter Bros	"	20	21	3	.....
"	A. Schmidt & Co	"	65	15	.....	.....
"	Thomas Cort, Jr	"	55	8	.....	.....
"	J. Durning & Co	"	20	.....	.....	.....
"	A. J. Miller	"	6	12	.....	.....
"	Thomas Wharton	"	.....	20	.....	.....
"	L. Boyden	"	125	30	.....	.....
"	Fonday's	"	35	15	.....	.....
"	Weston's	Electric supplies	75	75	.....	.....
"	Whitman Saddle Co	Saddles	16	.....	.....	.....
"	Wheeler & Shiner	Shirts	10	90	.....	.....
"	Thomas Linnett	"	5	33	.....	.....
"	A. F. Meagher	"	6	24	1	.....
"	C. H. Booth	"	.....	9	.....	.....
"	Smith's Shirt Factory	"	4	26	.....	.....
"	Neal's Shirt Factory	"	2	15	.....	.....
"	M. Richnan	" and waists	2	8	3	.....
"	Central Stamping Co	Stamping	.....	.....	.....	.....
"	Lowentrout's Skate Works	Skates	100	.....	3	.....
"	Speath's Skate Works	"	10	.....	.....	.....
"	Illingworth's Steel Works	Steel	500	.....	4	.....
"	Harvey Steel Works	"	60	.....	.....	.....
"	Heinisch's Scissors Factory	Scissors	100	.....	1	.....
"	Weiss' Scissors Factory	"	85	.....	4	.....
"	Phœnix Stamping Co	Stamping tinware	10	.....	.....	.....
"	John Tobin & Co	" "	24	1	.....	.....
"	A. Turner & Co	" "	30	.....	.....	.....
"	New Jersey Steel & Metal Co	" tin and metal	24	1	.....	.....
"	H. W. Woodman	" " "	30	.....	.....	.....
"	Stillwell & Co	Edged tools	15	.....	.....	.....
"	Dodge & Lyons	" "	15	.....	.....	.....
"	H. L. Osborn	" "	30	.....	.....	.....
"	M. Price	" "	40	.....	.....	.....
"	Wm. Johnson	Tools	45	.....	2	.....
"	Henry Foster	"	18	.....	.....	.....
"	F. Wichelhaus	"	7	.....	.....	.....
"	C. Osborn	"	60	.....	5	.....
"	Scheuerman & Co	"	20	.....	.....	.....
"	Newark Edge Tool Co	"	80	.....	.....	.....
"	M. Einwechter	"	15	.....	.....	.....
"	J. Harding	"	20	.....	2	.....
"	Clark Thread Co. (O. N. T)	Thread	200	1300	60	.....
"	George B. Jenkinson	Trunks	450	20	20	.....
"	Simon Bros	"	258	12	.....	.....
"	Lissa & Co	"	63	5	.....	.....
"	Edgar Farmer	"	116	8	8	.....
"	Wm. O. Headley	"	245	5	10	.....
"	John Toler & Son	Trunk rollers	68	2	5	.....
"	George M. Ballard	" hardware	30	.....	.....	.....
"	Oscar Barnett	" "	40	.....	.....	.....
"	Campbell, Lane & Co	Tobacco	35	25	.....	.....
"	Ladies' Undergarment Co	Undergarments	5	125	16	.....
"	Ultramarine Works	Ultramarine blue	50	20	6	.....
"	Newark Watch Co	Watches	30	.....	.....	.....
"	Henry Lee Fort	Watch crowns	145	5	.....	.....

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FACTORIES INSPECTED—SIXTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Newark	Pinnel, May & Co	Watch cases	23	2	.....	.....
"	A. Miline	" crowns	25	.....	.....	.....
"	Essex Watch Case Co	" cases	40	6	.....	.....
"	Conivesier's	"	200	.....	.....	.....
"	C. T. Williamson	Wire novelties	58	2	.....	.....
"	Bogardus Art Co	Wood "	70	.....	.....	.....
"	John Sommers & Son	Woodware	25	.....	3	.....
"	J. H. Hath & Sons	Wood turning	44	.....	.....	.....
"	Dalrymple & Faitoute	" "	10	.....	.....	.....
"	Central Planing Mills	" "	35	.....	.....	.....
"	Ripley & Sons	" sawing	35	.....	.....	.....
"	Chapin Hall Lumber Co	" turning	160	.....	.....	.....
"	Newark Planing Co	" planing	20	.....	.....	.....
"	C. T. Miltz	" turning	7	.....	.....	.....
"	William Kirk	Wood turning and carpentering	50	.....	.....	.....
"	J. G. & A. C. Leib	Wooden articles	10	.....	1	.....
"	M. Danklefsen	Wood and ivory turning	8	.....	.....	.....
"	William King & Co	" turning	100	1	.....	.....
"	William King	" and paper boxes	8	15	.....	.....
"	Swain & Jones	" planing	16	.....	.....	.....
"	Hedden & Sons	" turning and planing	60	.....	.....	.....
"	Oliver Mfg. Co	Wagon wheels	15	.....	.....	.....
"	Searls, Randall & Co	Whip sockets	43	.....	.....	.....
"	Eagle Winker Co	Winkers	22	8	.....	.....
"	P. Jones & Co	Wheels	90	.....	.....	.....
"	Atlantic Window Shade Co	Window shades	25	10	.....	.....
"	Franklin Murphy & Co	Varnishes	50	.....	.....	.....
"	John L. Armitage	"	20	.....	.....	.....
"	New Jersey Zinc and Iron Co	Zinc	250	.....	.....	.....
Orange	Cummings & Matthews	Hats	150	50	.....	.....
"	No Name Hat Co	"	85	15	.....	.....
"	F. Berg & Co	"	103	137	.....	.....
"	McGall, Allan & Co	"	350	100	.....	.....
"	E. V. Connett	"	170	55	.....	.....
"	Austin Drew & Co	"	150	50	.....	.....
"	Puff & Yeomans	"	50	10	.....	.....
"	McChesney & Fisher	"	80	20	.....	.....
"	Long & Co	"	40	10	.....	.....
"	Dougherty & Co	"	30	12	.....	.....
"	Harrup, Gist & Co	"	60	30	.....	.....
"	J. J. Perrine	"	60	20	.....	.....
"	Dykman & Co	"	200	50	.....	.....
"	A. Brandes	"	40	12	.....	.....
"	Porter, Crofort & Co	"	120	30	.....	.....
"	Brannan & Co	"	120	30	.....	.....
"	Barry, Quinlan & Co	"	140	40	.....	.....
"	Smith & Sons	"	50	15	.....	.....
"	E. B. Whiting	"	25	10	.....	.....
"	James Young & Son	"	25	10	.....	.....
"	Kearscher's	"	60	20	.....	.....
"	T. Walker	"	60	20	.....	.....
"	H. G. & H. Gibbs	Hat forming	40	11	.....	.....
"	C. Manus & Co	Hats	100	10	.....	.....
"	Berg's	"	70	18	.....	.....
"	C. W. Houghton	"	70	12	.....	.....
"	Thomas Walker & Co	"	60	10	.....	.....
"	A. G. Glover's	"	100	20	.....	.....
"	Jenkins, Dodd & Co	Paper boxes	60	20	.....	.....
"	T. O. Engling	" "	27	13	4	.....
"	F. G. Barber	Sash and blinds	20	.....	.....	.....
"	P. B. Fairchild	Wood turning	50	.....	.....	.....

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FACTORIES INSPECTED—SIXTH DISTRICT—Continued.

LOCATION.	NAME OF COMPANY.	GOODS MANUFACTURED.	Employes—males.	Employes—females.	Under sixteen years.	Children discharged.
Orange	Smith & Dodd	Jackets	4	50	2	.....
"	Standard Cash Register Co	Cash registers	10	.....	.....	.....
"	Thomas S. Post	Planing	25	.....	.....	.....
Bloomfield	P. Hayden	Harness mountings	78	2	.....	.....
"	James Moffatt	Brass goods	15	.....	.....	.....
"	R. S. Grummon	Silver-plated metal	35	.....	.....	.....
"	H. K. & F. S. Benson	" " "	16	.....	.....	.....
"	J. Freeman & Co	Shoes	80	10	.....	.....
"	De Lavel's Separator Co	Machinery	25	.....	.....	.....
"	James Cresp	Sewing-machine belts	10	.....	.....	.....
"	Thomas Oakes & Co	Woolen goods	149	40	10	.....
"	Combination Rubber Co	Rubber "	45	2	2	.....
"	S. Gilson	Hats	29	11	.....	.....
"	Eller, Lane & Co	"	82	18	.....	.....
"	Ellor Bros	"	72	18	.....	.....
"	Thompson, Eller & Co	"	60	20	.....	.....
"	Medical and Surgical Plaster Co	Medical plasters	14	6	.....	.....
Millburn	H. Graves	Hats	20	15	.....	.....
"	F. Forrat	"	40	20	.....	.....
"	Diamond Mills	Paper	14	4	.....	.....
"	A. L. Anderson	Pasteboard	23	1	.....	.....
"	Dillon's	Hats	20	.....	.....	.....
"	Brown's	"	20	.....	.....	.....
"	Ward's	"	24	.....	.....	.....
"	W. F. & J. H. Wade	Pasteboard	12	.....	.....	.....
"	J. L. Meeker	"	6	.....	.....	.....
Belleville	De Witt Wire Co	Wire	75	75	15	.....
"	P. Hogan Hat Factory	Hats	35	15	.....	.....
"	Oscar Nenninger	Iron moulding	5	.....	.....	.....
"	Riverside Rubber Co	Rubber	53	15	12	.....
"	Eastwood Chemical Co	Chemicals	28	.....	.....	.....
"	Eastwood Wire Co	Wire	53	7	.....	.....
"	Passaic Steam Laundry	Laundry	150	75	.....	.....
East Orange	Seabury's	Medicinal plasters	58	167	3	.....
" "	E. J. Brooks	Railroad supplies	23	7	.....	.....
" "	Spiral Weld Tube Co	Spiral tubes	120	.....	.....	.....
West Orange	Edison's Laboratory	Electric apparatus	300	200	.....	.....
" "	George Cooke	Builders' supplies	18	.....	.....	.....
" "	Whiting's Factory	Hats	35	15	.....	.....
" "	H. Bulkley	Steam pumps	10	.....	.....	.....
Franklin	Kingsland's Paper Mill	Paper	29	16	.....	.....
Montclair	Samuel Crump & Co	Labels	235	40	10	.....
Maplewood	Maplewood Paper Mills	Paper	15	.....	.....	.....
South Orange	South Orange Hat Co	Hats	.....	.....	.....	.....

CHANGES ORDERED AND CONDITION OF FACTORIES—SIXTH DISTRICT.

LOCATION AND NAME OF COMPANY.	CHANGES ORDERED.	Disposition of previous orders.	Health and safety.
Newark—			
Electric Accumulator Co.	No orders necessary	None given	Good.
Safety Alarm Co.	No orders necessary	None given	Good.
Asphaltic Roofing Co	Fly-wheel and belt to be guarded		Fair.
Tucker Letter and File Co.	No orders necessary	None given	Good.
Wm. T. Mersereau	Four belts, gearing and elevator to be guarded		Good.
C. M. Theabreath	No orders necessary	None given	Good.
Calhoun, Barnett & Co.	No orders necessary	None given	Good.
B. Conlan & Co.	No orders necessary	None given	Good.
George Havill	No orders necessary	None given	Good.
Riley & Osborn	One belt to be guarded and fire-escape ordered	None given	Good.
Richard Sims	No orders necessary	None given	Good.
Thos. H. Brown	No orders necessary	None given	Good.
James E. Mergot	No orders necessary	None given	Good.
M. Gould & Son	No orders necessary	None given	Good.
Goerts & Co	No orders necessary	None given	Good.
Deffany & Co.	No orders necessary	None given	Good.
Newark Novelty Co.	No orders necessary	None given	Good.
C. P. Gould	No orders necessary	None given	Good.
Scharling's	Fire-escape ordered on building	None given	Good.
Durning & Co.	No orders necessary	None given	Good.
Devlin Bros	No orders necessary	None given	Good.
Westerhoff	No orders necessary	None given	Good.
Newman & Co.	No orders necessary	None given	Good.
Eggers & Co.	No orders necessary	None given	Good.
R. C. Jenkinson	No orders necessary	None given	Good.
Naumberg & Co.	No orders necessary	None given	Fair.
Thos. Davis	Shafting to be guarded	Complied with	Fair.
Hubner & Son	Shafting to be guarded		Good.
McCutchon & Crain	No orders necessary	None given	Good.
Henry Smith	No orders necessary	None given	Good.
Frank & Co.	To provide more water-closets	Complied with	Fair.
Pearsols Button Co.	To guard shafting	None given	Good.
F. Frentz	To guard ends of shafting	Complied with	Fair.
Toms & Reed	No orders necessary	None given	Good.
Wm. Donovan	To guard belt	Complied with	Good.
N. J. Button Co.	To erect fire-escape	Complied with	Good.
H. M. Yates	No orders necessary	None given	Good.
Wm. Blum	No orders necessary	None given	Good.
Albrecht & Koch	No orders necessary	None given	Good.
Godfried Kreuger	To guard twelve belts	Complied with	Good.
Ballentine & Co.	Five belts and fly-wheel to be guarded	Complied with	Good.
Ballentine & Co., ale and beer	No orders necessary	None given	Good.
Joseph Hensler	To guard three belts	Complied with	Good.
William Hills	Belts to be guarded	Complied with	Good.
Charles Trefz	To guard elevator and belts		Good.
George W. Weidenmayer	No orders necessary	None given	Good.
Franz J. Kastner	No orders necessary	None given	Good.
Feigenspan's Brewery	No orders necessary	None given	Good.
Home Brewing Co.	To guard five belts	Complied with	Good.
Fred. Lisensky	Four belts to be guarded	None given	Good.
Lyon & Son			Good.
Newark Purse Frame Co.	To erect fire-escape on factory	None given	Good.
William Mockridge	To provide separate closet for females	Complied with	Good.
William Titus	No orders necessary	None given	Good.
Mangle & Smith	No orders necessary	None given	Good.
Fritche's Bakery	No orders necessary	None given	Good.
Adam Turkes	No orders necessary	None given	Good.
E. T. Hart (Boxes)	Three belts to be guarded	Complied with	Good.
U. S. Butter Extractor Co.	No orders necessary	None given	Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—SIXTH DISTRICT—Continued.

Location and Name of Company.	Changes Ordered.	Disposition of previous orders.	Health and safety.
Newark—			
J. D. Marquett & Co	No orders necessary	None given	Good.
Gauch & Co	To screen stairs	Complied with	Good.
Charles Osborn	No orders necessary	None given	Good.
John Davidson	No orders necessary	None given	Good.
Mergot, Howell & Co	To guard belt and shafting	None given	Good.
Charles Appel & Son	To guard elevator opening	Complied with	Good.
C. W. Conery	No orders necessary	None given	Good.
E. W. Dixon	No orders necessary	None given	Good.
Joseph Baldwin	No orders necessary	None given	Good.
Wm. A. Brentzinghoffer	No orders necessary	None given	Good.
Joseph G. Glutting	No orders necessary	None given	Good.
H. Donaldson	No orders necessary	None given	Good.
Friedenthal & Adler	No orders necessary	None given	Good.
Wm. Salter	No orders necessary	None given	Good.
J. B. Axt	No orders necessary	None given	Good.
Crawford & Co	No orders necessary	None given	Good.
H. Howarth	No orders necessary	None given	Good.
Wm. Kraft	To erect fire-escape and to guard shaft.	Not complied with.	Fair.
Jacob Meyer	To erect fire-escape and to guard shaft.	Not complied with.	Fair.
Hammerslough Bros	No orders necessary	None given	Good.
J. V. Deiffenthaler	No orders necessary	None given	Good.
Charles H. Curtus	To guard shafting and lime paint	Not complied with.	Fair.
Wenzel Koska	No orders necessary	None given	Good.
Peter Geiger	No orders necessary	None given	Good.
John Fleming	No orders necessary	None given	Good.
A. Steiner	No orders necessary	None given	Good.
Jacob Schmidt	No orders necessary	None given	Good.
George Miller	No orders necessary	None given	Good.
Chris. Arnold	No orders necessary	None given	Good.
Wm. Leven	No orders necessary	None given	Good.
Joseph Hass	No orders necessary	None given	Good.
Martin Singer	No orders necessary	None given	Good.
M. Kogel	No orders necessary	None given	Good.
Philip Ruttiger	No orders necessary	None given	Good.
George Braun	No orders necessary	None given	Good.
George Heller	No orders necessary	None given	Good.
A. Brutchman	No orders necessary	None given	Good.
Philip McDonald	To provide separate closet for females.	None given	Fair.
John Heberly	No orders necessary	None given	Good.
M. Freeman	No orders necessary	None given	Good.
John Fried	No orders necessary	None given	Good.
Philip Berz	No orders necessary	None given	Good.
J. Thumo	No orders necessary	None given	Good.
Mrs. Van Riper	No orders necessary	None given	Good.
John H Wheaton	No orders necessary	None given	Good.
T. H. Wisiner	No orders necessary	None given	Good.
John Henning	No orders necessary	None given	Good.
Continental Corset Co	Shafting of machine to be guarded	None given	Good.
James Bowers & Co	Shafting of machine to be guarded	None given	Good.
Ferris Brothers	Shafting of machine to be guarded	Complied with	Best.
Crotty Brothers	Shafting of machine to be guarded	Complied with	Good.
Weingarten Brothers	Shafting of machine to be guarded		Good.
Bristol Corset Co	Shafting of machine to be guarded	Complied with	Good.
Whiting & Smartwood	Fire-escape ordered	Not complied with.	Fair.
Wright's Corset Steels	To guard one belt	Complied with	Fair.
J. W. Jackson	To guard shafting		Good.
John Bea	No orders given	None given	Good.
Newark Lime and Cement Co	No orders given	None given	Good.
John Kearsing	No orders given	None given	Good.
D. S. Plumb	No orders given	None given	Good.
Bannister's Cutlery	To guard belts	None given	Fair.

CHANGES ORDERED AND CONDITION OF FACTORIES—SIXTH DISTRICT—Continued.

LOCATION AND NAME OF COMPANY.	CHANGES ORDERED.	Disposition of previous orders.	Health and safety.
Newark—			
Robert Meyer	No changes necessary	None given	Good.
Passaic Chemical Co.	No changes necessary	None given	Good.
Union Chemical Co.	To guard three belts	None given	Good.
Charles Cooper & Co.	No orders necessary	None given	Good.
James Quimby.	No orders necessary	None given	Good.
Wm. Streby	No orders necessary	None given	Good.
Celluloid Novelty Co	No orders necessary	None given	Good.
Celluloid Manufacturing Co.	No orders necessary.	None given	Good.
Celluloid Brush Co	No orders necessary	None given	Good.
Eureka Cement Co	No orders necessary	None given	Good.
Central R R. Car Works	One belt to be guarded	Complied with	Good.
Hiller & Co., dyers.	No orders necessary		Good.
Hemmer Bros.	To erect fire-escape	Not complied with.	Good.
Benjamin Bros.	To guard shafting		Good.
H. Borneman	Light in halls		Good.
Strauss & Joseph	No orders necessary	None given	Good.
Thos. & George Stone	To guard elevator shaft	Complied with	Good.
A. Shlueter & Co	No orders necessary	None given	Good.
Newark Electric Light Co.	No orders necessary	None given	Good.
U. S Electric Light Co.	To cut off end of shaft in cellar	Complied with	Best.
Elastic Hair Co	No orders necessary	None given	Good.
Bradley & Craig	No orders necessary	None given	Good.
Spencer Optical Co	To guard shafting	Complied with	Good.
Lister Brothers	To place more lights in black-room	Complied with	Good.
Wilkinson, Gaddis & Co.	To guard three belts	Not complied with.	Good.
F. F. Lane	To guard belting	Complied with	Good.
H. S. Miller	No orders necessary	None given	Good.
Newark Gas Co	No orders necessary	None given	Good.
Citizens Gas Co	No orders necessary	None given	Good.
Baulback & Son	To guard fly-wheels and shafting	Complied with	Good.
Le Long Brothers	No orders necessary	None given	Good.
Yates & Wharton	Shafting to be guarded; also better ventilation	None given	Good.
Wheeler & Russell	To guard belts and shafting		Good.
Ferry & Napier	No orders necessary	None given	Good.
Meyer Mercy, Academy St.	To guard shafting	Complied with	Good.
Meyer Mercy, Scott St.	To guard shafting		Good.
Meyer Mercy Mfg. Co., Polk St.	To guard shafting and belts		Good.
Joseph Schuman	No orders necessary	None given	Good.
C. F. Seitz & Sons	Two belts and shafting to be guarded	Complied with	Fair.
J. Rummel & Son	No orders necessary	None given	Good.
J. M. Espenschied	No orders necessary	None given	Good.
Wheeler & Russell	No orders necessary	None given	Fair.
Albert Seitz	No orders necessary	None given	Good.
David Wolf	No orders necessary	None given	Good.
W. H. Neary	No orders necessary	None given	Good.
James Robertson	No orders necessary	None given	Good.
C. M. Hedden & Co., 13th Ave.	No orders necessary	None given	Good.
C. M. Hedden & Co., Park Ave	No orders necessary	None given	Good.
Bernard Daly	Shafting to be guarded		Fair.
McClair & Davis.	Shafting to be covered	Complied with	Good.
Mark & Romberg	Shafting to be guarded	Complied with	Good.
Rutan & Pond	Shafting to be guarded	Complied with	Good.
Douglass Forming Mill	Belts and pulleys to be guarded	Complied with	Good.
Phiffer & Co.	Pulleys to be guarded		Good.
Oscar Willigerode	Pulleys to be guarded		Good.
G. H. Herman & Co	No orders necessary	None given	Good.
R. C. Winters	No orders necessary	None given	Good.
Peters, Calhoun & Co.	To erect fire-escape	Not complied with.	Fair.
Demerest & Co.	No orders necessary	None given	Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—SIXTH DISTRICT—Continued.

LOCATION AND NAME OF COMPANY.		CHANGES ORDERED.	Disposition of previous orders.	Health and safety.
Newark—				
Wm. Crabb		No orders necessary	None given	Good.
F. F. Beck & Son		No orders necessary	None given	Good.
F. W. Bonneau		No orders necessary	None given	Good.
Butler & Ward		No orders necessary	None given	Good.
S. S. Sargent		No orders necessary	None given	Good.
A. Albright		No orders necessary	None given	Good.
P. Hayden	1	No orders necessary	None given	Good.
Mahony & Clark	1	To guard main belt and shaft	None given	Good.
Newark Star Heel Plate Co		No orders necessary	None given	Good.
Smith Brothers		No orders necessary	None given	Good.
Crabb & Co	1	To guard shafting	Complied with	Good.
Baeder, Adamson & Co	2	To guard belts and ventilate one room	Complied with	Good.
Kuhnhold & Co	1	To guard shafting	Complied with	Good.
Tomkins & Manderville		No orders necessary	None given	Good.
Tyler Parmly		No orders necessary	None given	Good.
T. S. Carley	1	To guard shafting	Not complied with.	Good.
H. Fulcher		No orders necessary	None given	Good.
Thomas Nichols	2	Main belt to be guarded; also pulleys.	None given	Good.
Budich & Zudizky		No orders necessary	None given	Good.
Fairchild's Hat Factory	1	Shafting to be guarded		Good.
Joseph Mercy		No orders necessary	None given	Good.
C. H. Alliston		No orders necessary	None given	Good.
George Yule	3	Two belts and shaft to be guarded	Complied with	Good.
Jarvis & Co		No orders necessary	None given	Good.
Mercy & Kohn		No orders necessary	None given	Good.
M. McKeon	1	Six fire buckets ordered	None given	Good.
Mooney's Hat Factory		No orders necessary	None given	Good.
Herman's Hat Factory		No orders necessary	None given	Good.
Heller Brothers	1	To guard belts and pulleys	Partly complied with	Good.
John Ray		No orders necessary	None given	Good.
Sloan & Chace		No orders necessary	None given	Good.
Pomeroy & Sons	1	To guard hoistway	Not complied with.	Good.
Carter, Sloan & Co	4	To guard three belts and screen stairs.	Complied with	Good.
Krements & Co	1	To guard one belt	Complied with	Good.
Day & Clark		No orders necessary	None given	Good.
Durand & Co		No orders necessary	None given	Good.
M. Krause		No orders necessary	None given	Good.
Shoemaker & Pickering		No orders necessary	None given	Good.
Thomas G. Brown & Co		No orders necessary	None given	Good.
William Riker		No orders necessary	None given	Good.
William C. Edge & Son		No orders necessary	None given	Good.
William Rich & Co		No orders necessary	None given	Good.
Carr & Batten		No orders necessary	None given	Good.
M. Huger		No orders necessary	None given	Good.
Charles Schuets & Son		No orders necessary	None given	Good.
A. Alling Reeves		No orders necessary	None given	Good.
Chempenos & Co		No orders necessary	None given	Good.
Mayhew & Co		No orders necessary	None given	Good.
Elcox & Co		No orders necessary	None given	Good.
William H. Ball & Co		No orders necessary	None given	Good.
A. P. Morris		No orders necessary	None given	Good.
T. W. Adams & Co		No orders necessary	None given	Good.
Charles Knobs & Co		No orders necessary	None given	Good.
King & Co		No orders necessary	None given	Good.
Darrence & Long		No orders necessary	None given	Good.
Uhry & Alroth		No orders necessary	None given	Good.
Block & Bergfls		No orders necessary	None given	Good.
A. Jerolman		No orders necessary	None given	Good.
Rothschild		No orders necessary	None given	Good.
Bassett Jewelry Co		No orders necessary	None given	Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—SIXTH DISTRICT—Continued.

Location and Name of Company.	CHANGES ORDERED.	Disposition of previous orders.	Health and safety.
Newark—			
E. O. Hendricks & Co	No orders necessary	None given	Good.
T. P. Howell & Co	Four belts to be guarded; bar on elevator	None given	Good.
J. H. Halsey & Smith	No changes ordered	None given	Good.
C. W. Meyer	No orders necessary	None given	Good.
Robert Dingwell	No orders necessary	None given	Good.
M. J. Halpin	No orders necessary	None given	Good.
M. Caffrey	No orders necessary	None given	Good.
Reuben Trier	No orders necessary	None given	Good.
Cowfare & Co	No orders necessary	None given	Good.
Cashon & Flynn	No orders necessary	None given	Good.
F. A. Scheaffer & Co	No orders necessary	None given	Good.
Bingham's Leather	No orders necessary	None given	Good.
Shattoc & Bingham	No orders necessary	None given	Good.
Bentz, Ditsch & Betz	No orders necessary	None given	Good.
Phœnix Leather Co	No orders necessary	None given	Good.
John Moore	No orders necessary	None given	Good.
Newark Kid Works	No orders necessary	None given	Good.
John Dywire	No orders necessary	None given	Good.
Charles McEvoy	No orders necessary	None given	Good.
Smith & Co	No orders necessary	None given	Good.
R. G. Salomon	No orders necessary	None given	Good.
C. H. & J. D. Harrison	No orders necessary	None given	Good.
H. P. Weitzel	No orders necessary	None given	Good.
John W. Carr	Main belt to be guarded	Not complied with.	Good.
Palmer & Smith	No orders necessary	None given	Good.
Louis Meyer	No orders necessary	None given	Good.
Schaffer & Co	No orders necessary	None given	Good.
Albert C. Freidlander	No orders necessary	None given	Good.
L. M. Smith & Son	No orders necessary	None given	Good.
Wm. R. King	No orders necessary	None given	Good.
Bellingham's	Two belts to be guarded	Complied with	Good.
Smith & Co	One belt to be guarded	Complied with	Good.
Fred. Quimby	Shafting to be guarded	None given	Good.
Cogswell & Boulter	Shafting to be guarded	Complied with	Good.
Newark Steam Laundry	No changes ordered	None given	Good.
The American			
Sun Laundry	No changes necessary	None given	Good.
Troy City Laundry	Fly-wheel to be guarded	None given	Good.
Hausbrook's Troy Laundry	No changes necessary	None given	Good.
B. & M. Letter Co	No changes necessary	None given	Good.
Tucker Letter and File Co	No changes necessary	None given	Good.
C. N. Lockwood	One belt to be guarded; closet to be put in order	Complied with	Good.
F. Moller	No orders necessary	None given	Good.
J. Hubel	No orders necessary	None given	Good.
Thomas Sleight	No orders necessary	None given	Good.
C. L. & R. E. Smith	No orders necessary	None given	Good.
Cummings Brothers	No orders necessary	None given	Good.
Seidenback & Mahone	No orders necessary	None given	Good.
John Riley	No orders necessary	None given	Good.
M. Reardon	No orders necessary	None given	Good.
Conroy & Weyrauch	No orders necessary	None given	Good.
Hugh Smith	No orders necessary	None given	Good.
Charles Smith	No orders necessary	None given	Good.
R. P. Lister	No orders necessary	None given	Good.
Patrick Riley & Sons	No orders necessary	None given	Good.
Blanchard Bros. & Lane	No orders necessary	None given	Good.
Stengel & Rothschild	No orders necessary	None given	Good.
J. H. & J. W. Dawson	No orders necessary	None given	Good.
E. S. Ward	No orders necessary	None given	Good.
Riley & Mackin	No orders necessary	None given	Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—SIXTH DISTRICT—Continued.

Location and Name of Company.	Changes Ordered.	Disposition of previous orders.	Health and safety.
Newark—			
S. Halsey & Son	No orders necessary	None given	Good.
Henry Lang	No orders necessary	None given	Good.
Mies & Egner	One belt to be guarded	Complied with	Good.
M. Strouse	No orders necessary	None given	Good.
Henry Land (Arch St.)	Two belts to be guarded	None given	Good.
Smith Brothers	No orders necessary	None given	Good.
A. Lowenberg	No orders necessary	None given	Good.
Phœnix Lock Co	No changes necessary	None given	Good.
Kellog & Douglass	No changes necessary	None given	Good.
Newark Licorice Works	No changes necessary	None given	Good.
Watts, Campbell & Co	No changes necessary	None given	Good.
Hews & Phillips	No changes necessary	None given	Good.
Domestic Sewing Machine Co	To guard one belt	Complied with	Good.
Charles Felder	Closet to be cleaned	Complied with	Good.
E. O. Chace	No orders necessary	None given	Good.
Gould & Eberhardt	To erect a fire-escape on building		Good.
Tirrells Gas Machine Co	To put guards on elevator	Complied with	Good.
C. H. Redman	No orders necessary	None given	Good.
George Ohl	No orders necessary	None given	Good.
Atlas Manufacturing Co	No orders necessary	None given	Good.
John M. Hawkins	No orders necessary	None given	Good.
John R. Williams	No orders necessary	None given	Good.
William H. Chapman	No orders necessary	None given	Good.
H. C. Clawson	To guard one belt	Complied with	Good.
Skinner & Leary	No orders necessary	None given	Good.
A. B. Pierce & Co	No orders necessary	None given	Good.
Seymour & Whitlock	No orders necessary	None given	Good.
J. S. Monday	No orders necessary	None given	Good.
Chas. E. Green	One belt to be guarded	Complied with	Good.
Edward Yost	No orders necessary	None given	Good.
Maher & Robertson	No orders necessary	None given	Good.
H. H. Richmond	No orders necessary	None given	Good.
Smith & Landwell	No orders necessary	None given	Good.
Crane & Co	No orders necessary	None given	Good.
Cyrus Currier & Sons	No orders necessary	None given	Good.
E. C. Hay	No orders necessary	None given	Good.
Van Vliet's Malt House	No orders necessary	None given	Good.
T. G. Preston	Two belts to be guarded	Complied with	Good.
Barnett & Co	No orders given		Good.
Hedges	No orders given		Good.
H Bidwell	To guard fly-wheel	Complied with	Good.
Snelling & Matthews	No orders necessary	None given	Good.
Chambers & Ansley	No orders necessary	None given	Good.
E. R. Carhuff	No orders necessary	None given	Good.
Bulcher's	No orders necessary	None given	Good.
S. O. Smith	No orders necessary	None given	Good.
C. Roberts	To guard gearing	Complied with	Good.
L. Joy & Co	To guard gearing	Complied with	Good.
Altha & Hughes	No orders necessary	None given	Good.
Heath & Son	No orders necessary	None given	Good.
Newark Rivet Co	To guard fly-wheel	Complied with	Good.
Daniel Daleney	No orders necessary	None given	Good.
Tomlinson Spring Co	No orders necessary	None given	Good.
Richardson Brothers	Three belts to be guarded	Complied with	Good.
Bless & Drake	Four belts to be guarded	Complied with	Good.
H. M. Richmond	No orders necessary	None given	Good.
Basch & Greenfield	No orders necessary	None given	Good.
Tiffeny & Co	No orders necessary	None given	Good.
Etrick Art Tile Stove Works	No orders necessary	None given	Good.
Strauss & Josephs	No orders necessary	None given	Good.
Newark Pottery	No orders necessary	None given	Good.
Zipps Pottery	No orders necessary	None given	Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—SIXTH DISTRICT—Continued.

LOCATION AND NAME OF COMPANY.	CHANGES ORDERED.	Disposition of previous orders.	Health and safety.
Newark—			
E. E. Hogan	No orders necessary	None given	Good.
Johnson & Murphy	To guard shafting	Complied with	Good.
William Dersch & Son	To guard shafting	Complied with	Good.
Ober & Miller	No orders necessary	None given	Good.
James A. Bannister	No orders necessary	None given	Good.
John Burger & Brother	To guard shafting	Not complied with.	Good.
August Lentz	To guard shafting	Not complied with	Good.
Fetter Brothers	To guard shaft and belt	Not complied with.	Good.
A. Schmidt & Co	No orders necessary	None given	Good.
Thomas Cort	No orders necessary	None given	Good.
J. Durning & Co	No orders necessary	None given	Good.
A. J. Miller	To guard shafting	Complied with	Fair.
Thomas Warton	No orders necessary	None given	Good.
L. Boyden	No orders necessary	None given	Good.
Fonday & Co	To guard shafting		Good.
Weston's	No orders necessary	None given	Good.
Whitman Saddle Co	No orders necessary	None given	Good.
Wheeler & Shiner	To guard shafting	Complied with	Good.
Thos. Linnett	To guard shafting	Complied with	Good.
A. T. Meagher	To guard shafting	Complied with	Good.
C. H. Booth	To guard shafting		Good.
Smith's Shirt Factory	To guard shafting	Complied with	Fair.
Neal's Shirt Factory	To guard shafting		Fair.
M. Richmond	To guard shafting and provide a separate closet for females		Good.
Central Stamping Co	No orders necessary	Complied with.	Good.
Lowentraut Skate Works	No orders necessary	None given	Good.
Speath's Skate Works	No orders necessary	None given	Good.
Illingworth Steel Works	Fly-wheel and shaft to be guarded	Complied with.	Good.
Harvey Steel Works	Pulleys to be guarded	Complied with.	Good.
R. Heinsch & Son	No orders necessary	None given	Good.
J. Wiss	No orders necessary	None given	Good.
Phœnix Stamping Co	No orders necessary	None given	Good.
John Tobin	No changes necessary	None given	Good.
A. Turner & Co	No changes necessary	None given	Good.
N. J. Steel and Metal Co	No changes necessary	None given	Good.
H. Woodman	No changes necessary	None given	Good.
Stillwell & Co	No changes necessary	None given	Good.
Dodge & Lyons	No changes necessary	None given	Good.
H. L Osborn	No changes necessary	None given	Good.
M. Price	No changes necessary	None given	Good.
Wm. Johnson	No changes necessary	None given	Good.
Henry Foster	No changes necessary	None given	Good.
F. Wichelheus	No changes necessary	None given	Good.
C. Osborn	No changes necessary	None given	Good.
Schuerman & Co	No changes necessary	None given	Good.
Newark Tool Co	No changes necessary	None given	Good.
M. Einwechter	No changes necessary	None given	Good.
J. Harding	Main belt to be guarded	None given	Good.
Clark Thread Co.	Mule pulleys to be guarded	Complied with.	Good.
George B. Jenkinson	Shafting of machine to be guarded	Complied with.	Good.
Simon Brothers	Circular saws to be guarded	Complied with.	Fair.
Lissa & Co	No orders necessary	None given	Good.
Edgar Farmer	No orders necessary	None given	Good.
Wm. O. Headley & Co	No orders necessary	None given	Good.
John Toler	No orders necessary	None given	Good.
George M. Ballard	No orders necessary	None given	Good.
Oscar Barnett	No orders necessary	None given	Good.
Campbell, Lane & Co	No orders necessary	None given	Good.
Ladies' Undergarments	Shafting to be guarded	Complied with	Good.
Ultramarine Works	One belt to be guarded	Complied with	Good.
Newark Co	No orders necessary	None given	Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—SIXTH DISTRICT—Continued.

Location and Name of Company.	Changes Ordered.	Disposition of previous orders.	Health and safety.
Newark—			
Henry Le Fort	No orders necessary	None given	Good.
Pinnele, May & Co	No orders necessary	None given	Good.
A. Miline	No orders necessary	None given	Good.
Essex Watch Case Co	No orders necessary	None given	Good.
Watch Case Co	No orders necessary	None given	Good.
C. T. Williamson	No orders necessary	None given	Good.
Bogardus Art Co	Three belts to be guarded	Complied with	Good.
John Somers & Son	Two belts to be guarded	Complied with	Good.
J. H. Hatt's Sons	No orders necessary	None given	Good.
Dalrymple & Faitoute	No orders necessary	None given	Good.
Central Planing Mill	Two belts to be guarded	Complied with	Good.
Ripley & Sons	Two belts to be guarded	Complied with	Good.
Chapin Hall Lumber Co	Three belts to be guarded	Complied with	Good.
Newark Planing			
C. L. Miltz	No orders necessary	None given	Good.
J. G. & A. C. Leibe	No orders necessary	None given	Good.
M. Danklefsen	No orders necessary	None given	Good.
William King & Co	Three belts to be guarded	Complied with	Good.
William King (boxes)	No orders necessary	None given	Good.
Swain & Jones	No orders necessary	None given	Good.
Hedden & Son	No orders necessary	None given	Good.
Oliver Manufacturing Co	No orders necessary	None given	Good.
Searls, Randell & Co	No orders necessary	None given	Good.
Eagle Winker Co	Closet to be repaired	Complied with	Good.
P. Jones & Co	Elevator to be guarded	Complied with	Good.
Atlantic Window Shade Co	No orders necessary	None given	Good.
Franklin Murphy & Co	No orders necessary	None given	Good.
John L. Armitage	No orders necessary	None given	Good.
New Jersey Zinc Works	Two fly-wheels and three belts to be guarded		Good.
Orange—			
Cummings & Mathews	Pulleys and shafts to be guarded	None given	Good.
No Name Hat Co	Pulleys to be guarded	None given	Good.
McGall, Allen & Co	Pulleys to be guarded	None given	Good.
Austin, Drew & Co	Fire-escape to be erected; shafting guarded	None given	Good.
Berg's	Fire-escape to be erected; closet for females; rail on stairway	None given	Good.
Puff & Yomans	No orders necessary	None given	Good.
McChesney & Fisher	No orders necessary	None given	Good.
Long & Co	No orders necessary	None given	Good.
Dougherty & Co	No orders necessary	None given	Good.
Harrup, Gist & Co	No orders necessary	None given	Good.
J. J. Perrine	Hand-rail on stairs	None given	Good.
A. B. Whiting	Shafting to be guarded	None given	Good.
Dy Kernan & Co	No orders necessary	None given	Good.
A. Brandes	No orders necessary	None given	Good.
Porter, Crawford & Co	No orders necessary	None given	Good.
Brannan & Co	Pulleys to be guarded	None given	Good.
Barry, Quinlan & Co	No orders necessary	None given	Good.
Smith & Sons	No orders necessary	None given	Good.
James Young & Son	No orders necessary	None given	Good.
Kearscher's	No orders necessary	None given	Good.
T. Walker	No orders necessary	None given	Good.
Berg's	Shafting to be guarded	None given	Fair.
C. W. Houghton	Entire building unfit for use and dangerous to employes	None given	Bad.
A. G. Glorer's	Very old buildings; ceilings very low; ventilation not good	None given	Fair.
C. Manus & Co	No orders necessary	None given	Good.
Jenkins, Dodd & Co	No orders necessary	None given	Good.
T. O. Engling	No orders given	None given	Good.

CHANGES ORDERED AND CONDITION OF FACTORIES—SIXTH DISTRICT—Continued.

Location and Name of Company.	Changes ordered.	Disposition of previous orders.	Health and safety.
Orange—			
P. B. Fairchild	No orders necessary	None given	Good.
Smith & Dodd	No orders necessary	None given	Good.
Sland Cash Register Co.	No orders necessary	None given	Good.
Thomas S. Post	No orders necessary	None given	Good.
Bloomfield—			
P. Hayden	No orders necessary	None given	Good.
James Moffatt	No orders necessary	None given	Good.
R. S. Grummon	No orders necessary	None given	Good.
H. K. & F. S. Benson	No orders necessary	None given	Good.
V. Freeman & Co.	To guard shafting and fly-wheel	None given	Good.
De Laval Separator Co.	To guard fly-wheel	Complied with	Good.
James Cresp	One belt to be guarded	Complied with	Good.
Thomas Oaks & Co.	No orders necessary	None given	Good.
Combination Rubber Co.	To guard gearing	Complied with	Good.
S. Gilson	To provide new closet	Complied with	Good.
Ellor, Law & Co.	To provide separate closet for females	Complied with	Good.
Ellor Brother	To provide separate closet	Complied with	Good.
Thompson, Ellor & Co.	None necessary	None given	Good.
Medical and Surgical Plaster Co.	None necessary	None given	Good.
Millburn—			
H. Graves (hats)	No orders necessary		Good.
F. Fourat (hats)	No orders necessary		Good.
Diamond Mills	Belts and pulleys to be guarded		Good.
A. L. Anderson	One belt to be guarded		Good.
Dillon's Hat Factory	No orders	No orders	Good.
Brown's Hat Factory	No orders	No orders	Good.
Ward's Hat Factory	No orders	No orders	Good.
W. F. & J. H. Wade	Belt, pulleys and shafting to be guarded	No orders	Good.
J. L. Meeker	No orders necessary	No orders	Good.
Belleville—			
De Witt Wire Co.	No orders necessary	None given	Good.
P. Hogan	To guard belt and stairs		Good.
Oscar Neiminger	No orders necessary	None given	Good.
Riverside Rubber Co.	To guard shaft and furnace; also belts	Complied with	Good.
Passaic Steam Laundry	Fo orders necessary	None given	Good.
Eastwood Chemical Co.	No orders necessary	None given	Good.
Eastwood Wire Co.	No orders necessary	None given	Good.
East Orange—			
Seabury Medical Plasters	Bridge connecting buildings ordered; also all gearing to be guarded	Complied with	Good.
E. J. Brooks R. R. Supplies	No orders necessary	None given	Good.
Spiral Weld Tube Co.	Fly-wheel and pulley to be guarded	Complied with	Good.
West Orange—			
Edison's Laboratory	No orders necessary	None given	Good.
George Cook	Belting to be guarded	Complied with	Good.
Whiting's Hat Factory	Shafting to be guarded		Good.
H. Bulkley	No orders necessary	None given	Good.
Franklin—			
Kingsland's Paper Mill	Two belts to be guarded; also shaft		Good.
Montclair—			
Samuel Crump & Co.	None ordered	None given	Good.
Maplewood—			
Maplewood Paper Mills	No changes necessary	None given	Good.
South Orange—			
South Orange Hat Co.	None ordered	None given	

For accidents see pp 81 & 82

THE NECESSITY OF STOPPING POWER QUICKLY IN CASE OF ACCIDENTS.

BY INSPECTOR CALLAN.

Inspector Callan read the following paper before the convention:

Notwithstanding the fact that many manufacturers have given careful attention to the work of placing proper safeguards around the dangerous parts of the machinery in use by them, and the strict enforcement of the laws bearing upon this subject by the Factory Inspector, it is still a lamentable fact that either through the carelessness or ignorance of the operator or where the machinery is of such a nature that it is not possible to guard it, accidents are continually occurring. This being the case the question arises, and look at it as we may, it is a very important one, and worthy of the most careful consideration of manufacturers, to know what should be done under the circumstances.

In my opinion it is to provide the quickest and best means that can be devised for stopping the power, in order that the unfortunate who happens to be caught may in the quickest possible time be extricated from the deadly hold of the flying pulley, the sharp and relentless teeth of the gearing, the clutch of the silently-revolving shaft or swift-gliding belt that catches up its victim, to be hurled around the ponderous fly-wheel to instant death.

What devices have we in use at present for stopping the power quickly? In the Sixth district of this department, comprising Essex county, I find several kinds of devices in use, and in some factories, I regret to say, there are none at all, but trust to luck to meet exigencies. Should an accident occur word must be sent to the engine-room, generally located in the basement or yard of the factory. Let us imagine for a moment the frightful torture of a fellow-being in being mangled by machinery, to whom seconds are ages, while word is being sent to stop the power, which is very often stopped too late, for death steps in and ends all suffering; or if not death, there remains only a

helpless cripple for life and a career of usefulness ruined, which might have been saved had the proper means of stopping the power promptly been at hand. Next to sending word to the engine-room I find a sort of signal in use by a certain number of knocks on the floor over the engine-room, understood when given and heard, to "Stop!"

Others again make use of a hole in the floor, through which communication with the engineer can be had. In many factories the loose pulley is used, and in a few there are speaking tubes and electric bells. But, with all these devices, giving due credit to each if they were a proper and effectual means of communication with the engineer, he is often obliged to be away from his engine, for in some of the factories visited I find that either through motives of economy or something else, their owners will not employ an engineer unless he is willing to be also a man of all work, and do odd jobs about the factory, such as cutting wood in the yard, or grooming the employer's horse in the stable. In one factory visited, employing two hundred hands with a forty-horse-power engine and large boiler located in the basement, I found the engine-room deserted, and the engineer, so-called, a boy seventeen years old, in the adjoining lot playing base-ball.

I think the sooner the laws of New Jersey are amended so that none but competent engineers will be permitted to run engines, the safer it will be for the lives and limbs of the working people of the State.

Now, just what seems to be wanted, and which will come nearest to the desired end, is a cut-off, which will stop the power immediately from any part of a factory, no matter whether the engineer be at his post or not.

There is such a device in use in one factory in Newark, which seems to answer this purpose. It is known as the "Electric Safety Stop," which by the mere pressing of a button, requiring no skill or special judgment to execute, will not only stop the swiftest power instantly, but the momentum also. The simplicity of the device, and the apparent positive nature of its action, leads me to commend it to all proprietors of factories and workshops who use steam power. It can be seen in operation at the shoe manufacturing establishment of E. E. Hogan, Central avenue, Newark, and those who have the safety of their employes at heart would do well to visit the place where it is in operation, and if it meets with their approval, to place it at once within the reach of the youngest child, the greatest novice or the least informed in their employ.

UPON THE NECESSITY OF A SYSTEM OF FIRE DRILL IN FACTORIES.

BY INSPECTOR CALLAN.

Of all the dangers that threaten the lives of employes in the large and crowded factories of our cities and towns, the most imminent ever threatening, and that which needs to be most carefully guarded against is fire. So great is the fear of this deadly element that even the mere cry of fire, where none really existed, frequently caused panic, excitement and loss of life; it becomes, therefore, one of the highest duties of the Factory Inspectors, to whom the State has, in a special manner, entrusted the lives of many of its people, to study well this all-important subject, and to ascertain as far as possible the best means of prevention and escape. With this thought in view I gave much attention during the past year to this matter, and, as I visited the great factories in my district, noted down the different modes and contrivances that are in general use; and while I do not pretend to tell anything new, I may, perhaps, by mentioning this subject in my report, be the means of opening up avenues of thought on it to others.

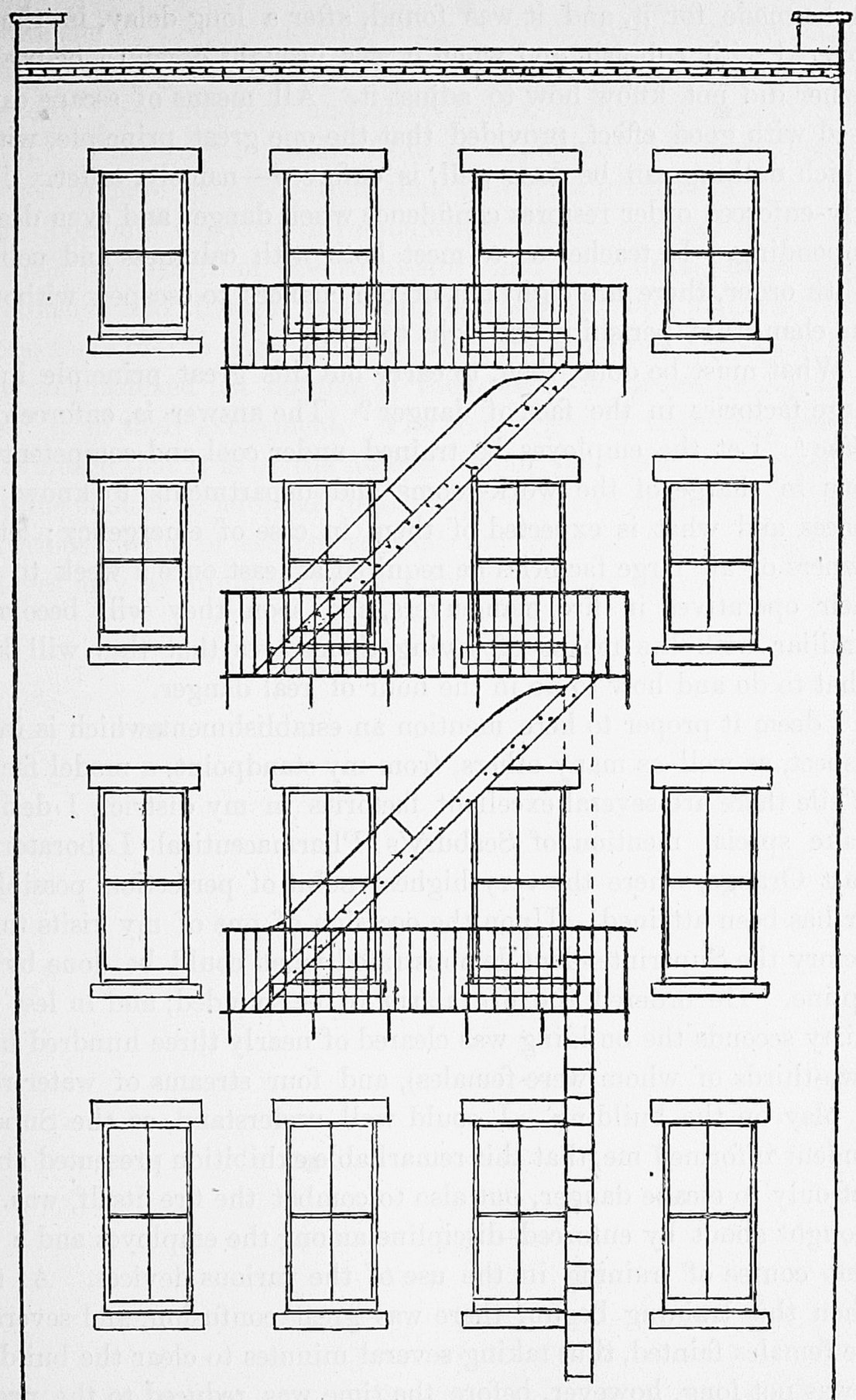
For the prevention of fire in the various factories visited, I have found almost every contrivance worthy of notice, namely: the steam pump, the stand-pipe and hose, the automatic sprinkler, the chemical engine, the portable fire extinguisher, the hand grenade, and water-tank with buckets and cups. The work-rooms of every large factory, particularly where easily-ignited or combustible goods are manufactured or used, should be supplied with all or most of these appliances. From what I can learn from those who have had occasion to use them, the automatic sprinklers are the most effective for work-rooms. The reasons given are that, being placed overhead, they will drench all parts of the room at once and with great expedition; besides, they are not an obstruction to egress, which many other contrivances are, especially where, as is often the case, there is but one means of exit.

For general use, the steam pump and chemical engine are considered the best. The portable extinguisher, hand grenades and buckets are good also, but no large factory should depend on them alone.

The modes of escape in general use are as follows: The tower stairway; the stout, outside iron ladder, with a landing at each story; the perpendicular ladder, reaching from the ground to the roof; the rope and pulley fire-escape, and the canvas shute. There are two other modes which some owners of factories are very anxious to impress on the mind of the Inspector as excellent escapes, but I cannot class them as such. One is the scuttle-hole in the roof, through which the employes can gain access to the roofs of adjoining buildings, and the other is the elevator. The former as a fire-escape is absurd, but as a means of exit it is better than none.

The elevator is always liable to accident, and, in time of fire, acts as a flue for the smoke and flames. In my judgment, a law should be enacted requiring that all elevator-doors should have a metal covering, and should be immediately closed upon the alarm of fire. The very best means of egress is the tower stairway; it is by this stairway that the operatives go to and from their work—they know it, are used to it, and prefer it to any other means. It should in all cases be properly constructed, and provided with doors that swing outward. Here let me say, in regard to doors, that I have found them opening in, out and both ways, and on slides and to be raised up. The law should, in my opinion, require that all outside doors, whether main or not, should open outward, and all inside doors should swing both ways.

The perpendicular iron ladder is not a good arrangement. It is so straight that few, especially females, could muster courage enough to descend it, even when moved by fear. It should be replaced as soon as possible by the slanting step-ladder escape, as illustrated on opposite page of this report. This is, I think, one of the best outside fire-escapes yet invented, and is less liable to accident than any of the others. The portable rope and pulley arrangement is good in its way, but should not be solely depended upon in large establishments, except as an adjunct, and then it should be always at hand and ready for use, and not thrown carelessly in some corner until needed, as I found it in a factory occupying the fourth floor of a large building where sixty girls were employed. The owner of this factory prided himself upon having an exemplary fire-escape. Being anxious to see it, search had



This diagram is intended to give a general idea only of an approved form of step-ladder fire-escape. The materials must be of the proper size and strength for the purpose and place for which it is to be used, and it must always be secured to the building in the best possible manner, as prescribed by Section 4 of the Act of 1887.

to be made for it, and it was found, after a long delay, in the attic covered with rubbish, and when it was brought down to be used the owner did not know how to adjust it. All means of escape can be used with good effect, provided that the one great principle, without which nothing can be done well, is enforced—namely, order. Properly-enforced order restores confidence when danger and even death is impending. It teaches us to meet both with calmness and courage. With order, there are eight out of ten chances to escape; without it, the chances of perishing are eight to ten.

What must be done, then, to carry out this great principle in our large factories in the face of danger? The answer is, enforce *discipline!* Let the employes be trained under cool and competent persons in charge of the work-rooms and departments, to know their places and what is expected of them in case of emergency; let the owners of all large factories be required at least once a week to drill their operatives in fire manœuvers, and soon they will become so familiar with the means of saving themselves that they will know what to do and how to do in the hour of real danger.

I deem it proper to here mention an establishment which is in this respect, as well as many others, from my standpoint, a model factory. While there are several excellent factories in my district, I desire to make special mention of Seabury's Pharmaceutical Laboratory, at East Orange, where the very highest point of perfection possible so far has been attained. Upon the occasion of one of my visits to this factory the Superintendent demonstrated what could be done by discipline. He ordered the fire alarm to be sounded, and in less than thirty seconds the building was cleared of nearly three hundred hands (two-thirds of whom were females), and four streams of water ready to play on the building. I could well understand, as the Superintendent informed me, that this remarkable exhibition presented ability not only to escape danger, but also to combat the fire itself, was only brought about by enforced discipline among the employes and a diligent course of training in the use of the various devices. At first, when this training begun, there was great confusion, and several of the females fainted, thus taking several minutes to clear the building; it was not long, however, before the time was reduced to the present standard. This goes to show not only for the protection of the employes, but for the employers also, what can be done when there is a system of fire drill in their works.

I consider it proper, in concluding, to mention another factory, in contrast with the one last spoken of—a lead-pencil factory, employing about three hundred and fifty hands, eighty of whom were females. A fire occurred there from an explosion of lead parings, or supposed to have occurred from that source; a great rush was made for the doors and windows in rooms where the fire was not near; several girls jumped from the third-story and were hurt, one of them dangerously, and though the building is well supplied with fire-escapes, some of the girls jumped from the windows which the fire-escape was fastened to; not one of them used the fire-escape, or even noticed it in their excitement. The comparison is, therefore, conclusive evidence that it is of the highest importance that some mode of discipline should be adopted in all large works in addition to having the various modes of escape, so that the greatest of all dangers to employes may be minimized to the lowest possible degree.

FACTORY LAWS.

An Act to limit the age and employment-hours of labor of children, minors and women, and to appoint an inspector for the enforcement of the same.

Approved March 5th, 1883.

SECTION 1. That after the fourth day of July, one thousand eight hundred and eighty-three, no boy under the age of twelve years nor girl under fourteen years of age shall be employed in any factory, workshop, mine or other establishment where the manufacture of any goods whatever is carried on.

SEC. 2. That on and after the first day of July, one thousand eight hundred and eighty-four, no child between the ages of twelve and fifteen years shall be employed in any factory, workshop, mine or establishment where the manufacture of any kinds of goods whatever is carried on, unless such child shall have attended, within twelve months immediately preceding such employment, some public day or night school, or some well-recognized private school; such attendance to be for five days or evenings every week during a period of at least twelve consecutive weeks, which may be divided into two terms of six consecutive weeks each, so far as the arrangement of school terms will permit, and unless such child or his parent or guardian shall have presented to the manufacturer, merchant or other employer seeking to employ such child a certificate giving the name of his parents or guardian, the name and number of the schools attended and the number of weeks in attendance, such certificates to be signed by the teacher or teachers of such child; *provided,* that in case the age of the child be not known, such teacher shall certify that the age given is the true age to the best of his or her knowledge and belief; *provided,* that in case of orphan children, where necessity may seem to require, the guardian or others having charge of the same may, upon application to the inspector provided for in this act, receive from him a permit

for the employment of such child or children, under such regulations as the said inspector may prescribe.

SEC. 3. Repealed.

SEC. 4. Amended and supplied by section five of the act of 1884.

SEC. 5. That the governor shall, immediately after the passage of this bill, appoint, with the advice and consent of the senate, some suitable person, who shall be a resident and citizen of this state, as inspector; the said inspector shall be empowered to visit and inspect, at all reasonable hours and as often as practicable, the factories, workshops, mines and other establishments in the state where the manufacture or sale of any kind of goods is carried on, and to report to the governor of this state on or before the thirty-first day of October in each year; it shall also be the duty of said inspector to enforce the provisions of this act, and prosecute all violations of the same in any recorders' courts of cities and justices of the peace of competent jurisdiction in the state.

SEC. 6. Amended and supplied by section three of the act of 1889.

SEC. 7. Amended and supplied by section one of the act of 1884.

SEC. 8. That all acts and parts of acts inconsistent with this act are hereby repealed, and that this act shall take effect immediately.

Supplement.

Approved April 17th, 1884.

SECTION 1. That the title of the inspector under the act to which this act is a supplement, and the deputies hereinafter provided for, shall be respectively, "factory and workshop inspector" and "deputy inspectors," and it shall be their duty to enforce the provisions of this act, and all other laws relating to the sanitary condition of factories and workshops, and to the employment, safety, protection and compulsory attendance at school of minors, and to institute all suits or actions in the name of the inspector, as in the fifth section hereof provided, for the violations of any of the provisions of this act, or the act to which this act is a supplement, but no action shall be begun by any deputy inspector without the written directions of the inspector; and in case of judgment, or the penalty of any such suit so instituted, the same shall be paid into the treasury of the state, to be used to defray the necessary expenses of the inspector and his deputies.

SEC. 2. Amended and supplied by section one of the act of 1889.

SEC. 3. That the inspector and his deputies shall have power to demand a certificate of physical fitness from some regular practicing physician in the case of minors who may seem to them physically unable to work, and shall have power to prohibit the employment of any minor that cannot obtain such certificate.

SEC. 4. That any parent or guardian, when so required by the inspector or one of his deputies, shall furnish to such inspector or deputy a certificate from the office of registration and birth, or in the absence of such certificate, an affidavit or affidavits, of the age of such minor; and if any one shall knowingly swear falsely in any such affidavit, the person or persons so swearing shall be guilty of perjury and liable to indictment and punishment accordingly.

SEC. 5. That section four of the act to which this is a supplement shall be amended to read as follows:

[That every manufacturer, merchant or other employer employing any person contrary to the provisions of this act, or who shall be guilty of any violation hereof, shall be liable to a penalty of fifty dollars for each offense, to be recovered in an action of debt in any district court in any city, or before any justice of the peace having due jurisdiction; and that any parent or guardian who knowingly permits the amployment of such child or children shall be liable in a like action to a penalty of not more than fifty dollars, as the court shall fix; that such action shall be prosecuted in the name of the inspector, the trial shall proceed as other actions of debt and the first process shall be a summons, returnable in not less than five days or more than ten days after issue, and it shall not be necessary to indorse the same as in qui tam actions; the finding of the court shall be that the defendant has or has not, as the case may be, incurred the penalty claimed in the demand of the plaintiff, and judgment shall be given accordingly; in case an exceution shall issue and be returned unsatisfied, the court, on application, after notice to the defendant, may award an execution to take the body of the defendant, and in case such a defendant is committed under such an execution, he shall not be discharged under the insolvent laws of the state, but shall only be discharged by the court making the order for the body execution, or one of the justices of the supreme court, when such court or justice shall be satisfied that further confinement will not accomplish the payment of the judgment and costs; an affidavit of the age of any minor made by its parent or guardian at the time of its employment shall be con-

clusive evidence of the age of such minor upon any trial against a manufacturer or employer for the violation of this act, but any parent or guardian who shall knowingly swear falsely in such affidavit shall be guilty of perjury, and the inspector or deputy inspector shall be authorized, in case they shall find any minor employed under any false affidavit given as aforesaid, to order and compel such minor to desist from work; the provisions of this act in relation to the hours of employment shall not apply to or affect any person engaged in preserving perishable goods in fruit-canning establishments.]

SEC. 6. Amended and supplied by section three of the act of 1889.

SEC. 7. That all acts and parts of acts be and the same are hereby repealed.

Supplement.

Approved March 22d, 1886

SECTION 1. Amended and supplied by section one of the act of 1889.

SEC. 2. That the inspector of factories and workshops and his deputies shall be furnished with certificates of authority by the secretary of state, and that they shall produce the same if so required by any occupier of a factory, mine, workshop or establishment.

SEC. 3. That it will be illegal for any one to personate an inspector of factories or forge his certificate of authority.

SEC. 4. That it will be illegal for any one to delay the inspector in the exercise of the duties, or conceal or attempt to conceal any child or children from examination by the inspectors.

SEC. 5. That every manufacturer, merchant or other person who shall be guilty of any violation of the provisions of this act, shall be liable to a penalty of fifty dollars for each offense, to be recovered in an action of debt, in the manner provided in section four of the act to which this is a supplement.

SEC. 6. That all acts and parts of acts inconsistent, be and the same are hereby repealed.

A General Act relating to factories and workshops, and the employment, safety, health and work-hours of operatives, approved April seventh, one thousand eight hundred and eighty-five.

Amendments approved May 6th, 1887.

SECTION 1. BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*, That any person or corporation engaged in

manufacturing, which requires from persons in his or its employ, under penalty of forfeiture of a part of the wages earned by them, a notice of intention to leave such employ, shall be liable to the payment of a like forfeiture if he or it discharges without similar notice a person in such employ, unless in case of a general suspension of labor in his or its shop or factory.

Section 2 as amended:

[SEC. 2. That all accidents in workships, factories or mines, which prevent the injured person or persons from returning to work within two weeks, or which result in death, shall, within twenty-four hours after the expiration of such two weeks, or after the death, as the case may be, be reported by the person in charge of such workshop, factory or mine, to one of the factory inspectors and to the city or district physician, where there is such an officer, which notice may be given by mail.]

SEC. 3. That the belting, shafting, gearing and drums in all factories and workshops, when so placed as to be dangerous to persons employed therein while engaged in their ordinary duties, shall be securely guarded when practicable (possible); if otherwise, then notice of its danger shall be conspicuously posted in the factory or workshop.

Section 4 as amended:

[SEC. 4. That no minor or woman shall clean any part of the mill gearing or machinery in any factory or workshop while the same is in motion, or work between the fixed or traversing parts of any machine while it is in motion by the action of steam, water or other mechanical power.]

SEC. 5. That the openings of all hoistways, hatchways, elevators and well-holes upon every floor of a factory or mercantile or public building, shall be protected by good and sufficient trap-doors or self-closing hatches and safety catches, or strong guard rails at least three feet high, and all due diligence shall be used to keep such trap-doors closed at all times, except when in actual use by the occupant of the building having the use and control of the same.

SEC. 6. That no explosive or inflammable compound shall be used in any factory, in such place or manner as to obstruct or render hazardous the egress of operatives in case of fire.

SEC. 7. That no minor under the age of sixteen shall be employed in any manufacturing, mercantile or mechanical establishment more than ten hours a day or sixty hours a week.

SEC. 8. That suitable places shall be provied in all factories and workshops where girls or women are employed, where unclean work of any kind has to be performed, for such girls or women to wash and dress, and that stairs in use by female employes in all factories and workshops be properly screened.

SEC. 9. That separate water-closets be provided for the use of employes of either sex in all manufacturing, mercantile and mechanical establishments where persons of both sexes are employed.

SEC. 10. That where the factories or workshops appear so overcrowded, that in the opinion of the inspector of factories there is danger to health, the inspectors shall have power, after being supported in their opinion by some reputable resident physician, to prohibit such overcrowding.

SEC. 11. That the inspectors of factories shall have power to order a fan or other mechanical means of proper construction, if practicable, for the purpose of preventing the inhalation of dust in establishments where any process is carried on by which dust is generated and inhaled by the workers to an injurious extent.

SEC. 12. That all factories and mines be ventilated so as to render harmless all impurities as near as may be.

SEC. 13. That no cellar, room or place shall be occupied as a bake-house, which is less than one-half of its height above the level of the street, footway or ground adjoining the same, unless the following regulations are complied with: First, no water-closet, earth-closet, privy or ash-pit, shall be within or communicate directly with the bake-house; second, no drain or pipe for carrying off sewage or other impure matter shall have an opening within a bake-house, unless such drain or pipe be trapped with a six-inch water-seal, both within and without the wall of the bake-house, and have a ventilating pipe of one-half the size of drain-pipe between the wall and the outer trap, and which ventilating pipe shall run two feet above the roof of building.

SEC. 14. That the sleeping-places for workmen and others employed in bake-houses shall be separate and distinct from the places used for the making of bread.

Section 15 as amended:

[SEC. 15. That any person or corporation, being the owner, lessee or occupant of any manufacturing establishment, factory, mine, workshop or store, or owning or controlling the use of any building

or room, shall, for the violation of any provision of this act, or of the act to which this is a supplement, be liable to a penalty of fifty dollars for each offense, to be recovered in an action of debt in any district court in any city, or before any justice of the peace having due jurisdiction, and that any employe who shall be guilty of any violation of the provisions of this act shall be liable in a like action to a penalty of not more than fifty dollars, as the court shall fix; that such action shall be prosecuted in the name of the inspector of factories; the trial shall proceed as other actions upon contract, and the first process shall be a summons, returnable in not less than five days or more than ten days after issue, and it shall not be necessary to indorse the same as in qui tam actions; the finding of the court shall be that the defendant has or has not, as the case may be, incurred the penalty claimed in the demand of the plaintiff, and judgment shall be given accordingly; in case an execution shall issue and be returned unsatisfied, the court, on application, after notice to the defendant, may award an execution to take the body of the defendant; and in case such a defendant is committed under such an execution, he shall not be discharged under the insolvent laws of the state, but shall only be discharged by the court making the order for the body execution, or one of the justices of the supreme court, when such court or justice shall be satisfied that further confinement will not accomplish the payment of the judgment and costs.]

Other sections of the act of 1887:

SEC. 4. That all factories, manufacturing establishments or workshops of two or more stories in height, in which thirty or more persons are employed above the first floor thereof, shall be provided with one or (if the proper officials deem necessary) more outside iron fire-escapes, not less than six feet in length and three feet in width, properly and safely constructed, guarded by iron railings not less than three feet in height, and taking in at least two windows at each story, and connected with the interior by easily-accessible and unobstructed openings; and the said fire-escapes shall connect by iron stairs not less than twenty-four inches wide, the steps to be not less than six inches tread, placed at not more than an angle of forty-five degrees slant, and protected by a well-secured hand rail on both sides, with a twelve-inch-wide drop ladder from the lower platform reaching to the ground.

SEC. 5. That for every twenty persons employed on every floor above the second floor of every factory and workshop there shall be

one rope or portable fire-escape, and that each story shall be amply supplied with means for extinguishing fire.

SEC. 6. That all the main doors, both inside and outside, in factories, shall open outwardly, when the inspectors of factories, in writing, so direct, and that no outside or inside door of any building wherein operatives are employed, shall be so locked, bolted or otherwise fastened during the hours of labor, as to prevent egress.

SEC. 7. That no minor below the age of sixteen shall be employed at any work dangerous to health, without a certificate of fitness from a reputable physician.

SEC. 8. That factories and workshops in which women and children are employed and where dusty work is carried on, shall be limewashed or painted at least once in every twelve months.

SEC. 9. That an abstract of the factory and workshop laws to be prepared and furnished by the chief factory inspector, shall be affixed in a conspicious place at the entrance of every factory and workshop.

SEC. 10. That if the inspector of factories find that the heating, lighting, ventilation or sanitary arrangement of any shop or factory is such as to be injurious to the health of persons employed therein, or that the means of egress, in case of fire or other disaster, is not sufficient, or that the belting, shafting, gearing, elevators, drums and machinery in shops and factories are located so as to be dangerous to employes and not sufficiently guarded, or that the vats, pans or structures filled with molten metal or hot liquid are not surrounded with proper safeguards for preventing accident or injury to those employed at or near them, he shall notify the proprietor of such factory or workshop to make the alterations or additions necessary within thirty days; and if such alterations or additions are not made within thirty days from the date of such notice or within such time as said alterations can be made with proper diligence upon the part of said proprietors, said proprietors or agents shall be deemed guilty of violating the provisions of this act; it shall then be the duty of the inspectors to examine the matter in dispute, and, if adverse to the appellant, he shall carry out the alterations or additions directed by said inspectors within thirty days as aforesaid, and under the like penalty.

SEC. 12. That all acts or parts of acts inconsistent with the provisions of this act be and are hereby repealed.

A Further Supplement to an act entitled "A general act relating to factories and workshops, and the employment, safety, health and work-hours of operatives," approved April seventh, one thousand eight hundred and eighty-five.

Approved May 13th, 1889.

1. BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*, That every building now or hereafter used, in whole or in part, as a public building, public or private institution, school-house, church, theater, public hall, place of assemblage or place of public resort, and every building in which twenty or more persons are employed above the second story in a factory, workshop, or mercantile or other establishment, and every hotel, lodging-house, or tenement-house, in which ten or more persons lodge or reside above the second story, and every factory, workshop, mercantile or other establishment, the owner, lessee or any one having control of such buildings, of which is notified in writing by the inspector of factories and workshops, or one of his deputies for the district in which any such building may be located, shall be provided with proper ways of egress or other means of escape from fire, sufficient for the use of all persons accommodated, assembling, employed, lodging or residing in such building or buildings, and such ways of egress and means of escape shall be kept free from obstruction, in good repair and ready for use; every room above the second story in any such building in which twenty or more persons are employed shall be provided with more than one way of egress, by stairways on the inside or outside of the building; stairways on the outside of the building shall be kept clear of ice and snow and other obstructions; women or children shall not be employed in a factory, workshop, or mercantile or other establishment in a room above the second story from which there is only one way of egress; all doors in any building subject to the provisions of this section shall open outwardly if the inspector or one of his deputies shall so direct in writing; no portable seats shall be allowed in the aisles or passage-ways, of such building during any service or entertainment held therein; the proscenium or curtain-opening of all theaters shall have a fire-resisting curtain of some incombustible material, and such curtain shall be properly constructed, and shall be operated by proper mechanism; the certificate of the inspector of factories and workshops or one of his deputies shall be conclusive evidence of a compliance with such requirements.

2. *And be it enacted,* That it shall be the duty of such inspector of factories or workshops, or his deputies, to examine as soon as may be after the passage of this act, and thereafter from time to time, all buildings within his district subject to the provisions of this act; a copy of this act shall be kept posted in a conspicuous place in every such building by the persons occupying the premises covered thereby.

3. *And be it enacted,* That upon an application being made to the inspector of factories and workshops for the granting of a certificate under this act, he shall issue to the person making the same an acknowledgment that such certificate has been applied for, and pending the granting or refusal of such certificate such acknowledgment shall have for a period of ninety days the same effect as such certificate, and such acknowledgment may be renewed by said inspector with the same effect for a further period not exceeding ninety days, and may be further renewed by said inspector until such time as such certificate shall be granted or refused by him.

4. *And be it enacted,* That in case any change is made in any premises for which a certificate has been issued under this act, whether in the use thereof or otherwise, such as terminates the effect of such certificate as above provided in section two, it shall be the duty of the person making the same to give written notice thereof forthwith to said inspector of factories or workshops.

5. *And be it enacted,* That in case any building or portion thereof subject to the provisions of this act is found by the said inspector or one of his deputies to fail to conform to the provisions of this act, or in case any change is made in such building or portion thereof, such as terminates the effect of a certificate formerly granted therefor as aforesaid, it shall be the duty of the inspector of factories and workshops to give notice in writing to the owner, lessee or person who may have control of such building, specifying and describing what additional ways of egress or means of escape from fire are necessary in the opinion of said inspector in order to conform to the provisions of this act, and to secure the granting of a certificate as aforesaid; notice to any agent of such owner, lessee or occupant in charge of the premises, shall be sufficient notice under this section to such owner, lessee or occupant.

6. *And be it enacted,* That in case any building subject to the provisions of this act is owned, leased or occupied jointly or in severalty, by different persons, any one of such persons shall have the right to

apply to any part of the outside of such building, and to sustain from any part of the outside wall thereof, any way of egress or means of escape from fire, specified and described by the inspector as above provided, notwithstanding the objection of any other such owner, lessee or occupant; and any such way of egress or means of escape may project over any highway, street or alley.

7. *And be it enacted,* That every story above the second story of a building subject to the provisions of section one, shall be supplied with means of extinguishing fire, consisting either of pails of water or other portable apparatus, or of a hose attached to a suitable water-supply, and capable of reaching any part of such story; and such means of extinguishing fire shall be kept at all times ready for use and in good condition.

8. *And be it enacted,* That it shall be the duty of every owner, lessee or occupant of any building or part thereof, subject to this act, to cause the provisions thereof to be carried out, and any owner, lessee or occupant failing to observe such provisions, shall be subject to a fine of not less than fifty nor more than five hundred dollars; but no prosecution therefor shall be brought until four weeks after written notice from the inspector of factories and workshops, or one of his deputies, as above provided, of the changes necessary to be made in order to conform thereto, nor then, if in the meantime such changes have been made in accordance with such notification; notice to one member of a firm or a corporation, or the person in charge of the premises, shall be deemed sufficient notice hereunder, and such notice shall be given in person; any such owner, lessee or occupant shall be liable for all damages caused by his violation of the provisions of this act; any person using or occupying a building contrary to the provisions of this act may be enjoined from such use or occupation in a proceeding to be had before any court of competent jurisdiction at the instance of the inspector, and upon the filing of a petition or bill of complaint therefor, the court in which such proceeding is pending may issue a temporary injunction or restraining order, as provided in proceedings in equity and according to the practice of such court.

9. *And be it enacted,* That each and every person employing labor, his officers, agents and employes, and any person or persons, owner or lessee of any building, mentioned in section one of this act, located within this state, shall, on demand of the inspector of factories

and workshops, or any of his deputies, for admission to any such building, immediately admit thereto such inspector of factories and workshops, or his said deputy, and such owner, lessee or occupant, his officers, agents and employes, shall afford such inspector or deputy full and free access to any room or apartment of any such building, and each of such persons hereby is required, if thereto requested by such inspector or deputy, to answer such questions as may be asked by such inspector or deputy, and if so requested by such inspector or deputy, to render a true account in writing to such inspector or deputy, to the best of his knowledge, of every person or employe then belonging to such building, regarding the various matters mentioned in this act, and whoever shall willfully fail or refuse to immediately answer such question, or to render such written report to such inspector or deputy as aforesaid, shall be guilty of a misdemeanor, and upon conviction thereof, shall forfeit and pay a sum not less than fifty dollars and not exceeding one hundred dollars; and every president, treasurer, secretary, general agent or manager, director of any manufacturing corporation located or employing labor in this state, or the owner, lessee or occupant of any building or institution mentioned in section one of this act, from which answers to any question or the rendition of the written report are herein required to be made, who shall willfully neglect or refuse to give true or complete answers to any inquiries, or render a written report, as required by this section, such person, officer or agent shall forfeit and pay a sum not less than fifty dollars nor more than one hundred dollars, to be recovered in action of debt, to be instituted by the prosecutor of the pleas of the proper county in any court of competent jurisdiction, in the name and for the use of the county wherein such violation occurs.

10. *And be it enacted*, That all fines from penalties imposed by this act may be enforced by indictment or appropriate action at law in any court of competent jurisdiction of the county wherein such offenses have been committed or forfeitures incurred.

11. *And be it enacted*, That all acts and parts of acts, general, special, local, public or private, inconsistent with the provisions of this act, be and the same are hereby repealed, and this act shall be a public act and shall take effect immediately.

COMPULSORY EDUCATION LAW.

Here is the text of the act providing for the compulsory education of children, to whose practical working and defective enforcement, so far as I have observed, I desire to call attention.

A Supplement to an act to establish a system of public instruction, approved April ninth, one thousand eight hundred and seventy-five.

Approved April 20th, 1885.

SECTION 1. BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*, That all parents, and those who have the care of children, shall instruct them or cause them to be instructed in spelling, reading, writing, English grammar, geography and arithmetic, and every parent, guardian or other person having control and charge of any child or children between the ages of seven and twelve years, shall be required to send any such child or children to a public day school for a period of at least twenty weeks in each year, eight weeks, at least, of which attendance shall be consecutive, unless such child or children are excused from such attendance by the board of the school district in which such parents or guardians reside, upon its being shown to their satisfaction that the bodily or mental condition of such child or children has been such as to prevent his, her or their attendance at school, or that such child or children are taught in a private school, or at home, by some qualified person or persons, in such branches as are usually taught in primary schools.

SEC. 2. That no child under the age of fifteen years shall be employed by any person, company or corporation to labor in any business whatever, unless such child shall have attended, within twelve months immediately preceding such employment, some public day or night school, or some well-recognized private school; such attendance to be for five days or evenings every week during a period of at least twelve consecutive weeks, which may be divided into two terms of six consecutive weeks, each, so far as the arrangement of school terms will permit, and unless such child, or his or her parents or guardian, shall have complied with the provisions of the act approved March fifth, eighteen hundred and eighty-three, limiting the employment-hours of the labor of children.

SEC. 3. That every parent, guardian or other person having charge

or control of any child, from twelve to sixteen years of age, who has been temporarily discharged from employment in any business in order to be afforded an opportunity to receive instruction or schooling, shall send such child to some public or private day school for the period for which such child shall have been discharged, unless such child shall have been excused from such attendance by the inspectors of factories and workshops, or by the board of the school district, for reasons as stated in section one hereof.

SEC. 4. That in case any parent, guardian or other person shall fail to comply with the provisions of sections one and three of this act, such parent, guardian or other person shall be deemed guilty of a misdemeanor, and shall, on conviction, be liable to a fine of not less than ten dollars nor more than twenty-five dollars for the first offense, and of not less than twenty-five dollars for each subsequent offense, or to imprisonment for not less than one month or more than three; the said fines, when paid, to be added to the public school money of said school district in which the offense occurred.

SEC. 5. That all children between the ages of seven and fifteen years, who are habitual truants from school, or who, while in attendance at any public school, are incorrigible, vicious or immoral in conduct, and all children between the said ages who absent themselves habitually from school, and habitually wander about streets and public places during school hours, having no business or lawful occupation, shall be deemed juvenile disorderly persons and subject to the provisions of this act.

SEC. 6. That in all cities having a duly-organized police force, it shall be the duty of the police authority, at the request of the inspectors of factories and workshops, or of the school authority, to detail one or more members of said force to assist in the enforcement of this act, and in districts having no regular police force, subject to this act, it shall be the duty of the board of education or the school district officers to designate one or more constables of said city, township or village, whose duty it shall be to assist in the enforcement of this act, as occasion may require, and said board of education shall fix and determine the compensation to be paid such police officer or constable for the performance of his duties under the act; members of any police force or any constable designated to assist in the enforcement of this act, as provided in this section, shall be known as truant-officers; *provided*, that in districts where no constable resides, the

said board shall have power to appoint some other suitable person as truant-officer.

SEC. 7. That it shall be the duty of any such truant-offcer or officers detailed to enforce the provisions of this act to examine into all cases of truancy, when requested so to do by the inspectors of factories and workshops, or by a district school board, and to warn such truants, their parents or guardians, in writing, of the final consequences of truancy, if persisted in, and also to notify the parent, guardian or other person having the legal charge and control of any juvenile disorderly person, that the said person is not attending any school, and to require said parent, guardian or other person to cause the said child to attend some recognized school within five days from said notice, and it shall be the duty of said parent, guardian or other person having the legal charge and control of said child, to cause the attendance of said child at some recognized school; if said parent, guardian or other person having the legal charge and control of said child shall willfully refuse, fail or neglect to cause said child to attend some recognized school, it shall be the duty of said officer to make or cause to be made a complaint against said parent, guardian or other person having the legal control and charge of such child, in any court of competent jurisdiction in the school district in which the offense occurred, for such refusal or neglect, and upon conviction thereof said parent, guardian or other person, as the case may be, shall be punished by a fine of not less than ten dollars nor more than twenty-five dollars, or the court may, in its discretion, require the person so convicted to give bond in the penal sum of one hundred dollars, with one or more sureties, to be approved by said court, conditioned that said person so convicted shall cause the child or children under his or her legal charge or control to attend some recognized school within five days thereafter, and to remain at said school during the term prescribed by law; *provided,* that if said parent or guardian, or other person in charge of said child, shall prove inability to cause said child to attend said recognized school, then said parent or guardian, or other person, shall be discharged, and said court shall, upon complaint of said truant-officer or other person that said child is a juvenile disorderly person, as described in section five of this act, proceed to hear such complaint, and if said court shall determine that said child is a juvenile disorderly person within the meaning of this act, then said court shall thereupon sentence said child to a juvenile reformatory until such

child shall arrive at the age of sixteen years, unless sooner discharged by the board of control of said juvenile reformatory; *provided, however*, that such sentence may be suspended in the discretion of said court for such time as the child shall regularly attend school and properly deport himself or herself; *it is further provided*, that if for any cause the parent or guardian, or other person having charge of any juvenile disorderly person as defined in this act, shall fail to cause such juvenile disorderly person to attend said recognized school, then complaint against such juvenile disorderly person may be made, heard, tried and determined in the same manner as is provided for in case the parent pleads inability to cause said juvenile disorderly person to attend said recognized school; *and it is further provided*, that no child under the age of nine years shall be sent to a juvenile reformatory under the provisions of this act.

SEC. 8. That it shall be the duty of the officers empowered, detailed or appointed under the provisions of this act to assist in the enforcement thereof, to institute or cause to be instituted, proceedings against any parent, guardian or other person having legal charge and control of any child, or any person, company or corporation violating any of the provisions of the sections of this act; *provided*, this law shall not be operative in those school districts of the state where there are not sufficient accommodations to seat the children compelled to attend school under the provisions of this act; and that no prosecution shall be instituted against any parent, guardian or child unless they have received due notification from an officer empowered under this act that they are acting in violation of the provisions of this act.

SEC. 9. That when there is not within the distance of two miles from the factory or shop in which a child under the age of fifteen years is employed, or from the residence of the child, a recognized efficient school, attendance at a school temporarily approved by an inspector of factories and workshops shall for the purpose of this act be deemed attendance at a recognized efficient school, and the inspector of factories shall immediately report to the education department every case of the approval of a school by him under this section.

SEC. 10. That two weeks' attendance of children between twelve and fifteen years of age at a recognized half-time or evening school shall for all purposes of this act be counted as one week at a day school.

SEC. 11. That when any of the provisions of this act are violated by a corporation, proceedings may be had against any of the officers or

agents of said corporation who in any way participate in or are cognizant of such violation by the corporation of which they are the officers or agents, and said officers or agents shall be subject to the same penalties as individuals similarly offending.

SEC. 12. That all acts and parts of acts inconsistent with this act are hereby repealed, and that this act shall take effect on the first day of September, one thousand eight hundred and eighty-five.