

Louis C. Vogt, Book and Job Printer, Morristown N. J.

New Jersey Supreme Court.

State

MORRIS AND ESSEX RAILROAD

COMPANY,

vs

OVER AND TERMINER OF MOR-

RIS COUNTY.

On Postea, &c.

Judgment on Indictment.

A. MILLS, *Attorney.*

As yet of the term of November, A. D. eighteen hundred and sixty-seven.

Witness M. BEASLEY, Esq., *Chief Justice.*

CHAS. P. SMITH, Clerk.

NEW JERSEY, MORRIS COUNTY, ss:

Be it remembered that heretofore, to-wit, on the third day of October, A. D. eighteen hundred and sixty-seven, 40

the State of New Jersey sent its writ of certiorari to the Judges of the Court of Oyer and Terminer, and General Jail Delivery in and for the said County of Morris, in the words following, to-wit:—

NEW JERSEY, ss :

10 { SEAL. } The State of New Jersey, to the Justices and Judges of the Court of Oyer and Terminer, and General Jail Delivery in and for the County of Morris. GREETING :

20 We being willing for certain causes, that a certain indictment in which the Morris and Essex Rail-road Company in the said indictment named before you is indicted for a nuisance in the township of Roxbury in the County of Morris, as is said, shall be determined before us and not elsewhere. We command you that the said indictment aforesaid, and all things touching the same, by whatsoever name the said the Morris and Essex Rail-road Company may be called in the same, before our Judges of our Supreme Court, at our next Supreme Court to be holden at Trenton, on the first Tuesday of November next, under your seal you send together with this writ, that we may thereupon further cause to be done what of right and according to the laws of this State ought to be done.

30 Witness, Mercer Beasley, Esquire, Chief Justice of our said Supreme Court aforesaid, at Trenton, aforesaid, this third day of October, eighteen hundred and sixty-seven.

VANATTA & DEMOTT, *Atty's.*

CHAS. P. SMITH, *Clerk.*

40 Which said writ was afterwards, according to the command thereof, returned to our said Supreme Court, at Trenton, before the Justices thereof, with a certain schedule thereto annexed.

Which said schedule is in the words following, to-wit :

STATE OF NEW JERSEY }
MORRIS COUNTY. }

To wit, be it remembered at the Court of Oyer and Terminer and General Jail Delivery held at the Court House in and for the said County of Morris on the first Tuesday of May in the year of our Lord one thousand eight hundred and sixty-seven before the Honorable Vancleve Dalrimple one of the Justices of the Supreme Court of Judicature of the State of New Jersey, and Samuel O. Briant, John W. Hancock and Louis B. Cobb, Esquires, Judges of the Inferior Court of Common Pleas in and for the said County of Morris according to the form of the statute in that case made and provided, and by the oath of William H. Anderson, James Holmes, John F. Voorhees, David S. DeCamp, William Bartley, Cyrus H. Righter, Richard Speer, Ichabod Searing, Richard Stephens, John Bates, Hiram Hulse, George Richards, John Stiles, Jr., John W. Jackson, Jerome L. Stout, Mahlon H. Dickerson, Edward Holland, Stephen N. Ward, Robert N. Cornish, good and lawful men of the said County of Morris duly summoned, and then and there sworn and charged to enquire for the State of New Jersey in and for the body of the said County of Morris it is presented in manner and form following, that is to say,

{ MORRIS OYER AND TERMINER
AND GENERAL JAIL DELIVERY. } 30

May Term, 1867.

MORRIS COUNTY, *ss* :

The Grand Inquest for the State of New Jersey and for the body of the County of Morris upon their oath present that heretofore, to-wit, on the first day of October in the year of our Lord one thousand eight hundred and sixty-six and from thence hitherto at the township of Roxbury in the said County of Morris and within the jurisdiction of 40

this Court the Morris and Essex Rail-road Company, a corporation existing under and by virtue of the laws of this State, were the owners and occupants of a certain Rail-road situate in the said township of Roxbury of great length and width, to-wit, of the length of ten miles and of the width of one hundred feet, which Rail-road lies adjacent and near to divers to-wit fifty houses, fifty barns, fifty sheds and fifty other buildings and also adjacent and near to divers, to-wit fifty fields of grain, and fifty fields of grass, which fields of grain and grass are enclosed with wooden fences, and also adjacent to divers, to-wit ten thousand acres of wood land, and ten thousand acres of sprout land, which houses, barns, sheds, buildings, fields, wood land and sprout land were and still are the property of divers citizens of this State and that the said the Morris and Essex Rail-road Company on the day and year last aforesaid, and on divers other days and times between that day and the day of the taking of this inquisition in and upon said rail-road unlawfully and injuriously did place and put divers,

10 to-wit twenty locomotive engines driven by fire and steam and unlawfully and injuriously did on the same days and times aforesaid cause the said locomotive engines to pass and re-pass over and upon the said Rail-road and by, along and near to the said houses, barns, sheds, buildings, fields, wood land and sprout land and while so passing and re-passing on the several days and times unlawfully and injuriously did cause the said locomotive engines to emit and throw out divers pieces of solid fire of great length and width and thickness to-wit, of the length of three inches and of

20 the width of three inches, and of the thickness of three inches, and unlawfully and injuriously did cause the said locomotive engines to eject and throw the said pieces of solid fire to a great distance, to-wit to the distance of fifty feet from the said Rail-road and did cause the same to fall in and upon the said fields, fences, wood land and sprout land and near to the said houses, barns, sheds and other buildings, by reason of which said several premises, the said fences caught fire and were burned and the leaves and brush and other combustible materials in and upon the

30 said wood land and sprout land, also caught fire and the

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wood and sprouts growing thereon, were greatly injured and damaged, and the said houses, barns, sheds and buildings, and fields of grain and grass, were greatly endangered to the great damage and common nuisance of all the citizens of this State, there inhabiting and residing and particularly of the said citizens of this State, owners of the said houses, barns, sheds, buildings, fields, wood land and sprout land, contrary to the form of the statute in such case made and provided and against the peace of the government and dignity of the same.

H. C. PITNEY,
Prosecutor of Pleas, Morris County.

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The foregoing indictment is endorsed as follows :

MORRIS OYER AND TERMINER :

May Term 1867.

THE STATE
vs
THE MORRIS AND ESSEX RAIL-
ROAD COMPANY.

Indictment for Nuisance.
H. C. Pitney,
Prosecutor of the Pleas.

20

W. H. ANDERSON,

A True Bill.

Foreman.

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STATE OF NEW JERSEY, }
MORRIS COUNTY, ss : }

I, William McCarty, Clerk of the Court of Oyer and Terminer and General Jail Delivery of the County of Morris, do hereby send to the Supreme Court of the State of New Jersey, the original recognizance taken in the foregoing cause, and also a true copy of the indictment in said cause and all proceedings had thereon, as the same re-

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mains of file in my office, as by the command of the writ hereto annexed.



In testimony, whereof, I have hereunto set my hand and the seal of the said Court, this first day of October, A. D. eighteen hundred and sixty-seven.

WM. McCARTY, *Clerk.*

10 And the said, the Morris and Essex Rail-road Company, by Vanatta and DeMott, their Attorneys, come into Court here, and having heard the same indictment read, say that they are not guilty of the said premises in the said indictment above specified, and charged upon them, and of this the said the Morris and Essex Rail-road Company put themselves upon the country &c. and _____ Esquire, who prosecutes for the said State in this behalf, does the like—

20 Therefore let a jury thereupon come before the chief justice or some other justice of the Supreme Court of the State of New Jersey, at a Circuit Court to be holden at Morristown in and for the County of Morris, on the first Tuesday in October in the year of our Lord eighteen hundred and sixty-nine, by whom &c., and the same day is given to the parties aforesaid there &c. And now at this day to-wit the twelfth day of June, A. D. eighteen hundred and seventy-two, before our said Supreme Court at Trenton, the plaintiff by its Attorney aforesaid and the said justice before whom &c., having sent hither his record had before him in these words to-wit.

30 And afterwards that is to say on the first Tuesday of October in the year of our Lord eighteen hundred and sixty-nine, at a Circuit Court held in Morristown in and for the County of Morris, before the Honorable Joseph D. Bedle one of the justices of the Supreme Court of judicature of the State of New Jersey, according to the form of the statute in such case made and provided come as well the said the Morris and Essex Railroad Company, by their Attorneys Vanatta & DeMott, as the State by Alfred Mills, the Prosecutor of the Pleas of said County of Morris, and the
40 jurors of that jury in the matter aforesaid being summoned

according to the form of the statute in such case made and provided also come, who to speak the truth of the matter within contained, being chosen, tried and sworn say upon their oath that the said defendants, the Morris and Essex Rail-road Company are guilty in manner and form, as they are charged in the said indictment.

Therefore it is considered that the said the Morris and Essex Rail-road do pay a fine of _____ together with the costs of prosecution. And that the said defendant do stand committed until the said fine and costs of prosecution are paid. 10

Judgment signed June twelfth, A. D. eighteen hundred and seventy-two. *Nunc pro tunc*, November second, A. D. eighteen hundred and sixty-nine.

M. BEASLEY, *Chief Justice*.

I, Charles P. Smith, clerk of the Supreme Court of the State of New Jersey, do certify the foregoing to be a true copy of the judgment in the above stated cause as the same remains of record in my office. 20

SEAL.

In testimony, whereof, I have hereto set my hand and seal of said Court at Trenton this twentieth day of July A. D. 1872.

CHARLES P. SMITH, *Clerk*.

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MORRIS COUNTY CIRCUIT.

October Term, 1869.

20	THE STATE	}	<i>Indictment</i>
	<i>vs.</i>		
	THE MORRIS & ESSEX RAIL ROAD COMPANY.		<i>for nuisance.</i>

Before his Honor J. D. Bedle.
MILLS AND PITNEY

For the State.

VANATTA AND PARKER

Contra.

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The Counsel for the State opened the prosecution and called and examined the following witnesses, viz :

Joseph Smith, who being sworn says : I lived at Shippenport, in Roxbury township, Morris County, in March 1867, at a distance of 50 yards from the M. & E. Railroad ; I worked for Mr. Henry Tice. In March 1867, I saw engines pass along the Railroad and the fire strike up behind them, I saw it fall right along the road on both
40 sides, I saw sprouts burning and the fence burning ;

I saw this on Mr. Riggs', Mr. Segur's and Mr. King's land.

I saw the fire fly, I saw it come from the engines, I cannot tell where it came out, it came out from behind it. I helped to put out the fire on John Brown's. I saw it sometimes on Mr. Riggs'. It was in 1866 or 1867. Most of the fire was in the Spring of 1867. H. Tice was with me once on the coal bank. The fire was on Mr. King's, Sheriff King's, it was running through his timber and fences, there was considerable burned, quite a lot of his land, there was no great amount of fence burned. I took my little boy. Mr. Stanberry and Mr. Riggs' son came there. I cannot tell how we were putting it out. 10

The fire run all over the *mountain* there was a good deal burned. It was a fire almost every day, it endangered things, the fire flew from the locomotives in motion. I was afraid of its burning our dwelling house. I would see fire fly from the locomotives down near our house. It endangered Mr. Tice's house and barn, which is pretty close to the Rail-road, it is 25 to 30 feet from the Rail-road. I saw the fire go over Mr. Tice's house, very frequently, the pieces of fire were as large as a hickory nut frequently. I can not tell how often. 20

Mr. Segur's barn was 40 to 50 yards from the Rail-road. I should think the fire was within 25 or 30 feet of the barn.

The locomotives were going up grade when they threw the fire, they were hardly ever coming down, I think never. I went and saw the fire running through the leaves, I saw it frequently. I saw pieces of coal red-hot, it was stove coal, they were red-hot when they lit in the yard.

I don't know that I ever saw anything set fire to in Mr. Tice's yard. I did at the back of the house. When it was a dry day it would be thrown so every day. The road is an up grade. 30

I think I have put out fire on Mr. Riggs' land ; I saw fire near Mr. King's saw mill. It was in the Spring of the year 1867. I supposed it came from the locomotives, the locomotive went through and the fire struck up behind, 150 to 200 yards off. I was on the coal bank and Mr. Tice said "go." The fire got near the mill. I can't say how close it was. 40

I don't know as anything particular burned but fences and sprouts. I pretty frequently saw the fire when the locomotives went up, it was commonly in the after part of the day. The average size of the pieces of fire was a hickory nut. I think I came there in May 1866 and stayed till the election of 1867.

AND BEING CROSS-EXAMINED says :

10 I lived in Mr. Segur's house, near the forge, it was on the North side of the Rail-road, right as you go west. The house is 150 yards, more or less, toward the Rail-road. Mr. Tice's was close to the Rail-road. Barns between; our houses are 40 to 50 yards apart. Mr. Tice's house is not very old. I saw the fire usually in dry weather, not much in summer. I saw no fire come from the engines and set fire to anything except in dry weather. I was working in the forge; it is from fifty to sixty yards from the railroad track. We used charcoal in the forge; we had two fires
20 there. The house was thirty feet from the forge, and Mr. Tice's as far again as mine.

I would see the coal fly over; it would be in the evening, not in the daytime. We would see them fly out, and then go and examine the fire. I examined two or three; I saw one piece of fire fly over the house. The railroad is on an embankment—eight or ten feet perhaps. I could not tell how many times I put it out; I could not tell the engines that threw the fire, or the names, or the engineers driving them; most generally they were coal trains—freight trains
30 —not passenger trains. The fire was thrown by heavy trains which went up grade there; more than once I have put out fire on Mr. Riggs' land; when the engines went up every day there was fire. Mr. Riggs' is on the south side of the road; I have seen fire half a dozen times or more on Mr. King's land; it was in 1867, in the fall, I think; I am not certain. I recollect none in May, June or July of 1867.

I saw coal thrown in the evening, just at night, after dark; I have seen locomotives at night which didn't throw
40 fire. I never knew a fire in woods without a railroad locomotive being by.

Mine and Mr. Tice's house are both on the same side of the railroad; there is a coal bank where we kept our charcoal.

AND, BEING RE-EXAMINED, SAYS :

I recollect Joseph Stansberry was there the same day I saw the mill come near catching fire; young Riggs and Joseph Stansberry came; we commenced on different ends to put the fire out, and met; we went there to put out the fire. 10

I suppose the fire came from the smokestack; I couldn't say; I think they came out of the top of smokestack; I always supposed so from what we saw at the time; I think so from the appearance, and seeing it fly as they went by; I saw coals; they raised and fell; I saw them rise, go and fall; most commonly it was on fire till the thing alighted.

AND, BEING RE-CROSS-EXAMINED, SAYS :

I think there was a small breeze on the day the fire was on the saw mill premises; I did not see coals fly that day; I saw fire start aside the engine, behind it, on the side of the track. 20

And the State also called *Judson Search*, who, being sworn, says :

I lived in the winter of 1866, and the spring of 1867, in Shippenport, in Roxbury township; I worked for Henry Tice. I lived in Mr. Segur's house, perhaps twenty-five yards from the railroad. I saw the fire in October, 1867, and in the spring of 1867—the early part. I saw it in Mr. Riggs' once, and in Mr. Segur's at another time; I do not know when I saw it in Mr. Segur's; in 1867—May or June, 1867. In the early part of spring I saw fire opposite Mr. Tice's house; I think last of May or first of June. Mr. Riggs came to me; Joseph Stansberry was there. 30

I saw fire before I saw it at Mr. Tice's—in the spring of the year, in 1866 or 1867; it was in Charles F. 40

Maryott's, and ran to Segur's lot ; it was so supposed ; this was p. m. ; I saw it in Maryott's lot, and at six o'clock I went to Segur's lot, and helped to put the fire out there ; I saw the sprouts burning, perhaps within twenty-five feet of the railroad ; I can say one acre on Charles F. Maryott's burned, and one acre of Mr. Segur's.

10 I was in Shippenport, opposite my house, when Mr. Riggs came to me, and wanted to put the fire out ; several trains had passed up ; this was about 2 o'clock, and at 1 o'clock trains went up ; the fire on Mr. Segur's land was perhaps a quarter of a mile from the buildings. We smothered the fire out ; we whipped it out with brush ; I saw fire come over Mr. Henry Tice's house into the yard, since the May or June spoken of.

AND BEING CROSS-EXAMINED, SAYS :

20 I saw the fire in Mr. Maryott's land at three or four p. m. It was a quarter of a mile from me on the right side of the railroad as you go from here.

And the State also called *Albert R. Riggs*, who, being affirmed, says :

30 I reside at Drakeville, Roxbury ; I own land along the line of the Morris and Essex railroad—about four hundred acres ; it is woodland mostly. I speak of what lies along the railroad ; there were fires in the latter part of 1866 and spring of 1867 ; the fires began when the railroad company began to run coal trains with coal-burning engines ; in the fall of 1866 they burned over, perhaps, twenty or thirty acres of my land ; snow came on, and there was no more burning till February ; then they began to burn again, and I took men, and set them on the line of railroad, to burn some fifty feet from the track for one mile. I took Mahlon K. Slack, Peter P. Babcock, Joseph Stansberry and others ; I don't remember who ; I did this to save my timber ; I had it done in February or March, 1867, on the south side of the railroad, for something over a mile.

40 After that was done there were fires along where we had

burned; the fire was thrown clear over the burned space, and it burned perhaps a hundred acres of woodland at that time; this was in February and March, 1867; on one side I had a strip of land of twenty acres; twelve or fifteen rods wide was burned on me, which I did not myself burn. This was in March, and some in April too. Altogether I had one hundred and fifty acres burned from October, 1866, to May, 1867, which did great injury to the wood, and burned up rails in fence; also sap wood; these fires were every dry day. I had my men there nearly two months to prevent the fires and put them out; I saw no fires originate; saw none set; I have seen the engines go up while I stood at the depot, and have seen the fire start up immediately after the engine have passed. This was above the depot, towards Hackettstown; it is up grade in the cut; the engines were coal-burners; woods burned, I do not remember how often; I remember one distinctly; once sixty acres this side of the depot; I did not see them originate. 10

I have owned land along the railroad twenty years; 20 about fourteen years ago the company set fire to my woods with a wood engine, which was out of order, as they said. I have not suffered until the last. The railroad station at Drakesville was burned some time about the same time in 1867, and the fall of that year.

I used to see coal-burners running at night; I saw the fire—a continual streak of fire going out of the pipe; I have frequently seen it. The fire will go up ten or fifteen feet high, and then go off with the wind; the only hole I knew for the fire to get out was out of the top. I can't say 30 for how long I have seen it; I have seen it nightly for the last three years.

I don't know at how many places fires originated. I got men to put out the fires; Mr. Babcock also came down to help.

Some of these fires were perhaps thirty to forty feet from buildings; there is a storehouse and dwelling lived in by H. Tice; this came within forty feet of the fire; there were buildings all round.

Very little of Segur's woods were burned; he owned half 40

an acre or so; there was a barn there which Mr. Segur built for me; it was built on my land; there is a forge a little further up; Mr. King's sawmill is a quarter of a mile further west; some of these fires were next, and nearly up to it; Mr. King's woods were burned; there was a building—a dwelling-house—burned below, which was said to be caused by the railroad. I cannot fix the time; it was in Roxbury township. Burt's buildings were endangered by the fire; they were about eight rods from the road.

10 There were buildings in Stanhope—all near the railroad; Mr. Joseph Heaton has a barn near the railroad. I know nothing of these buildings of my own knowledge.

AND, BEING CROSS-EXAMINED, SAYS :

When I burned my land the ground was pretty much covered with leaves; we raked them forward and burned them; the wind afterwards would drive the leaves back, but not very much; I have brought an action against the company for the injury done.

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And the State also called *Peter P. Babcock*, who, being duly sworn, says :

I live in Sussex; in the fall of 1866 I lived at Drakesville, and I was working for Mr. Riggs; I left last August in 1867; I lived right in front of Mr. Riggs' house—about one mile from the railroad; I was employed in the spring and winter of 1867, drawing wood for Mr. Riggs, above Shippenport, in Roxbury township; several fires occurred while I was there. One day I was drawing some rails, and a passenger train came up at 2.30, and fired the leaves in eight or ten different places; that was just at the corner of Port Morris switch; these fires were on the south side of the railroad—fifty or sixty feet—some further, or a hundred feet; leaves were set fire to, and also dry rails. Mahlon K. Slack was with me.

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I remember another time; it might be a week or so after. I was drawing wood about the deep cut, and a train came up and set fire to the leaves; there was

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some man with me, driving the other team ; it was fired in two or three different places ; it caught, I suppose, twenty feet from the top of the bank ; the cut is thirty or forty feet deep. The train was a passenger train with a coal-burner engine ; it was going up. I saw coals fly out from the smokestack ; they were quite a good size ; some were like a small peanut, or like the end of one's finger ; the coals were red-hot ; I saw them both before and after they landed ; they burned over five acres there of young sprouts, &c., belonging to Mr. Riggs.

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In April, 1867, there came down word that there was a fire on Riggs' lot ; I and John Riggs, Robert Rogers and Joseph Stansburrough went up ; found the fire in Riggs' lot ; lot had been burned over ; perhaps one hundred acres had been burned.

In April, 1867, there was a fire ; there were no buildings near ; Mr. Davis' house was close to the railroad, but the fire didn't go within a quarter of a mile of it ; do not recollect whether I helped to burn strip of Riggs' land along railroad ; they tried to burn it, but the leaves did not all burn up ; they would leave some ; it would catch fire again, and spread again.

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I often saw coals fly out when they would be going up grade ; they came out of the smokestack, and flew off on the ground each way ; I saw them after they alighted ; I never saw any larger than a peanut, and the end of one's finger ; those which set leaves on fire were thirty feet from the cut. That is the only place round the curve where I saw them set afire ; from the sawmill pretty near the cut, all the way up to the switch ; this and the cut are the only places I saw take fire ; it is quite a steep grade going up. I judge the engine-drivers were putting on steam when the engines threw the fire, by the motions they made—by their running—their going faster ; there was some little more of a noise. I used to see them at night ; I saw them throw fire a long distance ; the engines were coal-burners. The coals were of the size of a peanut or the end of one's finger.

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The fire in Henry Baker's woods was in the spring of 1867 ; saw it there twice near house that was burned ; often

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when I came from Milton I passed under the railroad, near the house of Searing's that was burned; have frequently seen them throw fire one hundred feet from the railroad, from smoke stack—pieces as large as the end of a finger, or size of peanut with shell on.

AND, BEING CROSS-EXAMINED, SAYS :

I was taking wood to the Morris and Essex railroad ;
 10 I think the engine was a coal-burner, to that passenger train.

And the State also called *Mahlon K. Slack*, who, being sworn, says :

I saw fires along the Morris and Essex railroad in February 1867 ; I saw fire in twelve or thirteen different places on Mr. Riggs' land, along the railroad track, ten or fifteen yards away ; it was up towards Port Morris cut, just this
 20 side. Three trains went up—coal trains ; one had ore on ; it is an up grade ; they were coal-burners. I saw the fires right after the trains passed ; I found the scales of the coal hot ; at one of the points where the fire started they threw a piece may be as big as a quarter of a dollar. We put out fire ; were one and a half or two hours in putting it out ; it burned over an acre or two. I never saw it burn any other time ; I have seen fire thrown from the smokestacks at night ; as big as a pea—small sparks which
 30 quite often saw this.

AND, BEING CROSS-EXAMINED, SAYS :

It was most generally at night that the engines threw the fire ; Mr. Babcock was there at the fire near the curve at Port Morris, on Mr. Winsey's land. The piece of coals I spoke of as big as a quarter dollar was not a quarter of an inch thick ; coal-burning engines threw out bigger sparks ; this piece of coal that I saw was in the middle of the space
 40 that was burned ; it was twenty-five or thirty paces off from

the track ; I was at that spot before it burned as big as a peck measure.

I am son of Albert R. Riggs, lived in Roxbury township winter of 1866, 1867, and spring of 1867 ; I saw several fires ; whenever a fire occurred I went and put it out—for three or four months ; then I let it burn ; in 1867 I saw a train go up, and immediately after a fire broke out ; it had burned four feet square when I first saw it. When I got it out it was as big as this room ; this fire was from a quarter to half a mile above Port Morris. They were freight trains, two that went up, one after the other ; the fire burned leaves and brush—dry wood timber six to eight inches through. 10

I saw fires a number of times, but do not remember distinctly but one ; I cannot say how many times I was up there to put fires out ; I was up there almost every day ; About last of March or first of April, 1867, I was up at Thomas L. King's land ; there was a fire there ; they had begun to put it out, and got down towards the mill, and met Joseph Smith and others doing the same thing ; the fire got to within fifteen or twenty feet of the sawmill ; I have seen fire come from the engines. 20

And the State also called *Henry Tice*, who, being sworn, says :

I live forty feet off from the Morris and Essex railroad, in Mr. Segur's house at Shippenport : I have lived there nearly four years ; I went there in April, 1866, and continued there since. There is a barn, and other buildings—forge, &c.—of which I have charge ; my wife and four children lived with me. There are three other houses there—Joseph Smith's, Mr. McNair's and Mr. Morgan's ; they all had families. 30

I saw fire thrown from locomotives ; my house was in danger ; the fire was thrown clear over the house into the yard ; so I told my family to watch. I put a fire out near the house—within twenty feet of the house—probably on the line of the road, near the house ; it was within fifty yards of the barn. Leaves and grass were burning ; it was 40

in the daytime ; have put it out frequently ; I put fires out in the spring and fall next after I moved there ; this was in 1866 or 1867, and through the summer of 1867—spring and fall. I saw what caused the fire ; I saw the coal that set the fire.

10 The coal was near the size of a quarter of a dollar ; it was hard coal ; they were hot coals. I saw them blowing out of the locomotive going up grade ; it was a coal-burner ; in a minute or two I saw the fire. Mr. Sickles helped, and I put the fire out on land of Mr. King, &c. ; there was considerable damage.

20 The fire rose thirty or forty feet above the smokestack. Mr. Segur's house is two hundred or three hundred yards from our place. I have seen fire falling near the barn—as near as twenty feet ; the wind was blowing ; it was a very dry day ; when I saw the fire first it was twenty or thirty feet off the railroad. I saw fires there, that winter and spring, a number of times ; I did not see the wood-burners throw fire at that time ; only coal-burners. The trains were going to Hackettstown ; they did not throw fire when going down.

I saw fires before ; I did not know where they came from ; fires were considerably more frequent after coal-burners were put on.

30 I have seen the coal flying from the smokestack, and land on Mr. Segur's, Thomas L. King's, Henry Sickles', Brown's and Riggs' land ; I put out fires on King's, Brown's and Sickles' ; after the coals fell I saw the fire. The coals were thrown into my yard ; my house is thirty feet high from base ; I have seen coals thrown thirty or forty feet above smokestack ; I cannot tell how often they were thrown over my house ; several times. I saw fire thrown near the other dwelling-houses there, and the barn in particular, and I put it out ; I put out the fire within twenty feet of barn frequently during 1866 and 1867 ; have seen Mr. King's woods on fire a great many times. At the time Mr. King's sawmill was in danger, saw the fire burning. Joe spoke about putting it out ; I set him to put out the fire ; it was twenty feet from sawmill ; it was a very
40 dry, blowing day. A little stream ran between the fire

and sawmill ; I saw the locomotive pass through ; it was a coal-burner ; the fire was thrown from the coal-burners when going up grade.

AND, BEING CROSS-EXAMINED, SAYS :

My house was fifty yards off the railroad track ; the barn is fifteen feet nearer the railway. I saw pieces of coal smaller than a quarter of a dollar ; I think I saw none larger. The furthest of the other three houses was not over three hundred feet from the railroad, and the nearest of the three within fifty yards of the railroad. 10

And the State also called *Henry Schauntz*, who, being sworn, says :

I live at South Stanhope, 75 feet off the railroad ; I built the house in 1863 ; my family consisted of self, wife and three children.

Before coal-burners were used we were not troubled with fires ; in the fall of 1866 we were troubled so we did not go to bed until the coal trains went through ; they threw coal so as to fill the gutters, and stopped the water from running. I saw them in pieces from as large as a pea to as large as a hickory nut ; it continued, and was for about two or three months ; I could not tell. I saw coals fall on my neighbor's house—*Mr. Scripture's* ; it was at night—nearly every night ; the grade going east was so heavy. I could see them very often ; the grade has been changed since about one year ago ; it is less now than it was ; straight smoke-stacks threw them as high as one hundred or one hundred and fifty feet out of the stacks. I have seen the coals fall as far as seventy-five or eighty feet from the place they came out, over my yard and garden ; other stacks threw the coals ten or twelve feet high only. We kept on watch till the heavy trains went through ; we did it every night for two or three months ; my neighbors watched. *Mr. Scripture* and *Mr. Heaton* also watched ; *Scripture's* house is one hundred feet from the railroad ; *Heaton's* is seventy or seventy-five feet off. We never had any fires ; the ground 40

is burned—the sod and grass ; there are no woods there ; it is cleared land. There was a watch near the station, to protect from fires by night, and I guess also in the day-time.

AND BEING CROSS-EXAMINED, SAYS :

10 I think straight smokestacks five or six feet high, and other smokestacks four or five feet high. Mr. Scripture and Mr. Heaton had barns.

And the State also called *Jedediah B. Bassinger*, who, being sworn, says :

20 I was formerly superintendent of the Morris and Essex railroad ; I left the company in the fall of 1866—in September. I think the company had no coal-burners until after I left ; some had been ordered ; I was away a month or two, and when I came back, that fall, they were in use. The grade of the line, west from Dover, is undulating near Baker's Mill ; there is an ascending grade of fifty feet to the mile ; it is continuous for five miles to Shippenport, which is the summit ; then there is three quarters of a mile level ; a slight, continuous curve nearly all the way ; from there west a slight, descending grade, sixteen feet, to Stanhope—perhaps a mile. After leaving Stanhope, there is a continuous down grade of fifty feet to the mile, to Waterloo, for three miles ; thence grades vary—fifty feet, forty feet and thirty feet to the mile, rise. Locomotives run
30 through from Newark to Hackettstown ; we used to change engines at Hackettstown, on account of difference of guage ; it changes from four feet ten inches to four feet eight inches and a half ; the guage was changed in July, 1866. There is some more power required to get trains round a curve than in a straight line.

AND, BEING CROSS-EXAMINED, SAYS :

40 Some coal-burners had been ordered before I left the road ; they were ordered at Paterson, of the Danforth

L—— M—— Works—six heavy and four pushing engines—ten altogether.

Question. Why did you order the coal-burners?

(This question was objected to by the counsel for the State at this time, because the evidence, if competent, was matter of defense, and the question was overruled by the court. A bill of exceptions is prayed by the defendants' counsel, and is allowed and sealed accordingly.) 10

{ L. S. }

I located the road from Dover to Hackettstown; the nature of the country through which I had to build the road necessitated the grade spoken of; so I thought.

And the State also called *Job Burt*, who, being sworn, says: 20

I live at Drakesville station, three hundred yards from the station-house; I have lived there eighteen years; I have a house, barn and blacksmith's shop, one hundred yards from the track; I am seventy-eight years old, and have a family. Between the buildings and the track there is a strip of timber belonging to me; there is a rock cut of thirty-two feet back of my house and barn, about ten chains long, perpendicular depth.

I think there were fires on the land in 1866, when the coal-burners commenced; the first fires of any consequence was burning the depot in February, 1867, and in the spring of 1867 there were fires there; one fire burned over fifteen or sixteen acres of sprouts—young timber. There were five different lots; myself and family put it out; it came within three rods of the buildings. The fires occurred both night and day; it came from the banks of the railroad cut; we would put out the fires in one place, and it would catch in another place; we always watched when a train was going up, at night particularly, for fear of fire. 30 40

I could see the engine half a mile off; the fire came from the smokestacks, and from scattering at bottom; there is a rise of ten or twelve feet. I never saw sparks get farther than the base of the bank, and some on the top of the bank, when it burned my fence; I never saw the fire rise above the top of the cut; I once picked up a piece of fire. On Town-meeting day, 1867, we had the worst fire, and the day after I saw smoke rising, and went down to put it out, and started to go home, down to the base of the bank; the
 10 bank was twenty-five feet above me, and a train went by, and a piece of coal came out as big as three fingers long. I put out the fire; it was red-hot when it fell. I picked it up, and carried it to the house; I saw it strike the ground; I thought it came from the fire-box; I saw it when it fell; it didn't bounce; it fell down; it did not roll down. Take the grade from where it fell, it must have been a hundred feet; the bank was twenty-five feet high; it fell within six feet of me; the fire started almost instantly after it fell. I do not know from what part of the engine it came. The
 20 first I knew, I saw it fall; I watched the fires to save my buildings; they are all about the same distance from the the track. Several times the fire ran up within two or three rods of my buildings—my house, granary, shop and barn. I was afraid the fire would get into my buildings. I would have my family all out, women and all—my wife and four children; several times the fires got into my rails.

AND, BEING CROSS-EXAMINED, SAYS;

30

I was at the base of the bank and the piece of coal landed perhaps 4 or 5 yards from the base. I should suppose the bank is 25 feet high and then the slope would make it 75 or 80 feet.

AND, BEING RE-EXAMINED, SAYS :

I was perhaps a rod from the base.

40 And the State also called *Benjamin Schuman*, who, being sworn, says :

I live at South Stanhope, I have lived there 7 or 8 years, I live 100 feet from the railroad on the other side of the wagon road; I was employed carting from the furnace; I remember when coal burners introduced; I saw at different times coal fly from engines into the grass, and saw that catch fire; it was 40 feet off the houses—Mr. Schanee's, Mr. Scripture's and my own; the coal struck about 20 feet from the track; I watched it, I was afraid it would get to the barn; I went every night when it was dry, so that there was any danger of fire, I watched till 10 or 11 P. M. 10
 some nights when I supposed all the trains were up; I used the barn for my horse; the pieces of coal were of the size of a hickory nut, down to a chestnut and smaller size; they were hot—red, they changed quickly on the ground; I put no fires out. I saw fires catch along the railroad, within 10 feet of Scripture's barn; I went to these pieces of coal and found them lying on the grounds.

And the State also called *Michael Walsh*, who, being sworn, says: 20

I lived 350 yards from the Stanhope station of the railroad; I moved to that house 2d November 1866—saw during that fall and winter and the next spring fires along the railroad, burning grass and leaves down by Mr. Schanee's, and again above Mr. Scripture's barn, 20 feet from it I think; I saw coals fall in Schantz's garden, the coals came from the engines, coal burners; it was at night. I should think it was within 10 feet of the house; the coal burners were going up grade; the coals came out of the smoke stack, they rose 15 or 20 feet; I saw them till they came down right by his house, some of the coals were smaller some larger. 30

I have seen fire drop along the railroad and set fire to ties; In spring—May—I saw some along the railroad; In February 1867, I saw fire thrown on the roof of the depot, it was about 2 o'clock; they were as large as a hickory nut—perhaps larger. The coal on the track came from the bottom range, I suppose. 40

AND, BEING CROSS-EXAMINED, SAYS :

When I saw the fire strike the depot, I was at the furnace, 200 or 250 yards off; I saw it bounce off.

And the State also called *John S. Wills*, who, being sworn, says :

10 I live one mile west of Stanhope, in Roxbury township, about $\frac{1}{4}$ mile from railroad station—shortly after the coal burners were put on.

As soon as grass &c. got dry, the fires began along the railroad track. There were several little fires between that time and the 14th December, along the railroad track on Gen'l. Cooper's lands, John Will's, Samuel Hubert's and William Batson's; sometimes the fire burned woodland and sprouts, and sometimes fields with stubble. On the evening of the night of 14th December, 1866, about 11:30
 20 as I left Stanhope, I saw the coal trains going east, one or two—as I came nearer I could see another train, and they run throwing out a stream of what I term fire-works, red hot coal from 10 to 30 feet above the smoke stack. The coals were about the size of a chestnut, and I think some were of the size of walnuts. I was then less than $\frac{1}{8}$ of a mile away, when I passed over a little hill, I could see what the fire was doing, it had caught both sides of the track and was burning rapidly. I went to father's house and called him up and he and his young man, went with me out to the fire, we put it out. Father and his hired man
 30 went with me. The fire was 10 yards from a hay stack and it was burning; that was between the house and the road. We got back about 1 A. M.

Again, in spring in the latter part of March or 1st April there were a good many fires along the track on Gen'l Cooper's farm and elsewhere. One time on Gen'l Cooper's land the fire ran 300 yards from railroad track in the night—another time it ran 150 yards. This was in March.

I saw fire fly 50 feet from the track I think; I examined some of them, I picked them up, I had put out fire on one
 40 side and crossed the track, and was looking at a train pass.

it threw a lot of cinders—pieces of coal, I put out the fire and looked at the coal when cold, they were of the size of a chestnut up to a good sized hickory nut—perhaps a little larger. I saw a $\frac{1}{2}$ dozen coals more too. I thought they came out of the smoke stack may be 30 or 40 feet. The bank is 6 or 7 feet above the railroad which is in a cut.

AND, BEING CROSS-EXAMINED, SAYS :

I recollect distinctly a hay stack standing there for two 10 years, I would not say it was longer.

And the State also called *Richard Young*, who, being sworn, says :

I live in Roxbury, at Succasunna Plains—am Constable : In 1866 or 1867 coal burners were put on. I saw fires a number of times, down at Drakesville between White Cut and Drakesville station on Corwin's land. There was a good deal of ground burned and of fence and woodland ; 20 I have seen engines throw fire very frequently, they were coal burners, and have seen the fire red, 30 feet from the track. When the coals go out red hot, they shew larger than they actually are. Was called up twice at night to go with load to put out fires on Gorman's and Goldsmith Corwin's land near Drakesville station. The fire ran over a good deal of ground, 3 or 4 acres of woodland ; I saw fire thrown out at Shippenport on Sickles' land, I saw the blaze, I ran and stamped it out ; it was about 8 o'clock at night. 30

And the State also called *George W. Scripture*, who, being sworn, says :

I lived in Roxbury, about 75 feet from the railroad track, west of the depot, near Shanz and Schubars ; I noticed the coal burners for I was working on repairs. The company used them principally on coal trains and freight trains ; I think not on passenger trains at that time ; I worked between Drakesville and Stanhope as a trackman ; coals flew from coal burners on my property ; I have seen them throw 40

small pieces of coal a number of times ; I was in bed some-
 times ; the coals came out of the smoke stack and lit in my
 yard, some struck against the window, they would be alive
 —red—hot, as a general thing ; they set fire to nothing ;
 there was nothing in my yard then to set fire to. If they
 had fallen into combustible matter they would probably
 have been set on fire ; some of the coals were of the size
 of a pea to that of a chestnut, I saw this frequently be-
 10 burners were put on the road ; I could not say if any fell on
 the top of the house ; they would rise 10, 15 or 20 feet
 from the smoke stack—may be some higher. They would
 frequently throw fire along the track against leaves, &c.,
 close to the track very often ; they would do it going up
 grade *of course*. When they were going down grade, they
 would be using no steam, and would throw nothing. There
 is more noise by steam works the harder the engine is la-
 boring, the more fire she is apt to throw when going ; when
 they have to use steam to carry heavy trains, they have to
 20 expel fire ; they can put on a lighter draft and the engine
 will not expel fire.

And the State also called *John H. Brittain*, who, being
 sworn, says :

I lived the fall of 1866, and following winter, at Stanhope ;
 I saw no fires in winter ; in the spring, in April, saw fires.
 In that winter I stood on the railroad bridge, right over the
 pipe of the locomotive ; I saw the coal come out of the
 30 pipe ; it would thump against the bridge. I saw coal, at
 night, light on the bridge and strike it ; I put fire out on
 the railroad bridge.

Coals thrown from locomotive were of different sizes—of
 size of walnut, and smaller ; frequently went up on bridge
 and saw this. I picked up pieces of coal ; some were as big
 as a walnut—some smaller. There was quite a curiosity
 there ; in winter they threw coals twenty-five to thirty feet.
 In April there were fires every day by coal thrown from
 the pipe. I saw them ; frequently fired our land ; fired
 40 fences. I saw fire also on the other side of the railroad—
 on Wells' land.

These fires on our land were fired from coals from the pipes of the locomotives; saw them at night; was in the habit of going over to watch the coal trains. One day it ran over half of our land; it ran right up by the barn, and would have burned the barn if we had not put it out. The fire went up to the stream within two feet of the barn; this was in the forenoon.

And the State also called *John Wills*, who, being sworn, says :

10

I live in Roxbury, at Stanhope, one mile west; I have seen engines throw fire frequently. The railroad goes right through my land; the engines were coal-burners; I never knew wood-burner engines to fire the road but once; that was one very dry time in spring. You cannot see the sparks in the daytime; you can see them in the night; when the train is going along you can see the fire spring up all over; one very windy night it passed a stack of hay thirty or forty yards.

20

Pieces would go from twenty to fifty feet on snow, after they put on coal-burners they threw fire on each side of the railroad, on my land, my son's and Gen. Cooper's. They burned one thousand or fifteen hundred rails of mine before May, 1867; the sparks, in winter, went from twenty to fifty feet from the railroad, and fell in snow on lands of self, son, Cooper, the Lawrence farm, &c.

AND, BEING CROSS-EXAMINED, SAYS :

30

There have been more fires since the company used coal-burners; the wood-burners fired the fields before the coal-burners were used. The coals from the stack come down hot; they retain their heat longer than those from wood-burners; sparks from wood-burners go out nearly as soon as they fall; coal takes longer to cool; that is the trouble. There was a fire from a woodhouse about the same time—a little before.

AND, BEING RE-EXAMINED, SAYS :

40

I do not know as I ever saw a spark from a wood-burner fall alive ; coal falls quickest ; I am not engineer enough to say that the main cause of the fires is using coal.

And the State also called *John W. Clouse*, who, being sworn, says :

10 In the fall of 1866, and the winter and spring following, I worked for A. R. Riggs in Roxbury ; I lived at Port Morris ; I saw fires in that spring, from March to May 1st, 1867 ; I saw them set on fire by engines—they were engines going east and west—on south and north side of the railroad, on Mr. Riggs' land, on Smalley's land, on lands of Iron Company, and land of heirs of Reuben King. I saw the fires catch from coal-burners—one engine in particular, a coal-burner ; I saw fire Mr. Riggs' land three times between March and May, 1867 ; it burned over nearly a mile each way. Several times I carried water, raked leaves, and scraped ground, to put out the fire ; coals fell thirty feet off.

20 I picked up a coal ; here it is ; I have seen larger pieces than this, and from that down to the size of chesnuts and grains of corn ; they were coal trains. This piece of coal fell, in the spring of 1867, from engine No. 56 ; I suppose the largest in 1867 was as large as a walnut with the bark off.

And the State also called *Rankins Brown*, who, being sworn, says :

30 I live at Port Morris, one hundred yards off the railroad ; two years ago last spring I helped to put out a fire on Mr. Riggs' twice ; it was on wood land near where I lived ; it began near the railroad ; I saw the engines—coal-burners—throw the fire ; it was an up grade. Some engines will throw fire, and some will not ; I mean coal-burners I have seen pass that way ; I have frequently seen coals thrown from engines ; I have seen them of the size of a hickory nut, and all down from that size.

40

AND, BEING CROSS-EXAMINED, SAYS :

I cannot tell, by the number or name, the engines that threw the fire ; I have noticed some circumstances—

And the State also called *Charles Recum*, who, being sworn, says :

I live at Shippenport, Roxbury township; in the early spring of 1867 I saw the fire on Thomas L. King's land from the coal-burners; the fire got eight or ten feet from the sawmill building. My house and buildings were endangered—my house, stable and store. 10

And the State also called *Horace Horton*, who, being sworn, says :

In March, 1867, I worked at Shippenport; one day I came down to Drakesville station; I stood off 50 yards from the track, and a coal train came by me, and a piece of coal from the engine—a coal-burner—struck me on the foot; it was as big as a black walnut with the shell off; it was hot. The train was the four p. m. coal train going up grade; I saw fire thrown, most every day, forty to fifty feet from the railroad, from the size of a white walnut down, in the day-time. 20

And the State also called *Samuel B. Herbert*, who, being sworn, says :

I live in Roxbury township, one mile east of Waterloo; I saw fires constantly—every day—burning fences, my young timber, &c. A stream of water stopped the fire; it burned two or three acres. I saw where the fire started from—near the railroad track; I have seen it start directly after the trains passed—coal trains and freight trains; they were the small straight coal-burners; I saw some pieces a good deal like an old-fashioned gun-flint. The burning continued to May 1st, 1867; saw the burning on lands of William Batson, John Wills, Peter Smith, Gen. Cooper and William Red—mostly timber lands. 30

Samuel Norman ;

I live in Roxbury, in Shippenport ; in spring of 1867 I saw, every time train came up, burning on different persons' land—my land, Thomas L. King's, John Brown's, Segur's, and Riggs'. Trains would go up, and in a few minutes I would see fire blaze up.

And the State also called *Michael Bennett*, who being
10 sworn, says :

In 1866 and 1867 I worked on the track of the Morris and Essex railroad ; I saw fires ; I had to put them out often. I never saw them set on fire ; I saw them on John Wills' land, and from there on to Stanhope ; saw it on Wills' land, 15 yards from railroad, where it had caught ; I helped often to put out these fires.

And the State also called *Theodore Young*, who, being
20 sworn, says :

I lived in Roxbury in 1866 and 1867 ; I saw fires in 1866 and 1867 ; in March or April, 1867, I assisted in putting out two fires on Mr. Riggs' land and my own. My land is a quarter of a mile from the station ; it was set fire to and burned over in the fall of 1866, and then again in the spring of 1867 ; about forty acres were burnt. The fire on my land originated at cut—the highest point—and swept each way in shape of a triangle, and then caught on the other side.
30 I saw another fire on Mr. Riggs' land ; I looked down the track where the road is perfectly straight for three miles, and saw a line of fire extending for the whole distance, extending from the railroad—not very far from the railroad.

And the State also called *Thomas L. King*, who, being
sworn, says :

I live at Roxbury ; I own lands along the Morris and Essex
40 R. R. Fires were frequent from October to May, 1867 ; from

April 1st to May 1st, scarcely a day or an hour in the day passed that if you looked out you did not see burning. I could see two or three miles along the line; my residence is about a quarter of a mile from the track. During that time they burned all through, some six miles, from Port Oram to Stanhope; from Stanhope west scarcely anything escaped. I frequently saw fire thrown from the engines and saw the coals; they were from the size of a pea to a black walnut. Trains would pass through, and right after the smoke of the fires would rise; some were put out 10 without going far; again, fires would get started, and a considerable land be burned over, probably twenty or thirty acres—lands of Maryott, A. D. Salmon, Mr. Young and others.

AND, BEING CROSS-EXAMINED, SAYS :

I did not say every rod was burned for six miles, but there was very little indeed, for all the distance, which has not been; it was low land, &c. 20

The State rests.

The defendants, by their counsel, moved the court to direct the jury, on the case made, to render a verdict of acquittal.

Which motion the court refused to grant.

A bill of exceptions is prayed by defendants' counsel, and 30 is allowed and sealed accordingly.

J. D. BEDLE,
Jus. Sup. Ct.

{ L. S. }

Defendants, by their counsel, called and examined 40

James Cook, who, being sworn, says:

I live at Paterson; I am a manufacturer of locomotive engines. Our works made ten engines for the Morris and Essex railroad company; six of the engines were eighteen by twenty-four inches, eighteen inches diameter by twenty-four-inches-stroke cylinder; the driving wheels were four feet and a half; the other four engines were eighteen by

10 These were tank engines for switching, pushing, &c.

The six were the largest class of engines built; we build heavier engines but not more powerful; they were for four feet eight inches roads, and as heavy as we ever build them.

We have had our establishment sixteen years; we have made sixty-five engines a year on an average. There are three different kinds of smokestacks; they had three with the peach-basket smokestack, two with similar stacks and cast-iron grates over the top; one had a flaring top, similar

20 to a wood-burning smokestack, and had a wire-cloth all over.

The plate produced shows two of the kinds—the peach basket, and the same with peach basket out; the first three were similar to left-hand draft; the other two to that with the peach basket out, and grating over the top.

We had directions to make these as good as possible—to make the best spark-catchers possible. I knew of no better means of arresting sparks than was furnished for

30 these engines.

The first machine, the Orange, was delivered September 7th, 1866, and the last one November 15th, 1866, a pusher; These arresters were on and in order when we delivered them; we had built coal-burners for other companies in the state; the first coal-burner we built was for the Delaware and Lackawanna railroad, ten or twelve years ago, and we continued to build them afterwards. For the Erie railroad we built a number in 1864; we built some eight years ago; we built for the Central railroad; we built four for them;

40 They were coal-burners, and two I do not know; a large

majority were coal-burners; coal-burners were used five years ago by the New Jersey railroad, and the Camden and Amboy had some too.

AND, BEING CROSS-EXAMINED, SAYS :

We use water power in our works; we used stationary engines; it is not usual for stationary engines to throw coal out of stacks. In producing power for stationary steam engines we advise that the furnace and boilers should be very large; if the fire box be smaller it requires greater rapidity of combustion to create power. In ordinary use coal produces less sparks than wood; intense draft necessary to create heat sends coal out of stacks; but we have to provide spark-arresters to prevent that. 10

I had examined, and endeavored to find the best spark-arresters before this. If I had a cross-barred grating that could not be broken no piece could get out larger than one quarter or one eighth of an inch, or whatever the size of the opening is; the exhaust steam is what carries up the coals; the exhaust steam is let into the smokestack to cause draft. There is no grate on the flaring-topped stack to prevent a piece four inches in diameter from passing out of top, if it makes the circuit; if the current is strong enough a coal two inches long could get through the grate of the flat gratestack if only a quarter of an inch thick. On the left-hand side a piece a quarter of an inch may get through; the exhaust steam drives it up; if the meshes were made one eighth of an inch, there would be no draft. Facts prove this, because it fills up with ashes and dust; the opening is seventeen inches at the top of stack. The protection against the escape of sparks is the curves they have to take to get through. 20

The other one having no cross bar, an object an inch long could get through if narrow enough; the smokestack with no cone in had nothing to prevent sparks going out, except the grating. 30

The peach basket had wire-cloth, and a cone of cast iron; an object may rise past the cone, and strike the peach basket. The first were the peach basket, the second the 40

flaring top stack ; three had peach baskets ; two had grating, peach basket away, and cone ; one had flaring top, which had wire-cloth.

Meshes in wood-burning engine have been put in four to an inch ; a quarter of an inch would not do for anthracite ; three to an inch might do, but not a very good draft ; I do not think if top enlarged it would do. If on the flaring top there was a network it would keep the coals from going out.

- 10 There is no great difference in coal engines, so as to prevent throwing fire ; there is a difference ; engines are bound to get out of order. Exhaust steam is sharper at one time than another ; it cuts the fire quicker ; sometimes it cuts the wire-cloth out. There are coal-burners that use wood-burning stacks ; these never. I have seen wood-burning stacks injured ; none of these came back to be repaired ; the grate was put on with bolts and nuts. The actual size of the openings of the mesh in the peach baskets was five sixteenths, between one fourth and one third of
- 20 an inch square ; the actual size of the opening, where the wires are three to an inch, is between one fourth and five sixteenths of an inch square. I have seen two engines going along at the same time, and one throw fire, and the other not ; that is because one is out of order.

There is a difference as to the making of smokestacks—about sending out fire—and there is a difference in the make of engines—as to their liability to get out of order. When the valves of engines get out of order they throw more fire ; sometimes they throw coal and cut wire-cloth ;

- 30 I have known this to be so with wood-burning stacks on coal-burning engines.

AND, BEING RE-EXAMINED, SAYS :

I had the charge of the motive power of the Delaware and Lackawanna railroad as master-mechanic ; I think I went there in 1863, and stayed two years and a half. The master-mechanic had charge of all cars and locomotives—locomotives especially.

- 40 We don't use the largest boilers on locomotives, because

it would take too much to carry it along ; coal-burners are larger ; we made these eight feet long and thirty-seven inches wide, ninety-six by thirty-seven inches ; wood-burners were sixty-two by thirty-seven inches. We use exhaust steam on wood-burners ; it is not practicable to work a locomotive without an exhaust ; it is not practicable to have such a guard as to cut off the draft. We aim at two things—as much protection against sparks as possible, with requisite power.

We thought these arrangements on the engines furnished to the Morris and Essex railroad the very best which could be had, so as to prevent throwing fire. 10

SECOND CROSS-EXAMINATION :

In freight-engines the fire passed from fire-box to smoke-stack through two-inch flues ; these inside flues are one and three quarters and one sixteenth or one and thirteen sixteenths inches ; the distance between the fire-box and the smokestack is thirteen feet—eleven feet of flues. The Delaware, Lackawanna and Western railroad company have taken screens out of the straight stack, and use it without ; they have no spark-arresters. There are other coal-burners besides anthracite—the bituminous ; some are used on the Erie road ; they use both kinds there ; they use bituminous altogether on the Pennsylvania Central, and anthracite wholly on the Delaware, Lackawanna and Western road. They do not construct engines the same way ; I do not know which is most liable to throw fire ; the bituminous do it. 20

The anthracite have very much larger fire-boxes ; on our engines the wire-cloth is liable to get out of order ; intense heat and the sparks would eventually wear it through. I have seen it done with coal and wood-burners ; I should think the liability to be broken is greater in anthracite coal-burners than in bituminous or wood-burners. If I saw stacks throw pieces as large as a hickory nut or chestnut I should not think it was in order ; if it went up in the air twenty or thirty feet it must have come out of the stack ; of these three smokestacks I suppose the peach basket was 30 40

the least liable to throw fire ; the flaring top is considered a very secure stack ; the apertures, five sixteenths to an inch are said to be made with thicker wires. If the basket was enlarged, &c., there would be more liability to throw fire, and the draft not so good.

On the Delaware, Lackawanna and Western railroad they use smokestacks with no grate on the top ; on the New Jersey transportation company it is used altogether,

10 I learned the trade in the establishment, and gave attention, and experimented ; after all my experiments I think this the best way. The Delaware, Lackawanna and Western railroad company dispensed with spark-arresters, to get more steam, &c. ; their road terminates at New Hampton Junction.

AND BEING RE-CROSS-EXAMINED, SAYS :

In the month of May, 1867, I was at Danforth Works ; I made an affidavit for Mr. Vanatta ; I don't remember any
20 repairs in changing at that time, at our shop ; there may have been at the Morris and Essex shop. The bonnet screen is around the top of the smokestack, and separated with hinge—removable. I do not remember any bonnet screen for coal-burners ; we have now spark-catchers with what is called the cabbage-top stack ; there is a large wire screen through the largest part, over a cone ; it has been used two years—not, probably, longer. My first knowledge of it was about two years ago ; it was made at Rogers' shop, above us ; I think the first one was made there. Another
30 kind of smokestack has a basket of wire entering downwards, against which sparks struck after striking the cone ; some think these very good, and others dislike them. I do not know how these are for stopping fire ; never saw them tried ; I had not time to go and see them tried. I know of four or five kinds of spark-arresters already described.

And defendants also called *Thomas L. Davis*, who, being sworn, says :

40 I reside in Lancaster, Pa. ; I am superintendent of the

Lancaster Locomotive Works; I have been engaged fifteen years in the business; I was employed at the Jersey City Locomotive Works in 1866—from 1859 to 1867; there were two hundred and odd locomotives made while I was there.

They found five locomotives for the Morris and Essex railroad in 1866—in the months of November and December. They were anthracite coal-burners—eighteen-inch cylinder, twenty-four-inches stroke, four feet and a half wheel. They were as large as I ever built; they were freight engines; they were of first-class construction; that was the order. They had the straight stack, with grate on the top, with bars a quarter of an inch apart; it was twenty-eight inches in diameter, with bars supported in each corner, fastened to the top of the stack with five or six bolts. They were not so made as to be unscrewed or swung to one side while the engines were in use; there was no way of taking it off, except unscrewing the nuts. I had orders from the master-mechanic as to the spark-arresters. We used our best judgment to get the best kind of screen; I knew no better practicable screen at that time; the same screen is used for other roads—the Erie, the A. and Great Western, and Oil Creek railroads; the stack was used on the New Jersey railroad and Transportation company. I do not know that any other was used then; we had used other screens before we found this, and we thought this the best for burning anthracite coal and arresting sparks; these screens were on when the engines were delivered, and in good condition.

AND, BEING CROSS-EXAMINED, SAYS :

I know of different arrangements—two or three; one the cabbage-head, another the peach-basket. We had made the cabbage-head at that time; I heard Mr. Cook's description of it; it corresponded with what I knew of one; I had known it several years, and had made them, but not for anthracite coal. I had gone out at night, and seen how much fire it would throw; it threw as much as the other—the straight stack. I also know one or two different forms

of the straight stack; all these are not provided with grates on the top; these two were the only ones I had experience with as coal-burners. I tried the cabbage-head on the Great Western and the Erie railroads; the cabbage-head is still in use.

I am now making bituminous coal-burners; we made a good many cabbage-head stacks in Jersey City, but not for anthracite coal-burning; spark-arresters are necessary in bituminous coal-burners. I do not think there is much
10 difference between them and anthracite coal-burners in throwing fire; for soft coal we use a different kind of arrangement.

These grates have only one crossbar in the centre; they would allow a piece of fire to go through which was a quarter of an inch thick, and the length possibly. The stack I found for the Morris and Essex railroad was more expensive than that for cabbage-heads; the top of our stack cost half as much again as the other. The names of
20 the engines we supplied were; the Franklin, Greenwich, Union, Singack, Mansfield,

And defendants also called *John Hedden*—

I live in Hudson City; I am superintendent of the motive power of the New Jersey railroad company; I have acted in that capacity about nine years; I have used coal-burners on that road ever since about 1856. They have used coal-burners on that road ever since about 1856, and have used anthracite coal since 1861; the engines of the company
30 number forty; three fourths of those in use are coal-burners. That is the motive power of the line; the engines have a straight pipe with cast-iron screen on the top. Mr. Davis' description of the smokestack is substantially the same; they were got from us.

We have used cabbage-heads; they are not in use now; we could not do our business with them; we could not deliver trains promptly with that kind of smokestack, and the flaring pipe threw too much fire on each side of the road.

40 The straight stack throws the sparks up; the flaring

stacks throw them off on an angle; there is no more practical means than these grates to arrest sparks; nothing but small pieces can pass—nothing larger than a pencil. We did not use the peach-basket screens; we spent a great deal of money trying experiments; we think our grate the best.

AND, BEING CROSS-EXAMINED, SAYS :

The heaviest grade on our road is about forty-two feet—
 average twenty-seven to thirty feet; it is forty-two feet for
 three miles and a half. There are eleven miles and three
 quarters of rising from Rahway to New Brunswick; there
 are sharp curves; we carry passengers and freight. The
 flaring top is the old-fashioned, large pipe; the internal
 construction is about the same as Cook described; it throws
 the fire beyond the line of road a good deal; we abandoned
 them on that account. It has sometimes wire-cloth, and
 sometimes perforated iron plate-holes one-eighth to three
 sixteenths of an inch in diameter; that is sufficient to give
 draft. I do not suppose it is more durable than wire-cloth,
 but it is easier to get; wire-cloth will bend, and not break;
 it is very difficult to break.

Anything that would pass through the tubes, *i. e.* the
 flues, would pass out of top of the flaring pipe; it would
 not go out the same shape, but it might; I have known
 pieces to go out, of same size and shape that they went
 through the flue apparently. Anthracite coal is the best
 and cleanest fuel to be used. I speak of the flaring top
 with no covering on it, one without obstruction or covering.
 Any piece that can get through the flue can go out of top;
 the draft is strong enough to take it.

Our engines will not throw anything larger than a com-
 mon pencil; we have three crossbars. If you have not the
 steam contracted there is no speed; we do not allow any-
 one to touch them; they need renewal every sixty days;
 we keep duplicates on hand; renew in a few minutes.
 Something depends on the nature of the business; if we
 are employed on heavy work they require renewal sooner;
 they require renewal on simple work.

I know of other anthracite burners; some use the same with us; some do not; I know of no others except those described here to-day, that is, attached to smokepipes. Some put perforated plate in front of the tubes from the fire-box, and use that in lieu of the cover for pipe; this is in the smoke-box, placed vertically, right in front of the tube or flue. That works very well, but is not so much in favor as the straight pipe with grate on the top; they use it in various places; in New Jersey and Pennsylvania I have
 10 seen them. If the spark-arrester was above too it would choke.

We have never had the peach-basket arrangement; we have used the cabbage-head, and abandoned it because it was dirty; it threw too much dirt on the passenger train. They try that on the New York and New Haven railroad; it is not equal, for stopping fire, to the straight pipe and grate; the cabbage-head is more likely to set fire to adjoining fields; sparks do not go so high from it; the netting is generally about the same size with the grating. I have
 20 never seen a locomotive that did not throw fire; they frequently set fire to things along the line. I do not know of any railroad which does not set fire to things along the line; best wood-burning engine will set fire to things on the road.

I have been connected with railroad these twenty-seven years, and there have always been fires; fifteen years ago, during the dry season, it was a daily occurrence. Speaking of fires, I mean grass; I never saw woods set on fire; I do not know of an instance of woods being set afire on
 30 the line of the New Jersey road. We have no engines quite so large as the Morris and Essex road engines; ours are passenger engines; we use coal engines with passenger trains. I have seen ties burned occasionally; we do not allow fires to be raked out on the line; we require them to be raked in the ash-pit; we have ash-pits provided; it is not necessary to rake them on the line.

And defendants also called *Luke F. Tronson*, who, being sworn, says:

I am master-mechanic of the Morris and Essex railroad; I went to the company in 1840, and have been in their service since—twenty-nine years; I see to the locomotives—that they are kept in order—and the machinery generally. I have control so far as the engines are concerned; I direct the manner of using the engines; the orders proceed from me. A coal-burner was first used in October, 1866; between that and the first of May, 1867, we got sixteen; we used four as pushers; one was kept at Hoboken, one at Newark, and two at Philipsburg, until they moved their station to Chatham, which was in 1867—the latter part—10
or the forepart of 1868. One of these came from Pennsylvania; the Varona and the Cook engine called Orange were the first and second we got; the Pennsylvania engine was made by Edward Norris at Lancaster, Pennsylvania; it was not built for our company, but it was new; it was steamed and came down to us, but I examined it before I accepted it. That had a straight stack with a grate on the top; the spaces were three-eighths or one fourth or half an inch at the bottom; the space through which coal had 20
to pass was three eighths of an inch. The size of that engine was seventeen by twenty-two stroke; it was a well made engine—not so highly finished, and more likely to break down. As to escape, it was equal to the ordinary run—about the same thing as those furnished by the New Jersey Locomotive Works.

I had had no experience with coal-burners before the fall of 1866; I made the first trip with it from Philipsburg to Newark, to see how it worked; the engine was loaded. We took a lot of cars; it worked very well; I saw no fire, 30
and felt none on the engine; it may have thrown it; it was in daytime—a shiny day. I afterwards altered the stack—next spring—in May or June probably. I think I was preparing cone for the change, previous to the bringing of the chancery suit; I had the cone ready to put in; I took it to Jersey City, and showed it to the chancellor.

I found out that it threw some fire; the grates got broken sometimes; we substituted another screen, to make it effectual to prevent fire. I enquired of the builders, and Mr. Norris told me that it would not throw fire; at the time it 40

was put in use I supposed it was a good machine. I think I found it out in about two months—that it commenced to break the grates. I got it some time in midwinter; it may have been November or December; the engine was laid up about two weeks. I put other grates in, and then, finding it again, I laid it up until I got it altered; I did not continue it in use until I got it fixed.

We have men to inspect these engines every day; sometimes they are inspected every three or four or five days—
 10 sometimes longer. I did not inspect; they are to inspect daily; my orders are, that as soon as anything gives way to hold on until it is repaired. These are the directions I gave at that time; my directions to the men were, to report at the end they run to, and not to clear fires until they are standing still; we have ash-pits at various places; I always cautioned them to use the engines cautiously; we gave no directions as to power; they had to get their trains over the grade, and I could not regulate their power. I employ
 20 men, and aim at getting careful men; I question them and require certificates. I received orders from Mr. Vanderpool to spare no means or money in experimenting to prevent throwing fire; I obeyed his orders.

Six freight engines were got at Paterson. I was at the shop while they were being built once a week; I gave directions to put on the very best possible devices with reference to preventing fires; Danforth Works are a first-class engine; there are no better engines made; the devices put on were not according to my judgment. I had never used coal-burners, and they had.

30 Three engines had the peach-basket stack—such as Mr. Cook described; two had the straight stack with grate over the top; one had the flaring stack.

Engines were never used without screens, to my knowledge or consent; I never heard of it; I first heard of complaints of their throwing fire in the latter part of November or the beginning of December, 1866; then Mr. Bassenger sent me a letter complaining of their throwing fire. I then went and examined all the stacks I could find; I found a
 40 peach-basket with a hole in it; I took a piece of wire-cloth and patched it; I reported immediately to Mr. Vanderpool,

and then he gave me orders, as mentioned. I could find nothing broken about the stacks, except this one; that was repaired and sent out on the road. A short time afterwards I found, in the flaring stack, a piece of wire at the top, about the size of my fist, gone; I replaced that. Then one at Philipsburg that had given out; I learned of that by telegraph, and it was repaired. Then I went to work and got up a cone such as you have there, and put that on a number of stacks. I put these on from the middle of April to the middle of May; at the time of fixing these I knew of no better device than these. 10

I never saw a locomotive engine which did not throw fire when in use. If a piece of coal falls thirty or forty feet it does not necessarily follow that it came from the smoke-stack.

I changed the fire-arresters on some of the engines; I did not change the flaring stacks; those are on the pushers. I changed the stacks on nine of the freight engines—three peach-baskets and six with grates in, including the Norris engine. I did not change the others; we had not much trouble with them; we could not improve them; it was the large stack, like this. I think there were three of them; they came from Danforth Works at Paterson. I never knowingly permitted one of the stacks to go out without being in order; this alteration answered a very good purpose as long as it would last. 20

AND, BEING CROSS-EXAMINED, SAYS :

Power is fuel, and there must be proportion between the fire-box, boiler, stroke, &c.; pressure on the square inch is the point; in order to increase practical power you increase pressure of steam, and to do that you increase the amount of fuel, or the rapidity with which it burns; so, not having the amount of fuel, you make a draft for the increase of rapidity of combustion. To get the same load up a higher grade, you must make more, or more rapid combustion. You might divide the load when the grade increases. If fire is thrown it is by means of extraordinary combustion. An engine may be overworked; by overworking I mean putting more on than an engine ought to pull. 30 40

The amount of fire thrown depends greatly on the amount of work the engine is put to; you cannot run an engine without throwing fire. Our locomotives carry two hundred and fifty tons at once, and drag it with half a ton burning at once. If your load was one hundred and twenty-five tons you would not throw very much less; it would make a difference as to size of lumps thrown, and in the amount of coals thrown; a locomotive, by itself, could not go up a grade without throwing small sparks of fire. The power of an engine depends at last on boiler and fire-box; if you want to increase the power of an engine you must enlarge those.

I do not think I went to examine the New Jersey Central engines before we put on coal-burners; I did examine the Delaware and Lackawanna engines—two or three of them. I do not take machinists' word without judging for myself; I did not hear that Stearns said, in the chancery case, that their locomotives were provided with a smoke-arch, and a spark-arrester besides. I have been in their shops, and paid no particular attention to spark-arresters.

The Delaware and Lackawanna engines had no arresters. The middle of January was the first I heard of trouble particularly; before that time I had heard from my engineers and others of their throwing fires, and had put in new grates. I have not looked at Mr. Bassinger's letter to see the date; I have not presumed it. I put the first extra grate, I think, along the latter part or middle of November. The engineers told me they set fire along the road; that was the way I heard. I told them to be careful of their ash-pans; the engineers did not tell me that they had hard work to get up the grades at all times. I do not recollect that they told me they had hard work on account of trains. Mr. Bassinger called to see me a week or ten days after writing. I do not think I went to New Jersey Central to make enquiries; I did to the New Jersey, and to the Erie. I put new grates on finding some bars were broken out; I think I put in six or eight new ones from the time we commenced running until spring.

Single bars were broken out from the middle of November until next spring—middle of May; the wire-cloth was

broken. I thought it was from the wear of the coal on it—coal striking; it might be twice; it might be three or four times. I did not accuse the engineers of punching the holes; I might before examining the cloth, and could not see the bar was the wrong way; this looked to me, from the under side, as if it was filed, showing evidently wear. I learned, about the middle of January, of great destruction along the railroad by fire; I learned, when the dry weather came on—in the spring—that it was very bad. We stopped the engines which threw the fire most; we did not lay up the six grate engines, nor stop carrying coal; we kept coal trains going, as we had before. Varona was taken off March 20th to the first of April; she was laid up, I think, until she was changed. 10

I have sometimes run out a locomotive imperfectly arranged; single bars were broken by the coal striking them; I did not suspect the engineer's breaking them on purpose. Varona first broke down as to grate; I cannot tell when. I repaired her; that was all; she was laid up from some time in March to the tenth or fifteenth of April. I had put a bonnet on before. 20

I used to see these engines—sometimes not for two or three days—at the machine shop at Newark, and they went to Hoboken. I went to Hoboken almost every day; it might be a week or ten days that I would not see a particular engine.

If a piece of coal so big as a hickory nut went out of the stack there was, I think, a grate off the stack. As to flaring stacks, if the piece of coal is driven up and, before it falls, the next exhaust comes along, that drives it out. I have replaced one of the wire chimneys in flaring stack; it was cut out. I took out the peach-baskets; I found holes in the sides. The gratings do not get red-hot at all. If the engine threw fire of the size of hickory nuts, the stack was not in perfect order. 30

Fire could fly out of the ash-pan over the fence; a spoke of the driving wheel strikes it, and throws it. Coals will drop at the corner of the furnace, and if the driving wheel happens to strike it, it would throw it.

We fixed ash-pans with flange; the ash-pans of the New 40

Jersey railroad are the same as ours; cannot say why the coals are thrown out on our road, and not on the New Jersey road. I can give the engineer instructions, but I can't be sure as to conduct; there was complaint as to the conduct of the engineers in regard to ash-pans, and I called them up, and I denied it; I think Major Bassinger's grounds were burned by that. Col. Berthoud was superintendent, I believe, at this time, and remained so until the Delaware, Lackawanna and Western railroad company took the road. I bargained with the engineers; I had to do with running trains, so far as engineers were concerned. I suppose the superintendent had the road in charge. Complaints came to me from my own men, that such a stack was throwing fire. Col. Berthoud sometimes informed me; Mr. Bassinger also wrote me.

It would make a difference as to throwing fire, what the condition of the fire was in the fire; a green fire, just made would more readily be broken into pieces and thrown. If the fire were pretty well burned down—the coal thoroughly fused—it gets into the ash-pan, and I do not think much would go out of smokestack. If a piece like that produced (egg shape) got out of the stack, it came out of the flaring stack; it could not get out of a peach-basket, unless the wire was out of order; this is *clinker* pretty much. The piece now produced (diamond shape) might find its way through the *Varona* stack (diamond shape); the other, not without breaking.

Mr. Vanderpool was president, I think.

To throw coal size of black walnut would require considerable draft; the draft on locomotives, up grades of twenty or thirty feet, would throw such coal. If the engine was working at all it would be very apt to raise it.

If two locomotives were going up grade, and one threw large pieces, and the others not, I would say that one spark-arrester would be out of order. If both had arresters I should judge it would be the difference of them; my orders to the engineers were not that they should not waste their fire; I never gave such order, because they cannot waste it. They are not to abandon effort to get up.

The car-dispatchers generally determine the amount of

load—how, I do not know. This side of Chatham they generally bring about thirty to forty loaded coal cars in the train. I cannot say when they began to break up the train at Chatham; it was the latter part of 1867 or forepart of 1868.

A large exhaust pipe will not be so likely to throw fire as a small one, because the force of exhaust will not be as great. In our engines the exhaust-pipes are from two inches and three quarters to three inches and a half; the stack is generally six feet high.

I do not remember borrowing an engine that winter; I do not know engines from the Miners' railroad have run on the Morris and Essex; Mount Hope did not *then*. Coal cars net five tons, and they put on five—in all ten tons; the Morris and Essex road have to compete with the New Jersey Central railroad; I know that the grades are heavier than on Central.

I recollect no such conversation as that they tasked our engines too much to compete with the Central, but I may have had such; I learned from the engineers that they had great difficulty in getting up grades generally in wet weather; I spoke with the officers of company about using helpers to go up grades.

I think we should have thrown as much fire with two engines as one. If the stacks were in good condition there would be no injury either way. I think we have the flaring stacks still on the road, up at Philipsburg unless altered, of which I am not aware. My devices worked well for a season, but the same difficulty occurred; you could not depend upon them. On a long trip they would start well and come back with holes in them; and looking down in the cone you could hardly see.

Very often I have been tripped by things looking well and not being so.

Sometimes we would take the bonnet out for some purpose and find the difficulty in them. We are not in the habit of taking them out to see if worn, when using them. When at my end of the road they were frequently heated. Generally were hot when I examined them. Coal engines are fired up at Easton; they are kept fired up till return-

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ed, and then laid over one day, and examined &c., for repairs. My train dispatcher at Easton had a right to take out and repair the bonnets, and sometimes did.

William Osborne is the name of the examiner at Easton. The bonnet top is like the stack there.

And being interrupted by the Court, says :

10 The advantage of using coal is, it is cheaper. I don't know of any other advantage.

AND, BEING RE-EXAMINED, SAYS :

Wood is getting to be pretty scarce. Loads going West, or forty or fifty empty cars. I think complaints are made as to going both ways.

I have no reason why I did not go to the New Jersey Central before I ordered the engines. It didn't occur to me as to going to the Central.

20 I thought the flaring stacks were safest; the flying out is not likely, it is improbable,—it is a question of possibility.

Vanderpool was either President or acting President.

If the stack was in order it would emit small coal whether much to do or little to do.

All our engines—wood and all, were in use, and in operation.

We had no power on the road that we could use while experimenting. Other engines were at work with gravel, &c., and the grades were the same.

30 I don't think there was sufficient wood to get for the demand of the road.

I complained to the engineers for running over speed. I found fault and threatened to discharge them. They said they ran fast to make up time which they lost by waiting; I told the engineers notwithstanding to go slow; not to make such time.

SECOND CROSS-EXAMINATION :

40 It is a wooded country between Dover and Hackettstown.

There was a single track ; we sent out heavy loaded trains going west—ore trains.

And defendants re-called *James Cook*, who, says :

I have been examing books. The Orange has a flaring top ; so the Millburn and Dover. Rockaway has straight pipe and grate. Warren and Chatham peach basket tops.

And defendants also called *Leonard Crossman*, who, being 10
sworn, says :

I reside in Elizabethport ; I am master mechanic of the Central Railroad ; have been so fifteen years. I have run locomotives twenty-one years—previously

Coal-burners are used on the Central Railroad ; one hundred and four anthracite, eight wood and one soft coal-burner, one hundred and thirteen in all. We have used anthracite fifteen years. At the outset we used no guards. We had the straight pipe without screens. After using the straight pipe four years we began the screens—probably 20
six year.

First we put in a plate perforated in the front of the flues or smoke arch ; we continued that but a little while ; we tried it in four or five. Then we changed the stack altogether, and used the flaring stack, similar to the picture produced, except that the netting ran clear down to the top of the cone, and the cones were larger. It was fourteen inch pipe, twenty inch cone. We have used the cabbage-heads and the peach basket. We discarded the peach basket ; we used it six or eight months. We have used 30
cabbage heads and put the wire-cloth in a different place—about eighteen months ago. This last plan we have adopted. I don't think it is much of an improvement over the old stack as regards throwing fire ; it is no improvement. It is easy to tell which is the best means of guarding the throwing of fire. We have spent a great deal of time and money trying devices.

We use coal on our road because we cannot get wood. To operate our road would take four thousand to five thou- 40

sand cords of wood a month. We cannot get the wood along the line of road to drive our locomotives. We carry from two hundred and fifty to three hundred and fifty tons of coal, in a train. The first fifteen miles of road from Philipsburg is twenty-seven feet per mile grade. The heaviest grade on road is thirty-seven feet, from Plainfield to Scotch Plains going east. Going west the heaviest grade is forty-five feet. We carry west fifty to one hundred and twenty-five empty cars.

- 10 I never saw a locomotive which would not throw fire in use. I never saw a spark arrester which would prevent the emission of fire.

AND, BEING CROSS-EXAMINED, SAYS :

- 20 Our engines throw fire ; we use $\frac{1}{4}$ inch wire. They don't throw larger pieces very often—not when in order. My experience is that wire-cloth wears out and we have to repair. We don't use iron gratings, only one, and that for a short time ; we didn't have very good success with it, it had $\frac{1}{4}$ inch openings, and one cross-bar. That, on experience, threw fire. It threw fire each side the road more, and a good deal more than the ones in use. That was ten or twelve years ago—just beginning.

- 30 We think our engines do not throw very hard ; forty-five coal trains are going daily one way, and some freight trains and passenger trains besides ; our stock trains (cattle) are generally the heaviest drag ; coal trains are the next heaviest. The curves are not very hard on our road ; it is rather distinguished for being straight ; we have double and single coal cars ; one hundred and twenty-five single cars ; we speak of—

There is another short grade at N— Branch, thirty feet for one mile ; there are no helpers used ; it is all farm land pretty much—very little wood land ; it is right on the line of road.

- 40 There were some houses set fire to ; I do not know whether the engines did it ; we set fire to a good deal on the line of the road ; since using them we have set fire to grass and across fences. I have not seen any pieces of fire as large as hickory nuts ; I have heard of them.

Witness criticises flarer, and says :

I do not call it a perfectly safe arrangement—not so safe as it would be if the wire came down to cone; if the engine is making quick motions, and the exhaust comes in quick puffs, the coal would be likely to be carried out of the top of the flaring stack, such as is shown on diagram; I do not think iron grating a safe arrangement.

The foreman of each round house attends to the close examination of the netting every time locomotive comes in he looks down the smokestack. When the engine is taken in for general repairs—once a year, and once in a year and a half—we examine everything. 10

In our present engines the coal strikes the cone first; cabbage-head style nettings wear out quicker than flaring top; we have had them six months without breaking. The peach-basket did not last but a very little time. We allow loaded trains ten miles an hour—unloaded twelve; to go faster throws more fire.

If there were two engines instead of one there would be about the same fire as if one, but it would not be likely to be so large pieces of coal. If you have perforated plate in smoke-arch and netting on top of stack you double the chances of stopping the sparks. 20

Perforated plate or wire screen in smoke-arch we have given up, except in two or three of our machines; in one of them we have quarter-inch netting. I do not know why this is not practicable; we do not see much difference as to fire thrown with these engines.

Our exhaust-pipes are from two inches and a half to four inches and a half—single four and a half; we make our exhaust as large as we can, to keep up the steam. There is a difficulty in running coal-burners so as to stop fire; they will set some fire the best we can do. 30

AND, BEING RE-EXAMINED, SAYS :

We do not throw much fire along our line, as we think; as to burning on our road, there has been plenty charged. The track behind is burned over on both sides of the road, 40

and also houses in Elizabethport. Single car weighs two tons and a half—double car five tons.

And defendants recalled *James Cook*, who, being sworn, says :

10 We have made the netting go lower in the bonnets, but think there is no particular reason for it. I do not think coal does get out of that; I think no appreciable amount. In our judgment they are just as good one way as the other. It would not injure draft to bring wire down to cone.

AND, BEING CROSS-EXAMINED, SAYS :

20 I have run engines temporarily as master-mechanic—not as a regular engine-driver. *This* was copied from the way it was done when I was superintendent; there were no suggestions whatever made to me in regard to the matter. I merely made it so because I had drawings that day.

The defendants rest.

And the State re-called *J. B. Bassinger*, who, says :

30 The grade at Stanhope cut was temporized and afterwards at Shippenport temporized. It was not all taken down; the grade at Stanhope was left a little over fifty feet. There was no place between Waterloo and Stanhope where it was higher grade. There was a little summit in Stanhope cut; I noticed the fring. The engines were ordered and in a state of forwardness. I called no attention of officers; I didn't see any difficulty in the Paterson engines. There were several other engines that threw fire very badly this was in October or at any rate in November; I noticed the Jersey City engine, and wrote a note to
40 Mr. Tronson. I think I notified him in October. I noticed the running of the engines.

I did not notice the Jersey City engines when they came on the road—not as such. I did not recognize them, or know where they came from. I recognized the large pipe Paterson engines, as those I ordered; about the same time I noticed two with straight pipes. In November, I think, I noticed these straight pipe engines. I noticed more of the like soon after—directly after—in a few weeks. I did not notice the working of these engines particularly with regard to the throwing fire.

Q. What did you observe in regard to their throwing fire when they first came on the road or shortly after, if anything? 10

This question was objected to by defendants counsel, but it was allowed by the court. A bill of exceptions is prayed by defendants counsel and is allowed and sealed accordingly.

J. D. BEDLE,
Jus. Sup. Ct.

{ L. S. }

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A. I noticed nothing but the result of burning along the line. I thought the straight stack burned more than the others, though the other did too. It was difficult to fix it at night. It was not general with engines to throw fire badly—it was exceptional, and as far as I could see in the daytime, it was the straight pipe. I communicated this to Mr. Tronson. I heard him sworn; it is the thing he mentioned. I first wrote him, and then saw him and asked him if he had received my letter, and whether he was fixing these engines, and he said he was—he was doing all he could to them. He and I talked about it. There had always been difficulty—spark arresters is an old subject, I had talked about it years before. 30

If the spark arrester is in order, there is no practical danger from wood burning engines; I met Judge Robeson, a director, and talked with him about it; he had given it his attention, and everybody was excited about it. This was during the fall and winter of 1866 and 1867; I also spoke to Mr. Vanderpool about it. I never said anything to Col. Berthoud about it. 40

I did not learn anything as to the reason, except I was told that the engines were made as good as could be made, and the fault was in the manner of working them—the fault in the men—difficulty to get proper men to run the engines. They had when I left the Morris & Essex Railroad as superintendent, twenty-eight or thirty wood burning engines—powerful engines some of them; fifteen to eighteen inch cylinders, four feet drivers. They were coal engines, the first six drivers we had ordered; they were heavy, good draft engines. We had bought wood before that, generally along the line of the road. We had no difficulty in providing abundance of wood along the line of the road. We had been drawing coal from Easton before I left the road. We had no difficulty in procuring abundance of wood along the line of the road. We had been drawing coal from Easton, before I left the road; a year or ten months. There were to coal trains every day. We changed engines at Hackettstown and through then to New York.

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20 Q. Did you notice the working of the coal engines all winter and in spring, as to the throwing of fire on the line of the road between Denville and New York?

Defendants counsel objected to this question as not rebutting and as not relating to the place charged in this indictment. The court allowed the question and the defendants by their counsel prayed an exception to that ruling of the court and that their exception might be sealed and it is sealed accordingly.

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J. D. BEDLE,
Jus. Sup. Ct.

{ L. S. }

A. Only in neighborhood of Denville, in Rockaway and Hanover townships. I did not elsewhere.

Q. What was your judgment as a railroad man as to the necessity of throwing fire to that extent.

Objected to and over-ruled.

40 Q. Did you notice the throwing of fire any where near your house by the engines; what did you notice? Objec-

tion by defendants. Question allowed by the court; Exception prayed by the defendants and sealed by the court.

J. D. BEDLE,
Jus. Sup. Ct.

{ SEAL. }

I noticed their throwing fire near my house by the engines. They threw fire into the trees and set hedge and things on fire. (The court overruled this) as to firing trees and hedges.

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Q. Please state the extent and frequency of throwing fire during the winter at and near your premises.

Objected to by defendant. Question allowed, the court saying that the question must be answered only as to the emission. Exception prayed by the defendants and it is allowed and sealed by the court.

J. D. BEDLE,
Jus. Sup. Ct.

{ SEAL. }

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A. I saw occasionally an engine emitting sparks from the pipe. I could not say what was the size, or whether I saw them in the air or not; occasionally the emission was large.

AND, BEING CROSS-EXAMINED, SAYS:

Mr. Tronson manifested great anxiety to remedy it; so did the president of the road. The engines, so far as I ordered them, were suitable for the business. I was engineer during twenty-five years; during that time there were fires more or less every dry season; coal-burners were ordered, because it was deemed of importance to meet the coming business in the coal trade; we believed coal-burners would be cheaper. Delaware and Lackawanna company, in 1869. I had been at company to order the locomotives; it was thought best to get coal-burners; other companies had them, and we believed it was cheaper and better. We

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had not motive power enough then on hand to do this coal business.

Question. You have said there was plenty of wood for the then exigencies of the road. Was it or not necessary, in view of the business expected and prepared for, to commence the use of coal as a source of motive power?

10 *Answer.* Yes, sir; we deemed it important; the price of wood, together with the increased business, made it important, we thought, to provide for coal engines. There was another road—the Central—and, in order to carry coal as profitably as they, we used coal. I had no fears of wood running out, but it would cost more than coal; with all the locomotives the company then purchased, they had not enough to do their business.

And the State also called *John Green*, who, being sworn, says:

20 I am a locomotive-driver on the Ogden Mine railroad; there is wood all the way along the road; I have been driving engines on the road from April 1st, 1867; we burn anthracite coal. Our grades are short—some one hundred feet to the mile—others fifty, sixty-four up to ninety; there is some low grade—three or four feet. Three miles of the whole road are level, three sixty-four feet, and three hundred or four hundred yards.

30 We transport iron ore; we have one hard place of curve and grade, on one part of the road as it goes to canal; extending about one mile and a half—grade sixteen or eighteen feet.

We have a spark-arrester; we throw fire; we have never set fire to anything, except once when the screen was broken. The meshes of the screen are five-sixteenths of an inch, whole screen forty-two inches in diameter, made by McKenzie, of Easton.

AND BEING CROSS-EXAMINED, SAYS:

40 We have carried four hundred tons in a train—cars and all; we use only one engine at a time; there are woods on both sides of us.

And the State also called *Henry M. Dalrymple*, who, being sworn, says :

I was formerly employed by the Morris and Essex railroad company ; I remember the coal-burners being brought on the road. I noticed them throw fire when they passed through Morristown, up grade.

To the admission of this evidence the defendants prayed an exception, and that it might be sealed, and it is sealed. 10

J. D. BEDLE.
Jus. Sup. Ct.

{ L. S. }

I live near the depot ; they seemed to throw fire. The first month we went into the business we employed watchmen to, &c.

I have frequently seen them throw coals as large as black walnuts, and they would fall on lumber, and set things on fire ; this was in the spring of 1867—every day. The same trains would pass along with other engineers, and there would be no fire ; others would run along, and throw heaps ; used to old engines. 20

It was an every-day occurrence in the spring and summer of 1867, and during the winter of 1866 and 1867, before I left the road.

I could not answer as to the different engines ; some engineers would throw more fire from same engine than others ; fire came from the smokestack. We could see the fire come from the engine ; the coals would fly like hailstones, going east, up the grade towards Newark. I could not say there was any difference as to the style of the engines. 30

AND, BEING CROSS-EXAMINED, SAYS :

I left the employ of the Morris and Essex railroad company about the first of April, 1867 ; they began burning on the first of March. We were unloading lumber all along 40

during that month of March; we would follow the train three hundred yards, from the station to my lumber yard. I left the depot at half past ten at night; it was ten o'clock to 12 o'clock generally before I left. Freight trains were drawn by coal-burners; one left Dover at half-past six o'clock, and got here about eight; I first noticed this throwing of coal from engines when the coal-burners first came on the road, in 1866.

10 And the State also called *John G. Mace*, who, being sworn, says :

I reside at Dover, at the rolling mill; I noticed engines on the Morris and Essex railroad throwing fire in 1866 and 1867; in April, 1867, I was sent on purpose, on the cut at end of bridge at Dover, so watch them—to see. I noticed trains going west; I saw them throwing fire; I stood right over them; I was sent there ninth, tenth and eleventh, thirteenth and eighteenth of April, 1867; was there
20 very often; it occurred almost every train of coal-burners. One piece of coal went out, fully three quarters of an inch in length; it flew forty-five feet from the track, on Mr. McFarlan's land. I was in McFarlan's employ; the straight stack threw most fire; one engine with a straight stack threw more than the others.

I could not tell why that threw more; I could tell that one; it set fire in several places on one occasion; that engine passed every other day or so. I do not know that this one threw larger fire than the others; I noticed a hole
30 in the screen of one—quite a large hole; it was full two inches or more; it was going west. I picked up this coal; it is three quarters of an inch. Previously to picking it up I had noticed the passing of locomotives.

AND, BEING CROSS-EXAMINED, SAYS :

The one which threw the most fire was not the one which had the hole in it; I saw the hole in the screen when the machine was in motion; was directly over it on bridge; it
40 was going a good gait; they generally go fast.

And the State also called *George Richards*, who being sworn, says :

Stockholders hold a great deal of land along the Ogden Mine railroad ; there has been some little fire along the line of the road ; never heard any fault found ; we put on spark-arresters.

AND, BEING CROSS-EXAMINED, SAYS :

The only engineer that threw the fire was Green ; he came in 1867. I do not know that he is extraordinarily careful ; the whole responsibility of running the one engine is in him.

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And the State also called *William Totten*, who, being sworn, says :

I live in Morrystown, and lived there in 1867 ; I was employed by Major Dalrymple, and Frank Howell, was weighmaster and sawyer.

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I was watchman of lumber yard and sawmill. About first of April, 1867, coal-burners threw out lots of coal all afire among the lumber, from the size of a hazel nut up to a small hen's egg ; the general size was that of a black walnut ; some were quite flat, some long—different shapes. They fell fifty yards sometimes.

The smallest ones went out, and the larger ones retained the fire ; this was every night during the month of April. From three to five coal-burners went along every night ; sometimes every engine would do it, and sometimes not more than one in the course of the whole night—one or two in the course of the night. They threw fire towards Gov. Randolph's pretty thick.

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AND, BEING CROSS-EXAMINED, SAYS :

My business is a laborer—at work for different people.

And the State also called *Albert B. Riggs*, who, being sworn, says :

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I had interview with officers of the Morris and Essex railroad soon after the fires commenced, and through the winter and spring. I spoke to Colonel Berthoud, the superintendent; I complained of their burning the land over. He said he did not know that he could help it; that they had burned on the Delaware and Lackawanna railroad, all along, and his farm, one mile and a half off; so I understood him.

10 I told him, further, they would have to pay damages; he said there was not anybody along the road, sued for damages. He once said he would be glad to settle with me, but could not do it. I spoke to him that winter and spring frequently.

I spoke likewise to Mr. Vanderpool and Mr. Van Wagner about the time the depot in our place was burned down; I think it was in February. I do not remember what I said to Colonel Berthoud, but I called his attention to it, and told him they were damaging me largely. I said
20 —that they were burning me over, and there must be some means taken to prevent it. It was talked about between us that they were burning and damaging other people along the road.

Colonel Berthoud lived then either at Washington or Morristown. Colonel Berthoud was in the habit of going to Easton, back and forth, quite frequently; I do not know how often I saw Mr. Vanderpool about this, during the winter and spring, frequently.

30 AND, BEING CROSS-EXAMINED, SAYS;

I think it likely that Colonel Berthoud told me they were taking every pains they could to prevent the trouble. Once he took me out to show me the screens. I think he did tell me they tried to get the best men, and make them as careful as possible. I believe they did try to get the best men; they were both anxious, and so expressed themselves, to prevent this evil to every possible extent.

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AND, BEING RE-EXAMINED, SAYS :

They did not propose to stop running the trains.

The case was closed.

The counsel of the defendants requested the Court to charge the jury according to the following propositions: 10

1st. The Morris & Essex Company being authorized to use locomotives, had a lawful right to adopt anthracite coal as fuel for them and to use coal burning engines, as well as those constructed for using wood.

2d. If after resolving to use coal burners, they sought to obtain the best machinery, and in order thereto resorted to manufacturers of high reputation and ordered machines of the best character, as for other purposes, so also 20 for that of preventing the communication of fire from their chimneys, they did all, at that stage of affairs which was required of them by the law in that regard, and they are not responsible for such injury as may have arisen from the mistake or want of judgment or information of the manufacturers.

3d. If, after receiving the engines from the manufacturers, they used ordinary care and diligence to obtain for them skilful and prudent drivers, and committed them to 30 their charge, with directions for care in their management, they did their full duty in that respect.

4. If, in actually receiving the engines, they received notice of their throwing fire to a greater extent than common, they are nevertheless entitled to continue to use them, and free from blame for so doing, provided that they took pains to keep them in good condition, enforced care and prudence in their drivers and endeavored earnestly and in good faith through competent agents to discover the cause why 40 so much fire was thrown.

5. If subsequently, the company or its agents endeavored to amend the means used for preventing the communication of fire, and in good faith made use of such amendments and inventions, they discharged their duty to the public, and are free from criminal responsibility. The evidence in this cause shows no such case as to call upon them to abandon their coal business, either finally or temporarily.

10 6. If the spark arresters originally used or subsequently amended are constructed with regard to the adoption of all practicable means for preventing the communication of fire and in such manner as reasonably to attain that end, according to the state of the art at that time, the statute is obeyed and the company are entitled to use the machines, notwithstanding they do not actually attain the end in view and notwithstanding there may be then or afterwards a better plan than that adopted, which the company did not then know, do not believe in and adopt. Whether inventions *bona fide* put in use, do prevent the communication of
20 fire or not, is not of legal consequence. The company are not insurers of safety in this particular.

7. If the injuries given in evidence would not have occurred, but for the negligence of engine drivers, or might have been avoided by their care, and if the company labored to secure such care and did not expressly or impliedly, authorize such negligence the corporation is not criminally responsible. They cannot be held guilty of an offence if
30 they honestly endeavored to prevent it.

8. It was the duty of the corporation having received intelligence or otherwise having cause to suspect carelessness of management on the part of their drivers to endeavor to discover the truth and by reprehension and watchfulness to prevent it in future; doing this, they cannot be held to authorize the negligence of their agents or be criminally responsible therefor.

40 9. This is not a public nuisance although it may injure a great many persons.

The Court declined to charge the foregoing propositions, further than is done in and by the charge hereinafter set forth to which refusal and to the said charge as it relates to said propositions and as it differs therefrom the defendants by their counsel excepted and prayed that their exception might be sealed and it is sealed accordingly.

J. D. BEDLE,
Jus. Sup. Ct.



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The court charged the jury as follows :

The indictment is for a public nuisance from October 1, 1866, to the first Tuesday of May, 1867, in the township of Roxbury, and the subject-matter is limited to that time. It is an indictment against a corporation, not against individuals, and for which no person can be imprisoned. The question is, whether the defendants, as a corporation, can be convicted. The form of the indictment has been disposed of by the Supreme Court. We take it as we have it here, and any difficulties about it can be determined hereafter.

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The acts constituting the nuisance complained of are, in general terms, the unlawful and injurious ejection and throwing of pieces of fire from the engines upon the premises of different owners adjoining and near to the railroad, and near other property of different owners, and injuring and endangering the same, and thereby the state says the defendants are guilty of a public nuisance.

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You must deal with the case only so far as the emission from the smokestacks is concerned.

Before speaking of the duties of the company to the public, and the measure of offence that would make a public nuisance, it is well to get the location of the property alleged to be affected, and its character. The railroad runs through Roxbury township about eight or ten miles; a large part of it through a wooded country—sprouts, &c. There is some farm land—some fenced—and there are buildings, haystacks, rails, herbage, &c. At some places

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the grade of the road is very steep—Mr. Bassenger says, about fifty feet to the mile, for about five miles from Baker's Mill:

(The evidence of J. B. Bassenger was here referred to as to curves, grades, &c.)

10 There are different owners or occupiers of lands, houses and premises on or near the railroad, and among them: Riggs, Segur, King, Search, Babcock, Tice, Schwartz, Burt, Schuman, Wills, Cooper, Scripture, Brown, Recum and Hubert.

That extent of property, with that variety of owners, is property that may be affected by such injury and danger as are here complained of, so as to become a public nuisance. Here is a sufficient public that may be affected by the injury and danger complained of, to make a public nuisance.

20 The scope of an injury, or the danger of an injury, may be sometimes difficult to define, in order to a public nuisance, but in this case the court charge you that the scope and character of the territory through which the road passes in that township, and the variety of ownerships and interests along and near it, are sufficient to constitute public rights that may be so affected by the injury or danger complained of, as to amount to a public nuisance. A railroad running through a section like that owes to the public there a certain common duty—the public along that line. Now then, what is the duty of the company to the public, and what are its rights against the public?

30 1st. ITS RIGHTS.—The company is incorporated for public purposes, and has a right to use steam-engines on its road, with all their necessary attendants and risks. The legislature has authorized that right. This case does not rest on the doctrine of a man so using his own land as not to injure the land of another. But, although their right to use steam-engines is authorized, it is accompanied with duties on the part of the company.

2d. *ITS DUTIES.*—Those duties are, in general, to exercise reasonable skill, care and judgment, in the use of the dangerous agent that they have, so as not to communicate fire to the lands adjacent or near to the railroad. If, in the exercise of that care, skill and judgment, fire is communicated, they are excusable; but, if they fail in such exercise they may commit a nuisance.

The court refers to the act of 1865 (Nixon's Dig., 794).

It is not necessary to say how far that is declaratory of the common law; but the court charges that the company are bound, in the management and use of this dangerous element (fire), to exercise all reasonable care, skill and judgment, by all reasonably practicable means, to prevent the communication of fire, from their locomotives, to the lands and premises adjacent; and the public, for the public good, must submit to the necessary consequences of the use of engines used with that kind of care, skill and judgment. The precise quality of skill, care and judgment is relative, depending on circumstances, the character of the country, grades, &c. If reasonable care and skill can prevent the communication of fire, it is the duty of the company to exercise it. In what then does this reasonable care, skill and judgment so far as practicable consist?

1. In procuring proper engines, with proper construction with reference to the work to be done, and the protection of the adjoining property.

2. In procuring proper engineers to run their locomotives, and these very engineers must themselves be in the exercise of reasonable care, skill and judgment, and the company are responsible for their carelessness and want of skill in the use of the locomotives. The company cannot get out of it by saying, we did our best to get good engineers. They must get good engineers, and are responsible for their want of reasonable care, skill and judgment.

3. In seeing that the engines and machinery are in pro-

per order, and must reasonably do their best to keep them so; and if it is, in your judgment, reasonably necessary, in order to keep holes from being in the netting of the engines, to overlook them every day, they must do it. Whatever means are reasonably practicable, consistent with the running of the road, in order to save the neighbors' lands and property from injury, the company must exercise.

- 10 They have no business unreasonably to overwork their engines at their neighbors' expense, nor to put improper engines there, nor to overload their trains in going up grades, at their neighbors' expense. The company must do no unnecessary injury to others. The rule is simple; whatever means are reasonably practicable, in the enjoyment of their corporate rights, to save their neighbors' land from injury, they must adopt and use. If they find they have improper locomotives, or that endanger their neighbors' land, they must take them off. If, when they undertake to use coal-burners, they find that they cannot be used without doing more damage than wood-burners, they must take them off, unless it is reasonably impracticable to get wood, and go back to wood until there is more skill in the use of coal.
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- Major Bassenger says there is no question but what the company could have furnished wood, but it would have cost more—no fears of wood running out for engines for years to come—and that we never had any difficulty, with precaution, in providing an abundance of wood along the
- 30 line of the road. The simple fact of putting the coal-burners on is not a want of reasonable care; but if the company found that they did more damage than wood-burners, they were bound to take them off or make them equally safe.

- Now, on this question of negligence, you have a right to judge of it by the circumstances and character of the acts. You can say from the general scope of the case, though not able to put your finger upon the particular carelessness, whether all the acts proved could have occurred in the
- 40 way, and with the frequency they did, without a want of reasonable care and skill. The facts are with you.

If you find the company has been derelict in this care, skill and judgment, then there is another feature of the case which is necessary in order to convict. If you find that, by reason of the neglects of the company under the rules laid down, the discharge of fire from the smokestacks of the locomotives, on lands adjacent to the railroad, were so frequent, habitual and continual, as to generally injure the property of persons along the line of the road in that township, or generally to endanger that property over and above what would result from the exercise of reasonable care, skill and judgment, that would make the defendants guilty of a public nuisance—otherwise not. The discharges of fire must have been by the neglect of the company in order to convict. 10

To so much of the charge aforesaid as said that "in this case the court charge you that the scope and character of the territory through which the road passes in that township, and the variety of ownerships and interests along and near it, are sufficient to constitute public rights that may be so affected by the injury or danger complained of, as to amount to a public nuisance; a railroad running through a section like that owes to the public there a certain common duty—to the public along that line," defendants excepted and prayed that their exception might be sealed, and it is sealed accordingly. 20

J. D. BEDLE,
Jus. Sup. Ct.

{ L. S. }

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To so much of said charge as is in these words, "In procuring proper engineers to run their locomotives, and these very engineers must themselves be in the exercise of reasonable care, skill and judgment, and the company are responsible for their carelessness and want of skill in the use of the locomotives, The company cannot get out of it 40

by saying, we did our best to get good engineers. They must get good engineers, and are responsible for their want of reasonable care, skill and judgment," the defendants excepted, and prayed that their exception might be sealed, and it is sealed accordingly.

J. D. BEDLE,
Jus. Sup. Ct.



NEW JERSEY COURT OF ERRORS AND APPEALS,

THE MORRIS AND ESSEX RAILROAD
COMPANY

vs.

THE STATE OF NEW JERSEY.

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Assignment of Errors,

Afterwards, to-wit at the term of June in the year of our Lord eighteen hundred and seventy-two, before the Court of Errors and Appeals, came the said the Morris and Essex railroad company, by Jacob Vanatta, their attorney, and say :

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1. That in the record and proceedings aforesaid, and also in giving the judgment aforesaid, there is manifest error in this, for that by the record and proceedings aforesaid it appears that the judgment aforesaid, upon the indictment, plea and proceedings aforesaid, is given for the State of New Jersey, and against the said the Morris and Essex railroad company, when, according to the law of this state, the said judgment ought to have been given for the said

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the Morris and Essex railroad company, and against the State of New Jersey; therefore in this there is manifest error.

2. There is also error in this, for that it does not appear by the said indictment, contained in the record aforesaid, that the said the Morris and Essex railroad company had done any act for the doing of which, or omitted to do any act, the not doing of which constituted a public nuisance or injury, for which an indictment would or will lie; therefore, in this there is manifest error.

3. There is also error in this, for that the said indictment is indefinite and uncertain, and does not apprise or inform the said the Morris and Essex railroad company, with such reasonable or sufficient certainty, of the names, numbers or other description of the locomotive engines referred to in the said indictment, as to enable the said company to know which of their said engines were meant or referred to in and by the said indictment, nor whether the alleged faults of the said locomotive engines, whereof complaint is made in and by the said indictment, were faults or defects in the construction thereof, or in the plans or construction of the means and devices connected with said locomotive engines, to prevent the communication of fire therefrom, or in the use, by the servants of said company, of the said locomotive engines, so as to enable said company to defend themselves against the charges contained in said indictment. Therefore, in this there is manifest error.

4. There is also error in this, for that the said indictment is indefinite and uncertain, and does not apprise or inform the said the Morris and Essex railroad company, with such reasonable or sufficient certainty, of the location of the location of the wood land, sprout land and fences, which, in and by the said indictment, are alleged to have been injured; nor of the location of the houses, barns, sheds and buildings, and fields of grain and grass, which, in and by the said indictment, are alleged to have been greatly endangered, as to enable the said company to traverse and

defend said allegations of injury and danger. Therefore, in this there is manifest error.

5. There is also error in this, for that it is not averred in or by the said indictment, that the said the Morris and Essex railroad company were guilty of any negligence whatsoever in respect of the said locomotive engines, in the said indictment mentioned, nor in respect of the use of the said locomotive engines on or along the said railroad. Therefore, in this there is manifest error.

6. There is also error in this, for that it is not charged or averred in or by the said indictment, that the said the Morris and Essex railroad company, in respect of the said locomotive engines in the said indictment mentioned, did not take and use all practicable means to prevent the communication of fire from the said locomotive engines in passing along or being upon the said railroad, to any property of whatever description, of any owner or occupant of any land adjacent or near to said railroad.

7. There is also error in this, for that it appears by the first one of the said bills of exceptions, that the said justice of the Supreme Court before whom the said trial was had, when the evidence for the prosecution was rested, refused, when requested by said the Morris and Essex railroad company to direct the jury, on the case then made, to render a verdict of acquittal, when, according to the law of this state, the said justice should have directed the said jury, upon the case then made, to render a verdict of not guilty. Therefore, in this refusal there is manifest error.

8. There is also error in this, for that it appears by the second, third, fourth, fifth and sixth ones of the said bills of exceptions, that the said justice of the Supreme Court, before whom the said trial was had, notwithstanding the objection of the said the Morris and Essex railroad company, admitted evidence, offered by the prosecutor, which was not relevant or material to the issue then being tried, did not relate to the place in question, and was not rebutting to the evidence which had been offered by the said the

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Morris and Essex railroad company in their defence, when, according to the law of this state, the said evidence ought to have been rejected and excluded. Therefore, in this there is manifest error.

9. There is also error in this, for that it appears by the seventh one of the said bills of exception, together with the charge of the said justice to the jury, that the said justice of the Supreme Court, before whom the said trial was had, refused, when requested by the Morris and Essex railroad company, to charge the said jury that the said company, being authorized to use locomotives, had a lawful right to adopt anthracite coal as fuel for said engines, and to use coal-burning engines as well as those constructed for using wood, when, according to the law of this state, the said justice should have so charged. Therefore, in this there is manifest error.

10. There is also error in this, for that it appears by the seventh one of the said bills of exceptions, together with the said charge of the said justice to said jury, that the said justice before whom the said trial was had, although requested so to do by the said railroad company, refused to charge the said jury that if the said company, after resolving to use coal-burners, sought to obtain the best machinery, and, in order thereto, resorted to manufacturers of high reputation, and ordered machines of the best character, as for other purposes so also for that of preventing the communication of fire from their engine chimneys, they did all, at that stage of affairs, which was required of them by the law in that regard, and that they are not responsible for such injury as may have arisen from the mistakes, or want of judgment or information of the manufacturers, when, according to the law of this state the said justice should have so charged. Therefore, in this there is manifest error.

11. There is also error in this, for that it appears by the seventh one of the said bills of exceptions, together with the said charge of the said justice to said jury, that the said

justice, before whom the said trial was had, although requested so to do by the said the Morris and Essex railroad company, refused to charge the said jury that if the said company, after receiving the said locomotive engines from the manufacturers thereof, used ordinary care and diligence to obtain for them skillful and prudent drivers, and committed them to their charge, with directions for care in their management, they did their full duty in that respect, when, according to the law of this state, the said justice should have so charged. Therefore, in this there is manifest error. 10

12. There is also error in this, for that it appears by the seventh one of the said bills of exceptions, together with the said charge of the said justice, that the said justice, refused, when requested by the Morris and Essex railroad company, to charge that if said company, in actually receiving the said engines, received notice of their throwing fire to a greater extent than common, the said company were, nevertheless, entitled to continue to use them, and were free from blame for so doing, provided they took pains to keep them in good condition, enforced care and prudence in their drivers, and endeavored earnestly and in good faith, through competent agents, to discover the cause why so much fire was thrown, and if subsequently the said company, or its agents, endeavored to amend the means used for preventing the communication of fire, and in good faith made use of such amendments and inventions, they discharged their duty to the public, and are free from criminal responsibility, and that the evidence in this case shows no such case as to call upon the said company to abandon their coal business, either finally or temporarily, when, according to the law of this state, the said justice should have so charged. Therefore, in this there is manifest error. 20 30

13. There is also error in this, for that it appears by the seventh one of the said bills of exception, together with the said charge of the said justice, that the said justice, when requested by the said railroad company 40

refused to charge the said jury that if the spark-arresters originally used, or subsequently amended, are constructed with regard to the adoption of all practicable means for preventing the communication of fire, and in such manner as reasonably to attain that end, according to the state of the art at that time, the statute is obeyed, and the company are entitled to use machines, notwithstanding they do not actually attain the end in view, and notwithstanding there may be then, or afterwards, a better plan than that adopted, which the company did not then know, do not believe in and adopt. Whether inventions, *bona fide* put in use, do prevent the communication of fire, or not, is not of legal consequence. The company are not insurers of safety in this particular, when, according to the law of this state, the said justice should have so charged. Therefore, in this there is manifest error.

14. There is also error in this, for that it appears by the seventh one of the said bills of exception taken in connection with the said charge of the said justice to the said jury, that the said justice when requested so to do by the said the Morris & Essex Railroad Company, refused to charge the said jury that if the injuries given in evidence could not have occurred, but for the negligence of engine drivers, or might have been avoided by their care, if the company labored to secure such care and did not expressly or impliedly authorize such negligence, the corporation is not criminally responsible. They cannot be held guilty of an offence if they honestly endeavor to prevent it, when, according to the law of this State the said justice should so have charged the said jury, therefore, in this, there is manifest error.

15. There is also error in this, for that it appears by the seventh one of the said bills of exception taken in connection with the said charge of the said justice to the said jury, that the said justice when requested by the Morris & Essex Railroad Company so to do, refused to charge the said jury that it was the duty of the corporation, having received intelligence, or otherwise having cause to sus-

pect carelessness of management on the part of their drivers to endeavor to discover truth and by reprehension and watchfulness to prevent it in future; doing this, they can not be held to authorize the negligence of their agents, or be criminally responsible therefor, when, according to the law of this State the said justice should have so charged the said jury. Therefore, in this, there is manifest error.

16. There is error also in this for that it appears by the seventh one of the said bills of exceptions taken in connection with the said charge of the said justice to said jury, that said justice, when requested so to do by the said the Morris & Essex Railroad Company, refused to charge the said jury that this is not a public nuisance although it may injure a great many persons, when according to the law of this State the said justice should have so charged the said jury. Therefore, in this, there is manifest error. 10

17. There is error also in this for that it appears by the eighth one of the said bills of exceptions taken in connection with said charge of said justice that the said justice did charge the said jury that "in this case the court charge you that the scope and character of the territory through which the road passes in that township and the variety of ownerships and interests along and near it, are sufficient to constitute public rights that may be so affected by the injury, or danger complained of as to amount to a public nuisance—a railroad running through a section like that owes to the public there a certain common duty—the public along that line"—when the matter so charged was and is contrary to the law of this State, therefore, in this, there is manifest error. 20 30

18. There is error also in this for that it appears by the ninth one of the said bills of exceptions that the said justice did charge the said jury that "in procuring proper engineers to run their locomotives and these very engineers must themselves be in the exercise of reasonable care, skill and judgment, and the company are responsible for their carelessness and want of skill in the use of the locomotives. 40

The company can not get out of it by saying we did our best to get good engineers. They must get good engineers and are responsible for their want of reasonable care, skill and judgment," when according to the law of this State, the matter so charged was and is erroneous in law, and injurious to the said the Morris and Essex Railroad Company, therefore, in this, there was manifest error.

10 And the said the Morris and Essex Railroad Company prays that the judgment aforesaid, for the errors aforesaid and for other errors being and appearing in the said record and proceedings may be reversed, annulled and held utter- by for nothing and that the State of New Jersey may re- join to those errors.

JACOB VANATTA,
Attorney of the Morris and Essex Railroad Company,

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The company can not get out of it by saying we did our best to get good engineers. They must get good engineers and are responsible for their want of reasonable skill and judgment, when resorting to the law of the State. The matter so changed was and is erroneous in law, and in fact, and in consequence of such error, the Morris and Essex Railroad Company, therefore, in this, there was manifest error.

And the said the Morris and Essex Railroad Company prays that the judgment aforesaid, for the errors aforesaid and for other errors being and appearing in the said record and proceedings may be reversed, annulled and held void, and proceedings may be reversed, annulled and held void by the Court of the State of New Jersey, and by the Court of the State of New Jersey.

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NEW JERSEY COURT OF ERRORS AND APPEALS,

JACOB VAN ANTWERP

THE MORRIS AND ESSEX RAILROAD COMPANY

vs,

Joinder in Error.

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THE STATE OF NEW JERSEY.

And hereupon the said The State of New Jersey, by Alfred Mills, the Prosecutor of the Pleas, comes and says that there is no error either in the record or proceedings aforesaid, or in giving the judgment aforesaid; and prays that the Court here may proceed to examine as well the record and proceedings aforesaid, as the matters aforesaid assigned for error, and that the judgment aforesaid, in manner aforesaid given may in all things be affirmed.

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ALFRED MILLS,
Prosecutor of the Pleas.

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