

STATE OF NEW YORK.

# Supreme Court

APPELLATE DIVISION—FOURTH DEPARTMENT.

2

SUPREME COURT—COUNTY OF MONROE.

PNEUMATIC SIGNAL COM-  
PANY,

*Appellant,*

against

TEXAS AND PACIFIC RAIL-  
WAY COMPANY,

*Respondent.*

3

## STATEMENT UNDER RULE 41.

This action was begun by the service of summons upon the defendant, the Texas and Pacific Railway Company, on October 10th, 1907. The defendant on October 30th, 1907, appeared in said action by Pierce & Greer, its attorneys. The complaint was served on the defendant's attorneys on November 25th, 1907. The answer was served on January 24th, 1908. The name of the plaintiff is Pneumatic Signal Company. The name of defendant is Texas and Pacific Railway Company. Medcalf, Averill & Tompkins appeared for plaintiff and Pierce & Greer for the defendant. There have been no changes in the parties to the action and no change of attorneys for said parties.

4



## AMENDED COMPLAINT.

9

STATE OF NEW YORK.

SUPREME COURT—COUNTY OF MONROE.

<p>THE PNEUMATIC SIGNAL COMPANY,</p>	<p><i>Plaintiff,</i></p>	<p>10</p>
<p>against</p>		
<p>TEXAS AND PACIFIC RAIL- WAY COMPANY,</p>	<p><i>Defendant.</i></p>	

The above named plaintiff for its amended complaint herein shows upon information and belief as follows:

11

## I.

That the plaintiff herein is a domestic corporation having an office and principal place of business in the City of Rochester, County of Monroe and State of New York.

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## II.

That the defendant herein is a corporation organized under the Laws of the United States.

## III.

That at all the times hereinafter mentioned defendant owned, controlled, operated and maintained, and used for the carrying and transporting of passengers and freight as a common car-

13 rier, a certain railroad and the appurtenances  
thereto appertaining called the *Texas and Pacific*  
Railroad. That prior to the making and entering  
into the contract hereinafter set forth, by and be-  
tween the parties hereto, plans and specifications  
of certain changes, alterations and additions in  
and to the defendant's said railroad at Texarkana  
in the State of Texas were by the defendant  
14 herein duly submitted to the State Railroad Com-  
missioners of the State of Texas, and by said  
Commission officially approved and duly filed in  
the office of said commission.

That thereafter and on or about the 25th day  
of June, 1903, plaintiff and defendant entered into  
a contract in writing whereby the plaintiff under-  
took and agreed to make a portion of such changes  
15 and additions according to said plans and specifi-  
cations so filed and approved as aforesaid; that  
the work which plaintiff so undertook and agreed  
to perform comprised the furnishing and install-  
ing a system of interlocking railroad signals at a  
certain point in said road at Texarkana afore-  
said; that in order for plaintiff to install the same  
according to said plans and specifications and in  
16 order for the same to work correctly it was neces-  
sary that certain changes and alterations should  
be made to and in and about defendant's said  
railroad before plaintiff could commence its work,  
during the progress of said work and after the  
completion thereof, which said changes defend-  
ant agreed, in and by said contract, to make and  
do.

#### IV.

That pursuant to said contract the plaintiff  
made the changes, alterations and additions to

said railroad which in and by said contract it agreed and undertook to make, and built, erected and installed said interlocking system and plant at the place aforesaid, all in accordance with said contract and the plans and specifications aforesaid, and in full and complete compliance with said contract and with said specifications and plans.

17

## V.

That the defendant agreed to pay the said plaintiff for the work, labor and materials performed and furnished pursuant to said contract, the sum of Sixteen thousand six hundred fifty dollars (\$16,650.00). That by the terms of said contract the said sum was to become due and payable upon said plaintiff having operated successfully said plant for a period of sixty days after its erection.

18

19

## VI.

That by the terms of said contract the payment of the said sum of Sixteen thousand six hundred and fifty dollars was made conditional upon the said work and materials so furnished and performed by the plaintiff and the alterations, changes and additions made by the plaintiff being accepted by the said Railroad Commission of the State of Texas.

20

## VII.

That on or about the 7th day of July, 1904, the Railroad Commission of Texas, made an order

21 whereby it temporarily approved said plant and  
the work done by the plaintiff aforesaid. That  
at that time certain of the alterations and changes  
which defendant had agreed to make in its said  
railroad as aforesaid, and which were required  
by said plans and specifications, had not been  
made by the defendant as agreed. That said  
order further provided that certain specified  
22 additions and improvements be made to said in-  
terlocking plant and also to that part of said  
railroad which was operated by said plant and  
which was defendant's duty to make, and that  
said order provided that upon the completion of  
said additions and improvements to the satisfac-  
tion of the said Railroad Commission, that it, the  
said Railroad Commission, would issue its order  
23 approving finally said plant, and the work so done  
at that point.

#### VIII.

That said plaintiff thereafter complied with  
said order and made all of the additions and im-  
provements therein referred to which pertained  
to its plant and work and which it was the duty  
24 of said plaintiff according to the terms of said  
contract to make.

#### IX.

That said defendant failed, refused and neg-  
lected to obey and comply with the order of the  
said Railroad Commission and did not make the  
changes, alterations and improvements in its rail-  
way as required by the terms of said order. That  
by reason of said defendant's failure as afore-

said to comply with the provisions and requirements of said order, said plant and all of said work has not been finally approved by the said Railroad Commission. 25

### X.

That the failure of said Railroad Commission to finally approve of this plant and all the work of the plaintiff is not due to any default, neglect or omission on the part of the said plaintiff or to any failure of plaintiff to comply with the provisions of said contract or to any failure on the part of said plaintiff to furnish proper appliances, labor and material in the erection of said plant, but was wholly due to the default, neglect and omission on behalf of the said defendant as hereinbefore set forth. 26 27

### XI.

That on or about March 1st, 1905, said plaintiff fully and finally completed said interlocking plant and system according to the terms of said contract and had operated the same successfully for a period of sixty days and more and had on said March 1st, 1905, fully complied with all the requirements pertaining to said plant and which devolved upon the said plaintiff, as set forth in the order of said Railroad Commission hereinbefore referred to; that on said March 1st, 1905, said defendant was using and operating said plant, and has since said date to the commencement of this action, continuously used and operated it in connection with its railroad. 28

29

## XII.

That said defendant has retained, used, operated and accepted said interlocking system and plant.

## XIII.

30

That no part of said Sixteen thousand six hundred fifty dollars (\$16,650.00) has been paid to the plaintiff and that the whole sum is now due and owing said plaintiff by said defendant with interest thereon from March 1st, 1905.

31

WHEREFORE, the plaintiff demands judgment against the said defendant for the sum of Sixteen thousand six hundred fifty dollars (\$16,650.00) with interest thereon from March 1st, 1905, together with the costs of this action.

MEDCALF, AVERILL & TOMPKINS,  
*Attorneys for Plaintiff,*  
 502-505 Ellwanger & Barry Bldg.,  
 Rochester, N. Y.

32

State of New York, }  
 County of Monroe, } ss.:  
 City of Rochester. }

JOHN N. BECKLEY, being duly sworn, says that he is the President of the plaintiff in this action; that he has read the foregoing complaint and knows the contents thereof; that the same is true to the knowledge of deponent, except as to the matters therein stated to be alleged upon in-

formation and belief, and that as to those matters he believes it to be true. 33

That the grounds for deponent's belief are information received from officers and employees of said plaintiff and from plaintiff's attorneys in said action.

J. N. BECKLEY.

Sworn to before me this 34  
 3rd day of January, 1911.  
 Gertrude Watkeys,  
 (Seal) Notary Public.

NOTE SHOWING DIFFERENCE BETWEEN  
 ORIGINAL AND AMENDED  
 COMPLAINTS. 35

The original complaint was precisely like the proposed amended complaint as far as and including the paragraph numbered X in each. Paragraph XII of the original complaint is identical with paragraph XIII of the proposed amended complaint and the prayers for judgment in each are the same. ~~The plaintiff's object in its motion, the order granting which is hereby appealed from, is to substitute~~ Paragraphs XI and XII of the amended complaint, for paragraph XI of the original complaint which reads as follows: 36

XI.

"That on or about March 1st, 1905, said plaintiff fully and finally completed said interlocking plant and system according to the terms of said contract and had operated the same successfully for a period of sixty days

37 and more and had on said March 1, 1905,  
 fully complied with all the requirements per-  
 taining to said plant and which devolved  
 upon the said plaintiff as set forth in the  
 order of said Railroad Commission herein-  
 before referred to; that on said March 1st,  
 1905, said defendant was using and operat-  
 ing said plant, and has since said date con-  
 38 tinuously used and operated it in connection  
 with its railroad; that defendant's refusal  
 to accept formally said plant was unreason-  
 able and unjust; and was not due to any de-  
 fault on the part of said plaintiff, or to any  
 defect in said plant as erected and completed  
 by plaintiff. That said sum of sixteen thou-  
 sand six hundred fifty dollars (\$16,650.00)  
 39 became due and owing plaintiff by said de-  
 fendant on or about May, 1905."

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ANSWER.

STATE OF NEW YORK.

SUPREME COURT—COUNTY OF MONROE.

40	<p>THE PNEUMATIC SIGNAL          COMPANY,  <i>Plaintiff,</i></p> <p style="text-align: center;">against</p> <p>THE TEXAS AND PACIFIC          RAILWAY COMPANY,  <i>Defendant.</i></p>	}	.
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The above named defendant, by Pierce & Greer,  
 its attorneys, answering the amended complaint  
 of the plaintiff herein, on information and belief,  
 says:

## I.

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As to the allegation in the paragraph of the amended complaint designated as "I" this defendant denies any knowledge or information sufficient to form a belief.

## II.

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As to the allegation contained in the paragraph of the amended complaint designated as "II" this defendant admits the same.

## III.

As to the allegations contained in the paragraph of the amended complaint designated as "III" this defendant denies the same, except that it admits and alleges that at the time in said amended complaint mentioned it owned, controlled, operated, maintained and used for the carrying and transporting of passengers and freight as a common carrier a certain railroad and the appurtenances thereto appertaining called The Texas and Pacific Railway; that prior to the sixteenth day of September, 1903, the defendant had duly submitted to the State Railroad Commission of the State of Texas certain plans and specifications for the furnishing and installing of a system of interlocking railroad signals at Texarkana, in the State of Texas, which plans and drawings were approved by said Railroad Commission; and that on or about said sixteenth day of September the defendant entered into a contract with the plaintiff to construct said interlocking system; that in order for the plaintiff to

45 install the same according to said plans and  
specifications it was necessary that certain  
changes and alterations should be made to and in  
and about defendant's said railroad; and that  
defendant agreed, at its own expense, on two  
weeks' written notice from plaintiff, to furnish  
and put in place all necessary derails, switches,  
and long derail and switch ties required for the  
46 support of the switch-operating mechanism of the  
plaintiff; and to blast and remove all rocks which  
might interfere with the setting of any part of  
the apparatus of the plaintiff.

And this defendant alleges that said plaintiff,  
in and by its said contract, undertook and prom-  
ised to construct said interlocking system in a  
first-class and workmanlike manner, in all its  
47 parts, and to provide all the necessary fixtures  
and appliances, except as therein specified, to  
enable said system properly to perform its func-  
tions; and that the materials and apparatus to be  
furnished and labor to be performed by the said  
plaintiff should be in conformity with the said  
specifications and satisfactory and acceptable to  
the Chief Engineer or other authorized officer of  
48 the defendant and to the Engineer of the Rail-  
road Commission of Texas.

#### IV.

As to the allegations contained in the para-  
graph of the amended complaint designated as  
"IV" this defendant denies the same.

#### V.

As to the allegations contained in the para-  
graph of the amended complaint designated as

“V” the defendant denies the same except that 49  
 it admits that the defendant agreed to pay for  
 work, labor and materials performed and fur-  
 nished, pursuant to said contract, the sum of  
 \$16,650.00, the same to be due and payable at the  
 times and subject to the conditions therein ex-  
 pressed.

And this defendant alleges that by the terms 50  
 of said contract this defendant promised to pay  
 the gross sum of \$16,650, on condition that said  
 plaintiff should operate said plant for sixty days  
 at its own expense, and that the same should work  
 perfectly and satisfactorily in every particular  
 during this time and should be accepted by the  
 Railroad Commission of Texas; but if said plant  
 should not work satisfactorily or be accepted by 51  
 the Railroad Commission of Texas, the plaintiff  
 should not be entitled to any part of said sum,  
 but that the same should be forfeited in full, and  
 the work done or material furnished by the plain-  
 tiff should also be forfeited to this defendant.

## VI.

As to the allegations contained in the para- 52  
 graph of the amended complaint designated as  
 “VI” this defendant admits the same, except  
 that this defendant denies that said condition  
 therein mentioned was the only condition pre-  
 cedent to its liability for payment of said sum of  
 \$16,650, or any other sum; and it alleges that a  
 further condition to its liability for payment of  
 said, or any other sum, was that said plant to be  
 constructed by plaintiff under the terms of said  
 contract should be satisfactory and acceptable to

53 the Chief Engineer or other authorized officer of  
the defendant, and to the Engineer of the Rail-  
road Commission of Texas.

#### VII.

54 As to the allegations contained in that para-  
graph of said amended complaint designated as  
"VII" this defendant denies the same, except  
that it admits that on or about the 7th day of  
July, 1904, the Railroad Commission of Texas  
made an order whereby it temporarily approved  
said interlocking device, and it alleges that by  
said order the operation of said device was only  
authorized conditionally, and did not contem-  
plate permanent approval, unless the reports of  
55 daily operation, which it ordered defendant to  
file with it, showing the condition of the ap-  
paratus and machinery and failure of the work-  
ing of its parts, and a further inspection should  
show to the satisfaction of said Commission that  
its operation was safe and successful.

#### VIII.

56 As to the allegations contained in the para-  
graph of the amended complaint designated as  
"VIII" this defendant denies the same.

#### IX.

As to the allegations contained in the para-  
graph of the amended complaint designated  
"IX" this defendant denies the same.

## X.

57

As to the allegations contained in the paragraph of the amended complaint designated as "X" this defendant denies the same.

## XI.

As to the allegations contained in the paragraph of the amended complaint designated as "XI" this defendant denies the same, except that it admits that an interlocking device constructed by the plaintiff has been in partial use in connection with said railroad. 58

## XII.

As to the allegations contained in the paragraph of the amended complaint designated as "XII" this defendant denies the same. 59

## XIII.

As to the allegations contained in the paragraph of the amended complaint designated as "XIII" this defendant denies the same except that it admits that no part of said sum of \$16,650 has been paid to the plaintiff. 60

## XIV.

This defendant further alleges that said plaintiff did not construct said interlocking system in a first-class and workmanlike manner, and did not provide the necessary fixtures and appliances to enable said system properly to perform its

61 functions; that it did not complete the installation of said interlocking plant on or before the first day of January, 1904; that it did not replace promptly, at its own expense, parts of the apparatus and material furnished under said contract which, within one year from the date of installation of said system, failed to perform their proper functions because of defects in the construction or erection of such apparatus and material; that said plant, during the sixty days after its installation during which the plaintiff operated the same at its own expense, did not work perfectly and satisfactorily in every part; that the materials and apparatus furnished and labor performed by the plaintiff were not satisfactory and acceptable to the Chief Engineer or any other authorized officer of the defendant nor to the Engineer of the Railroad Commission of Texas; and that said plant was never finally accepted by the Railroad Commission of Texas; but, on the contrary, by order dated August 12, 1907, said interlocking system was finally disapproved by said Commission.

64 And this defendant alleges that, as a railroad corporation operating a railroad in the State of Texas, it was, at the time when said contract was entered into, and thence continuously until the date of the bringing of this action, subject to Chapter LXXXIX of the General Laws of the Twenty-seventh Legislature of said State, whereby it was provided that in any case where two or more railways cross each other at a common grade, it shall be the duty of such railroad company to protect such crossings by interlocking or other safety devices and regulations to be desig-

nated by the Railroad Commission of Texas and to be constructed to the satisfaction of said Commission; that said Railroad Commission has promulgated certain rules governing the installation of such interlocking devices; that such rules require railroad companies which have been ordered to establish an interlocking device at any crossing to furnish a complete plan of such crossing with the proposed changes and alterations thereof; and when the plan submitted has been duly approved by the Commission, and the same has been constructed and is ready for operation, to petition the Commission for an inspection of the same. 65 66

And this defendant alleges that its railroad and those of the Texarkana and Fort Smith Railway Company and of the St. Louis Southwestern Railway Company of Texas cross each other at a common grade at Texarkana, that said companies were, by special order of said Railroad Commission dated June 5, 1902, ordered to construct an interlocking device at said crossing; that in accordance with said rules this defendant submitted plans to the Commission for approval, and the same were approved on May 29, 1903; that thereafter it entered into said contract with the plaintiff for the construction and installation of said interlocking system in accordance with said plans and specifications approved by said Commission; that in said contract it was stipulated and agreed, among other things, that the plaintiff herein should not be entitled to any part of the payment therein provided to be paid for all that it should furnish or do under said contract, if said plant should not be accepted by said Commission. 67 68

69 And this defendant alleges that by reason of  
the failure of the plaintiff to fulfill the terms of  
its contract, and so to construct said interlocking  
device as to be acceptable to the Engineer of said  
Commission, and by reason of said device being  
finally disapproved by said Commission, said de-  
vice could not be lawfully operated by it except  
by special and temporary permission of said  
70 Commission; that by said order whereby said de-  
vice was finally disapproved and condemned this  
defendant was ordered to proceed with the con-  
struction of a new interlocking device; and was  
authorized to operate the device constructed by  
the plaintiff and disapproved as aforesaid, only  
pending the completion and putting into opera-  
tion of said new device; that defendant did pro-  
ceed with the construction of said new device in  
71 accordance with said order, and completed the  
same, and the same has been approved by said  
Commission and has been continuously in opera-  
tion; that the same is of a make and type wholly  
different from that which is the subject of this  
action; that by reason of said final disapproval  
by said Commission of said device and the sub-  
stitution therefor of the said new device, said de-  
vice constructed by plaintiff not only was of no  
72 value to defendant, but imposed on defendant the  
expense of removal; that the construction of said  
new device cost this defendant far more than the  
sum of \$16,650, which would have been due under  
its said contract with the plaintiff.

And this defendant alleges that it has perform-  
ed every act and deed specified in said contract  
requisite and necessary to enable the plaintiff to  
perform all the terms and conditions of said con-  
tract, and that the failure of the plaintiff to per-

form said terms and conditions, and to complete  
the contract acceptably to the Chief Engineer of  
said Company and to the Engineer of the Rail-  
road Commission of Texas, and the non-accept-  
ance of said plant by the Railroad Commission of  
Texas, was not due to any default, neglect or  
omission on the part of this defendant. 73

And this defendant alleges that in consequence  
of the failure of said plant to work perfectly and  
satisfactorily, and to be acceptable to the Chief  
Engineer of the defendant, and to be accepted by  
the Railroad Commission of Texas, the plaintiff  
is not entitled to any part of said sum of \$16,650,  
but the same has been and is forfeited in full, and  
the work done and materials furnished by the  
plaintiff is also forfeited to the defendant as  
liquidated damages for its failure to carry out 74  
the terms of the contract. 75

WHEREFORE, this defendant asks judgment  
dismissing the plaintiff's amended complaint,  
and for its costs and disbursements in this ac-  
tion.

PIERCE & GREER,  
*Attorneys for Defendant,*  
The Texas and Pacific 76  
Railway Company,  
Office and Postoffice Address,  
115 Broadway, Borough of Manhattan,  
New York City.

State of New York, }  
County of New York. } ss.:

C. W. VEITCH, being duly sworn, deposes and  
says that he is the Assistant Secretary of the de-

- 77 fendant, The Texas & Pacific Railway Company, that said defendant company is a foreign corporation; that he has read the foregoing answer and knows the contents thereof, and that the same is true of his own knowledge except as to the matters therein stated to be alleged upon information and belief and that as to those matters he believes it to be true; that the grounds of his
- 78 belief are correspondence and conferences with various officials of said defendant, reports rendered by employees of defendant in the course of duty, and conferences and correspondence with other persons who are acquainted with the facts and circumstances relating hereto.

(Signed) C. W. VEITCH.

- 79 Subscribed and sworn to before me  
this 5th day of June, 1911.  
(Notarial Seal) (Signed) H. L. Utter,  
Notary Public, Kings County.  
Certificate filed in New York County.

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NOTE AS TO ORIGINAL ANSWER.

- 80 The Third paragraph of the XIII allegation of the answer to the original complaint concluded as follows:

“That in said contract it was stipulated and agreed, among other things, that the plaintiff herein should not be entitled to any part of the payment therein provided to be paid for all that it should furnish or do under said contract, if said plant should not be accepted by said Commission; for the reason

that unless said plant should be so accepted, 81  
 under the provisions of said statute it could  
 not be used by this defendant, and would be  
 utterly valueless to it."

This XIII allegation has now become the XIV  
 allegation of the present answer and the clause,  
 "For the reason that unless said plant should be  
 so accepted, under the provisions of said statute 82  
 it could not be used by this defendant, and would  
 be utterly valueless to it," is omitted from the  
 Third paragraph thereof.

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MINUTES OF TRIAL.

At a Trial Term of the Supreme Court,  
 held in and for the County of Monroe, 83  
 at the Court House in the City of  
 Rochester, State of New York, on the  
 8th day of January, 1912.

Hon. George A. Benton,  
*Justice Supreme Court, Presiding.*

PNEUMATIC SIGNAL CO.	}	<i>Medcalf, Averill</i>	84
vs.		<i>&amp; Tompkins,</i>	
TEXAS AND PACIFIC RAIL-		<i>Attorneys for</i>	
WAY CO.	<i>Plaintiff.</i>	<i>No. 1/2 Tried.</i>	
	<i>Pierce &amp; Greer,</i>	<i>Attorneys for</i>	
	<i>Defendant.</i>		

This cause having been moved by the plain-  
 tiff's attorneys, was ordered to trial.

The following named persons were called and  
 sworn:

85

## WITNESSES.

*For Plaintiff:*

Frank L. Dodgson, Jan. 10th.  
Jan. 12th, Morris Weurpel.

*For Defendant:*

86 Jan. 10th, Otto H. Lang,  
“ 11th, William N. Neff,  
“ “ Edward N. Cullins,  
“ “ Frank W. Kane,  
“ “ Benjamin S. Wathen.

Jan. 12th. Under charge of the court and in charge of sworn officers the jury retire.

87 Jan. 15th. The jury return into court and say they find for the defendant.

Motion for new trial upon all grounds stated in section 999 of the Code made and denied and exceptions ordered to be heard at the Appellate Division in the first instance.

(Copy)

88

H. V. WOODWARD,  
*Spl. Dep. Clk.*

## JUDGMENT.

89

## SUPREME COURT—MONROE COUNTY.

PNEUMATIC SIGNAL COM-  
PANY,

*Plaintiff,*

against

TEXAS AND PACIFIC RAIL-  
WAY COMPANY,

*Defendant.*

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The issues in this action having been brought on for trial before Mr. Justice George A. Benton and a jury, at a Trial Term of this court, held on the 8th day of January, 1912, at the County Court House, in the City of Rochester, State of New York, and the issues having been duly tried, and the jury on the 15th day of January, 1912, having duly returned a verdict in favor of the defendant and against the plaintiff, and the court having on such verdict directed judgment in favor of the defendant and against the plaintiff, dismissing the complaint on the merits, with costs, and the defendant's costs having been duly adjusted at three hundred one dollars and seventeen cents (\$301.17).

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92

NOW, on motion of George S. Cooper, of counsel for defendant, it is

ADJUDGED, That the plaintiff's complaint be and the same is hereby dismissed upon the merits, and that the defendant, Texas and Pacific Railway Company, do recover from the plaintiff, Pnumatic Signal Company, the costs of this ac-

93 tion as taxed, and that execution issue therefor  
for the sum of three hundred one dollars and  
seventeen cents, (\$301.17).

Dated, March 18, 1912.

JAMES L. HOTCKISS,  
*Clerk.*

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ORDER DENYING MOTION FOR NEW  
TRIAL.

At a Trial Term of the Supreme Court,  
held in and for the County of Monroe,  
at the Court House in the City of  
Rochester, N. Y., on the 12th day of  
January, 1912.

95

Present, Hon. George A. Benton,  
*Justice Supreme Court, presiding.*

SUPREME COURT—MONROE COUNTY.

96	<p>PNEUMATIC SIGNAL COM- PANY, <i>Plaintiff,</i></p> <p style="text-align: center;">against</p> <p>TEXAS AND PACIFIC RAIL- WAY COMPANY, <i>Defendant.</i></p>
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The issues in this action having come on  
regularly for trial at the Monroe County Trial  
Term of this court, held on the 8th day of Jan-  
uary, 1912, before Hon. George A. Benton, Jus-  
tice presiding, and a jury, and the issues **having**

been tried, and the jury having found a verdict in favor of the defendant, and the plaintiff having thereupon moved before the Judge presiding at the trial, upon the minutes, for a new trial upon all the grounds stated in §999 of the Code; and, after hearing Mr. William H. Tompkins, of Counsel for the plaintiff, in support of said motion, and George S. Cooper and Willis A. Matson, of counsel for the defendant, opposed, it is hereby

97

98

ORDERED, that the plaintiff's motion for a new trial herein be, and the same is hereby, denied.

Enter, Geo. A. Benton,  
*J. S. C.*

JAMES L. HOTCHKISS,  
*Clerk.*

99

NOTICE OF APPEAL.

STATE OF NEW YORK.

SUPREME COURT—COUNTY OF MONROE.

PNEUMATIC SIGNAL COMPANY,

*Plaintiff,*

against

TEXAS AND PACIFIC RAILWAY COMPANY,

*Defendant.*

100

Gentlemen:

PLEASE TAKE NOTICE, that the plaintiff in the above entitled action appeals to the Appel-

101 late Division of the Supreme Court, Fourth Department, from the judgment of the Supreme Court herein, entered in the Clerk's Office of the County of Monroe, on the 18th day of March, 1912, in favor of the defendant and against said plaintiff, for three hundred one dollars and seventeen cents (\$301. 17) and from the whole of said judgment; also that said plaintiff appeals to  
 102 the Appellate Division, Fourth Department from an order denying a motion for a new trial in the above entitled action upon the judge's minutes, dated January 12th, 1912, and entered in Monroe County Clerk's Office on the 18th day of March, 1912.

Dated at Rochester, N. Y., April 8th, 1912.

Yours, &c.,

103

MEDCALF, AVERILL & TOMPKINS,  
*Attorneys for Plaintiff,*  
 Rochester, N. Y.

To

The Clerk of the County of Monroe,

And to

Pierce & Greer,

104 *Attorneys for Defendant.*

## CASE AND EXCEPTIONS.

105

## SUPREME COURT—COUNTY OF MONROE.

PNEUMATIC SIGNAL COM-  
PANY,

*Plaintiff,*

against

TEXAS AND PACIFIC RAIL-  
WAY COMPANY,

*Defendant.*

106

The issues joined in the above entitled action came on for trial before the Hon. George A. Benton and a jury at a Trial Term of the Supreme Court, held at the Court House in the City of Rochester, Monroe County, N. Y., on the 8th day of January, 1912. Plaintiff appeared by Medcalf, Averill & Tompkins, its attorneys, and the defendant appeared by Willis A. Matson, Esq., and George S. Cooper, Esq., of counsel. A jury was called and sworn. Mr. Tompkins then opened the case for the plaintiff, and Mr. Cooper opened the case for the defendant.

107

Mr. Tompkins offered in evidence Chapter 89 of the General Laws of the 27th Legislature of the State of Texas. Marked Exhibit 1. He read sections 2, 4 and 5.

108

Mr. Tompkins offered in evidence the Order of the Railroad Commission of the State of Texas, dated June 5th, 1902. Marked Exhibit 2.

Mr. Tompkins offered in evidence the rules and regulations covering the installation, maintenance and operation of interlocking devices at grade crossings, of railroads, dated, Austin, Texas, May 31, 1902. Marked Exhibit 3.

109 *F. L. Dodgson, for Pltf., Direct.*

Mr. Tompkins offered in evidence the contract entered into between Texas & Pacific Railroad Company and Pneumatic Signal Company. It was conceded that the date thereof was September 16, 1903. Marked Exhibit 4.

110

FRANK L. DODGSON, being duly sworn, testifies as follows:

I reside in Rochester. I am and have been Consulting Engineer for the General Railway Signal Company since its formation in 1904. Prior I was Chief Engineer for the Pneumatic and its predecessors from 1892 until 1904. My duties in general were those of an engineer connected with such a concern, designing signaling apparatus. I had no prior experience. I graduated in Civil Engineering at Cornell University in 1889. I designed the interlocking system installed by the Pneumatic Signal Company at Texarkana and a great deal of the apparatus. I was present at Texarkana during the last two weeks of its installation in February, 1904. The work was nearly completed when I went there.

It was here conceded by Mr. Cooper that the plant was installed there then.

When I was at Texarkana in February, 1904, I tested out the work that had been done by the men previously, tested all the apparatus and circuits and stayed there while the plant was put in service for the control of trains. I put it in service and saw it actively in service. I inspected

*F. L. Dodgson, for Pltf., Direct.*

113

the controlling machine; it was of good material and good workmanship. I inspected the charging plant; it was of good material and workmanship. I inspected each of the signals and signal machines. I can say the same as to their construction and material. I inspected the switch

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machines and all the various machines and apparatus that had been installed by the Pneumatic Signal Company. They were all of good workmanship and good material. I saw such parts of the wiring as could be seen. The wires I saw there, known as Simplex, manufactured by the Simplex Manufacturing Company, were of the size provided for in the specifications, Exhibit 4. The letters, B and S, in that provision of the specifications under wire trunks and staking mean Brown and Sharp gauge. That is one of the standard gauges. The quality of the wire used was standard quality, such as we were in the habit of using on other plants of the same character.

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Mr. Tompkins offered in evidence a blue print on which appears "Texarkana T & P Railway, interlocking diagram."

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Marked Exhibit 5.

Exhibit 5 was the Pneumatic Signal Company's working plan by which the plant at Texarkana was installed. 1032-4 on this exhibit means that 1032 is the number of the plant, while 4 shows there have been at least three changes made on the plan since originally made.

Blue print 1032-2 you show me is the one referred to in the contracts and specifications as 1032-2. It shows the tracks as they are constructed at

117 *F. L. Dodgson, for Pltf., Direct.*

118 Texarkana; it shows the signals which were to be erected under this contract, the derails which were to be placed in the tracks and the switches which were to be handled in the interlocking plant. In the plant as constructed at Texarkana there were some slight changes as to the location of some of the signals. From the plan of 1032-2 distance signal, No. 41, was omitted, signal, No. 4, changed from a two-arm signal to a bracket pole signal; two dwarf signals added, one more signal changed from a high signal to a dwarf signal. The numbering of the various functions were changed.

119 Blue print 1032-2 received in evidence and marked Exhibit 6.

120 The changes I have mentioned were brought to the attention of some of the officers or representatives of the Texas & Pacific. While there in February, 1904, I met Mr. Lang, Assistant Chief Engineer, and Major Wathen, Chief Engineer of the Texas & Pacific. Mr. Lang saw these changes I have testified to at that time. 1032-4 shows the lay-out of the plant and the signals as it was actually constructed.

Offered in evidence, on the ground that the same actually shows the location as the work was done by the plaintiff in this action. Received and marked Exhibit 5.

Blue print, entitled "Texarkana, Texas, T. & P. Railway," you show me, is a plan of signalling at Texarkana made on a larger scale than 1032-4, and is called a tower diagram. It is put in the tower for the guidance of operators. It shows

*F. L. Dodgson, for Pltf., Direct.*

121

the location and numbering of those various devices connected with the plant the same as 1032-4.

Offered in evidence.

It is not drawn to a scale.

Q. The specifications call for 18 crossing bars; will you state what a crossing bar is and what its function is?

122

A. A crossing bar is a detector bar which is placed at the crossing and it is a piece of steel, about fifty feet long, laid along the side of the rail and hinged to the rail by arms, so that in a certain movement of the setting up of a route for a signal this bar is raised above the rail. The object is, that if a train or the wheels of a train happen to be occupying that particular piece of track, it would be impossible to move this. Then through other interlocking devices, it also makes it impossible to move a signal or derail whichever is desired, and the term, crossing bars, is given because these bars are placed near the crossing of two railroads. Crossing bars were not used at Texarkana. What is known as electric crossing bars were placed in their stead there. Those are pieces of track circuit which take the place of mechanical detector bars and they are so operated as they perform the same functions of crossing bars, to wit; to prevent the moving of a switch or signal while a train occupies that particular piece of track. I examined some of the underground trunking at Texarkana. The underground trunking, that is the lateral trunking, was made of the usual three by three grooved material, covered with a covering, an inch thick, standard three by three trunking. The main

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*F. L. Dodgson, for Pltf., Direct.*

trunking was made up according to the number of wires it had to carry. Where a groove, larger than two by two, was required, it was built up of inch and a half material, I think, with an inch groove in the usual manner. When the groove required was not larger than two inches square, then a piece of four by four was taken and a groove planed out of it two inches square, that was the lower part, or the part which contained the wires. Then over that was placed a four by one cover.

126

While at Texarkana in February, 1904, I made a personal examination of the various switch machines, signal machines and other machines and I am familiar with the contract and specifications for those machines and the various parts of the interlocking plant. They conformed with the specifications. I personally had to do and saw the operation of each of these machines and I am familiar with their functions. Each piece of apparatus and each machine performed the function that it was designed to perform. The whole device performed its functions as designed.

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Photograph or print entitled "Pneumatic Signal Company, Rochester, N. Y., all electric interlocking," offered in evidence, received and marked Exhibit 7.

The cut in the center of Exhibit, No. 7, was taken from a photograph of the interlocking machine which was placed in the tower at Texarkana. The cut at the upper right hand corner was one of the mechanisms for operating high signals. In lower right hand corner is a dwarf signal, such as used at Texarkana. The two cuts

*F. L. Dodgson, for Pltf., Direct.*

129

beneath the controlling machine show the mechanisms used for operating switches and derails, one with the cover on, the other removed. The cut in the lower left hand corner shows the same as the cut in the lower right hand corner with the cover on. All the cuts on Exhibit 7 except the three-arm bracket signal in the upper left hand corner represent parts of the machinery that was used and installed at Texarkana by the plaintiff. 130

An order of the Railroad Commission of the State of Texas, dated, July 7th, 1904, offered in evidence, received and marked Exhibit 8.

I was at Texarkana in December, 1904, and examined the plant at that time. Provision, No. 1, of this order, Exhibit 8, provides all switches and derails must be provided with switch boxes as part of the interlocking plant. The Pneumatic Signal Company placed switch boxes on derails and switches as required by that provision. Provision, No. 2, of this order, "All distant signals must have the wires carrying the current operating them looped through their home signals, the latter to be provided with proper circuit breakers," has to do with the interlocking plant. 131

The Pneumatic Signal Company carried out what this provision asked for. Provision, No. 3, "All facing point switches between home and distant signals must be provided with switch boxes etc.," has to do with the signal plant. The Pneumatic Signal Company placed switch boxes such as were located between the home and distant signals and carried the wires controlling the dis- 132

133 *F. L. Dodgson, for Pltf., Direct.*

tant signals through them. I have read and now examine Numbers 4, 5, 6, and 7 of this order. These four provisions did not have to do with that part of the interlocking plant which the Signal Company contracted to install. As to provision 4, I observed that no telephone connections had been established and that there was one or two indicators, but I don't recall on which tracks they were placed. There were no telephones between the yard office and tower when I was there. I was in the tower and I saw there were no telephones in the tower. I observed that provision, No. 6, in relation to guard rails had been performed. I observed the condition of the railroad crossings at Texarkana on my visit in December, 1904. I saw that the railroad crossing had not been placed upon any other foundation than they were when I was there in February. I saw that the bolts, angle bars and other things which go to make up a crossing were loose. I saw they were badly worn where they would naturally get wear by trains passing over them. That applied more particularly to the crossing next to the tower between the Cotton Belt and the Kansas City Southern.

The real function of an interlocking plant is to prevent two trains coming together at a crossing, in other words, to make it impossible for two trains to meet at the crossing. That is done by placing on each side of the tracks leading up to the crossing what are called derails, for example, Nos. 70 and 71, on the plan are derails. On the other tracks which conflict with this up and down track there are other derails, for instance, Nos.

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137

8 and 10, and on the other side, Nos. 19 and 18. Now, in the construction of the interlocking machine, it is so arranged that when one set of derails are closed so that a train can pass along the track, the other set are open so that if a train passed along the track they would be derailed, and the derail is a device which opens up or breaks one of the main tracks so that if a train attempts to pass over an open derail, it would drop off on the ties. Then to govern the movement of the trains, signals are used. On those signals are movable arms. When these arms stand horizontal it means that the train shall stop; it also means in all probability the derail in front of that signal is open, so that if the train does go by the signal it will be derailed. Now in locking, or the connection between the levers that operates the signals and derails, they are still further interlocked, so that unless the derail and the switches which the train is going to pass over when the signal is placed in the safety position, are in their proper position, the signal lever cannot be operated so as to operate the signal. So that the term, interlocking, and the functions of these various devices is to prevent accidents on the crossing and the signals and derails are interlocked so that trains, if they obey the signals, two of them cannot go on the crossing at once.

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A detector bar is used usually in connection with the derail or switch, and its function is to prevent the switch or derail from being moved while the train is passing over the switch. The detector bar is purely a mechanical device. It is a bar, about fifty feet long, which lies right

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*F. L. Dodgson, for Pltf., Direct.*

along side of the rail and is connected to the rail by arms and these arms are in turn connected with the mechanism which operates the switch, so that as the switch is moved, or by means of such motion and arms, just before the switch moves, the bar moves up above the rail, then the switch  
 142 moves over into position, then the detector bar goes down level with the rail so that if there is a wheel of the train standing on that portion of the track the bar cannot rise up, consequently the switch cannot be moved.

Track circuits are used for all kinds of purposes, particularly where it is desired that the train itself shall take some part in its own signaling, that is, it shall operate something. That is  
 143 brought about by segregating a piece of track, two rails from the other rails, that is, insulating them and then making those two rails conductors of electricity in such a way that when there are no wheels of a train on that particular piece of track, the electricity will go through the rails and operate some device. It may operate a signal, it may operate a lock, it may operate anything.

144 When the tracks are so connected that when there are the wheels of a train on the track circuit, the electricity flows through the wheels of a train and not through the device which it is intended to indicate, so that if a train is present it is indicated by the fact that no electricity can flow through and operate the device.

It can't be shown very well on this plan where track circuits were used, but on a little piece of track on each side of the crossing is made into a track circuit so that there was a piece here and

*F. L. Dodgson, for Pltf., Direct.*

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there and so on. When there was no train on the crossing the current flowed through this piece of track and operated a track relay, a device operated from the track, in turn, this track relay would operate a lock on the machine in the tower which would allow the operator to operate a certain lever. This lever it was necessary to operate before he could close the derails on the track, on certain tracks or operate the signals, so that if a train stood, for example, on the K. C. S. tracks and he attempted to operate the signals which would let a train pass over the Cotton Belt, he would find himself locked up because the electricity, which would flow through this lock, if it flowed through the track, was flowing through the train.

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If a train was on the Kansas City Southern, that is the north and south track, and the operator in the tower has attempted to set at safety the signals on the Cotton Belt or the St. Louis & Southwestern, it would be impossible for him to do so. That is the province of the track circuit, as track circuits are used in this case. The track circuit or portions of the track within the circuit are segregated or kept apart from the rest of the track, the adjoining tracks, by means of what are called insulated joints. They are ordinary angle bar joints having pieces of insulating material so applied that the two rails nowhere come in metallic contact. The ordinary fibre insulation is used. That is part of the railroad's work. It was done by the railroad company. A track circuit, in order to operate efficiently, requires a track that is fairly well ballasted, not too wet, or

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*F. L. Dodgson, for Pltf., Direct.*

the ballast too close around the rails. If the ballast came in contact with the rails, the electricity would leak away into the earth. If the leakage was too great it would prevent the track circuit from operating; it would be the same as though a train was on it.

150

I observed the condition of the tracks themselves when I was at Texarkana in February, 1904.

Q. Will you describe the condition of the various tracks as you observed them at that time?

A. The tracks on the T. & P. were in good condition.

151

Mr. Matson: Objected to that construction of it.

The Court: You will have to testify to what you saw; not characterize it but state the fact.

152

I observed that this T. & P. track was ballasted with gravel. And had a 75 or 80-pound rail. The tracks of the Cotton Belt were ballasted mostly with cinders, had a very light rail, the joints were worn, the switches were lightly constructed and their connections worn, the frogs were worn and loose, and the same condition prevailed on the K. & C. tracks. I observed the condition of the tracks in this yard when I was again at Texarkana in December. There was no material change in the conditions from which I have already described as being there in February, 1904, except in the wear and general looseness of the parts which were more. I said there was more or less cinder ballast. I know what effect cinder ballast has upon wires where the wires are laid

*F. L. Dodgson, for Pltf., Cross.*

153

in wooden trunking beneath or in the cinder ballast. Wires such as are used on interlocking plants are insulated by using rubber compound, covered with a braid. In all cinders there is more or less sulphur and when the cinders are wet, it forms a mild form of sulphuric acid and sulphuric acid coming in contact with the rubber deteriorates it very quickly, so the insulation on the wires is quickly deteriorated where there are any cinders above the wires. That is true of some kinds of soil ballast but not true of ordinary gravel ballast. Sulphuric acid takes away the insulation so that the two wires may come together and form short circuits or crosses. By short circuits I mean two wires touching that ought not to touch.

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The effect which the short circuit of two wires coming in contact where they should not upon the operation of the machinery it was intended to operate would depend upon the nature of the two wires which were crossed. Usually it would be shown on the machine by the blowing of a fuse; again it might be shown on the machine by certain functions refusing to operate. The blowing of the fuse would prevent the operation of the function which that wire was intended to operate.

156

The normal position of signals is danger, or the arm horizontal. If it is impossible to operate a signal, derail, or switch by the controlling machine, they can be operated by hand.

**CROSS EXAMINATION** by Mr. Cooper:

I call myself the inventor of this particular system of interlocking, but I was not the inven-

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*F. L. Dodgson, for Pltf., Cross.*

tor of the circuits used. Two other devices of this system have been installed. Texarkana was the first to go in service. It was not the first to begin installation. Neither of them are now in use. Blue print 1032-2 was prepared in our office under my direction. I don't believe I could  
 158 tell exactly where the main lines ran on the map. I could only tell from the plan where they ought to run. They don't always run on a particular plan where they ought to run, sometimes some physical obstruction that makes them run in different places. I can tell you where the larger trunking would be, but not whether it would be four, or six, or eight. I can tell you where the comparative sizes go, which piece of trunking was  
 159 the larger. I can tell where it was. I couldn't say where there was eight-inch. I can say where it was the largest. I can't tell you the size of this various trunking as to which I have testified. I can come very close to telling where there was groove trunking and where box trunking.

The effect of moisture and cinders upon trunking was fairly well known to engineers who have  
 160 to do with placing wires under ground. I wouldn't say it was well known to electrical engineers. It was known to me at the time. We sometimes find the same effect in other soils besides cinder ballast. We find soils that have a trace of sulphur in them but it is not very frequent. The signal pole is made of iron pipe. In this case the mechanism which operated it was in an iron box at the base of the pole which was supported on the box and the box was supported on a concrete foundation bolted to it by bolts bedded

*F. L. Dodgson, for Pltf., Cross.*

161

in the concrete. The switch machines were secured to longer and heavier ties provided for the purpose and the switch mechanism consisted of three parts, a motor and a chain of gears and a switch and lock movement. The motor was supported to the box which carried the gears; that box was supported on ties, which were longer and deeper than the ordinary railroad tie and were specifically installed there for that purpose by the railroad company. The generating plant was installed by the Signal Company and was part of the Signal Company's contract. It consisted of what is usually the standard for electric interlocking plants of this kind, that is a set of fifty-five cells of storage battery, I think those were 80 ampere hour, I am not sure, a gasoline engine and generator for charging them, together with the things, switch boards, reostats and charging instruments, measuring instruments. They were all permanently fixed in the tower. The engine was on a foundation. The generator is a very small one, I don't think it required a foundation.

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Q. Were the railroads in the southwest at that time well equipped with signal apparatus; were they well equipped with power interlocking plants?

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Mr. Tompkins objected as incompetent and immaterial. Overruled.

A. I can't say just how well equipped they were. There were some power interlocking plants of this class in the southwest, some in the State of Texas, but I think none on the Texas & Pacific.

Q. It was regarded as a field for installing such plants, there were plenty of places where they had to be installed?

165 *F. L. Dodgson, for Pltf., Re-direct.*

A. Yes, sir.

Q. Who got up these specifications?

A. This case was one where the railroad company had no signal men and consequently they had no specifications of their own, consequently we did that in this case as we did in hundreds of others, prepared a set of specifications for the railroad company. We very often had to act as consulting engineer for the railroad companies in those days. I was at this plant at Texarkana, I think, but twice, in February, 1904, and December, 1904. In December, I was in Texarkana and Dallas three or four days altogether. I don't remember the date I went to Dallas. I think we came to Texarkana first and then Dallas and then back to Texarkana again. Mr. Wuerpel and Mr. Cade were with me. Mr. Cade was manager of sales for the General Railway Signal Company, and Mr. Wuerpel, I think, was their representative at St. Louis. I called Mr. Cade manager of sales and installation. The General Railway Signal Company had in their employ a man named Walshe. He was at Texarkana a number of times, sent there first to help put the plant in service and was sent there later to make some changes.

RE-DIRECT by Mr. Tompkins:

This plant was the first one put into actual service. There were two other plants of the same design and construction being installed by the Pneumatic Signal Company about that time. One was on the Lake Shore Railroad. One of them was a plant considerably larger than this on the Lake Shore Railroad at a place called Indiana

*F. L. Dodgson, for Pltf., Re-direct.*

169

Harbor. The other was in Philadelphia on the Philadelphia & Reading Railroad at a place called Park Junction. Neither of them is now in service.

Q. Do you know what the occasion of their going out of service was?

Mr. Matson objected as incompetent and immaterial. 170

The Court: They may meet an inference that they failed, by evidence showing a change of plan was made and others substituted for them by a new company I don't know what the fact is, but I think it is fair that they meet any inference that you brought out. The objection is overruled. 171

Mr. Matson excepted.

A. The plant at Indiana Harbor was taken out of service on account of a large ship canal which was built at that plant and ran across the tracks, the various tracks about where the plant was originally located. As that ship canal was being built, other plants that were located on either side of this Lake Shore plant began to take in the various functions of the Indiana Harbor plant until it was all absorbed in the other plants. The occasion of this plant at Philadelphia going out of service was considerable change in the signalling and in the running of trains in this location where this plant was installed, and a number of new interlocking plants were installed each side of it and a lot of block signals put in and in that general shake-up of the arrangement of the tracks, this plant was done away with. 172

173 *Testimony of J. M. Walshe read.*

Q. You stated that you drew the plans and specifications and that as signal engineer you were occasionally called upon to act in an advisory capacity to railroads which were installing a system of interlocking signals; did you advise putting the trunking at Texarkana underground?

174 Mr. Matson objected. Sustained and exception.

Mr. Tompkins: I wish to read the testimony of John M. Walshe from the stenographer's minutes of the first trial. He is now in Omaha, Nebraska.

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175 Testimony of JOHN M. WALSHE given on trial of action December 17th, 1908, read by Mr. Averill:

176 I reside in Texarkana, Texas. My business is electrical construction and engineering supplies. I have been engaged in electrical business about eighteen years, there was a time when I was employed by the Pneumatic Signal Co. There was a time when I was employed by that company to supervise the installation of portions of the All-Electric system of signalling which were being installed by that company at that time. I had charge as foreman of that line of the work at the shops here in town, at Park Junction in Philadelphia, at Texarkana, Texas, and Indiana Harbor, Ind. I went to Texarkana in the employ of the Pneumatic people about May 23rd, 1904. I believe I was there after Mr. Dodgson was there in 1904. About May 23rd, as near as I can rec-

*Testimony of J. M. Walshe read.*

177

ollect. I have heard Mr. Dodgson describe this interlocking plant here in the court room. The plant was completed when I got there. It seemed to be working very properly. I was there about eleven months. I remember when an inspection was made by the representatives of the Commission. I was present at that inspection. I remained there for about eleven months in all during which time I became somewhat familiar with the situation and location. I went away the following year, along in April, April 11th, 1905. During that time this plant worked very well. I went away in April, 1905, and returned the following year in February.

178

Q. I show you the first three requirements specified in Exhibit 4, which is the order of the State Railroad Commission dated July 7th, 1904. "1. All switches and derails must be provided with switch boxes;" state whether or not you had anything to do with the installation of those switch boxes?

179

A. I put them in.

Q. "2. All distant signals must have the wires carrying the current operating them loop through their home signals, the latter to be provided with proper circuit breakers?"

180

A. I put them in.

Q. You so installed them?

A. Yes, sir.

Q. "3. All facing point switches between the home and distant signals must be provided with switch boxes, through which the wires charged with the currents which operate the distant sig-

181 *Testimony of J. M. Walshe read.*

nals must be carried;" state whether or not you did that?

A. I did.

182 Q. I ask you to read the other four requirements in this order, omitting the eighth one; state whether or not that was installed at that time by the defendant, the fourth, fifth, sixth and seventh, or were they installed at all?

Objected to.

A. I don't remember about that; a portion of No. 4 was installed.

183 That was previous to the time I went to Texarkana. There were two indicators, one on the T. C. division of the T. & P. and one on the western approach, or southerly approach of the St. Louis and Southwestern or Cotton Belt. That was all. The western approach of the T. C. was in, and the St. Louis and Southwestern Railway of Texas were in when I came there. That was before this order was made. That is all that was done.

184 Q. "Telephone connection must be established between the tower man and all depots and yard offices, etc?"

A. That was not done.

The guard rails were put in as required by the order.

Q. "All railroad crossings must be maintained in first class condition and placed on suitable foundations of permanent character;" were those crossings maintained, during the time you were there, in a first class manner?

Mr. Matson objected to the question "were those crossings maintained in first class manner?"

*Testimony of J. M. Walshe read.*

185

Sustained and exception.

Bolts were loose, joints were shaking and the frogs were considerably worn. I believe the weight of the rails of the Cotton Belt line parts were 75 pounds and parts 56 and 64. There was a time when I returned to Texarkana the following year after I left in 1905.

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I got back there about February 28th or March 1st, 1906, and saw this plant after I got back. There had been considerable change in the plant from its original layout, or condition, when I got there. At the time I was employed by the General Railway Signal Company. At the time I mentioned, I made careful measurements of these changes, and I indicated them on a blue print and embodied them in a report made to the General Railway Signal Company. That blue print was accurate at the time, to the best of my knowledge.

187

The Court:

Q. Was it?

A. Yes it was; I made it myself.

Yes, I could state now exactly what those changes are. That is my signature attached to the paper writing you show me, dated March 9th, 1906. It is my report. The blue print you show me is mine. That is the one I rectified.

188

Marked Exhibit 5 for identification.

This blue print marked for identification was not made by me. The changes and alterations which occur thereon, marked in red and black ink, are made by me. This blue print properly describes the changes which I found had been made in that plant, when I returned in 1906.

Mr. Averill: I offer this blue print in evidence.

189 *Testimony of J. M. Walshe read.*

Mr. Hubbell: I object to it as incompetent, immaterial, no foundation laid for such testimony, and not the best evidence.

190 Mr. Averill: It is for the purpose of showing that these people have gone on and changed our plant entirely; that they took it absolutely into their own possession.

Received. Exception.

191 I found the plant changed when I got there as follows: No. 2 home signal on the north side of the Cotton Belt track was selected with No. 2 dwarf signal, which was not in the original contract; selected by means of a selected box placed on the switch.

The Court:

Q. You mean, not in the original contract, or original construction?

A. Not in the original construction.

192 I could make that plainer by saying that a dwarf signal was added near No. 2 signal on a siding. No. 11 crossing circuit was cut out entirely, entirely out of service, and the release, the electrically operated release, taken out of the box entirely.

Crossing circuits prevent any movement of the levers while a train is standing on the crossing or crossing the crossing. It prevents the levers from being changed during that time. It is the same thing as crossing bars; it takes the place of crossing bars. It guards against any accidental movement of the levers in the tower. No. 11 was the one I said was out. No. 14, which is another

*Testimony of J. M. Walshe read.*

193

crossing circuit, was entirely out and disconnected and connected direct to the main battery inside. No. 15 cross-over was taken out of the original position and moved west of the T. & P. Railway crossing. No. 16 cross-over movement disconnected from switches and taken out entirely. The track remains the same. I mean by that, the switch movement which controlled the switch. That switch was intended to be connected up by hand. It couldn't be operated at all from the tower in the position in which it was. 194

No. 17 switch derail, the switch movement was disconnected and taken out, and the track remains the same, but the derail was moved west to within 267 feet of the Texas & Pacific crossing. No. 18 derail taken out entirely. No. 22 dwarf signal moved south of tracks. No. 23 dwarf moved west in between tracks to within 220 feet of the T. & P. crossing. A switch derail had been installed on the new spur track which leads northwest from the St. Louis & Southwestern main track, about midway between No. 10 derail and Kansas City & Southern crossing. That switch was not in when the plant was originally installed. The wires from 18 lever in the tower are connected to this switch and derail at this time. 195 196

Mr. Hubbell:

Q. When were you there?

A. At the time this report was made. The date of that report is March 9th, 1906.

No. 36 crossing circuit, and another one like 11 and 14 was cut off the track entirely and connected directly to the battery, and the electric release

197

*Testimony of J. M. Walshe read.*

taken out of the boxes, putting it completely out of commission, so far as track circuit was concerned. I believe that covers the changes.

198

On that occasion I reported to Mr. R. R. Ayers, the Division Superintendent of the T. C. Railroad, of the defendant. Mr. Ayers said he didn't know when they had been made, but he presumed all changes had been made that I had been sent there to make. At the time I was there the plant was being used constantly for signalling. Trains were passing through these various portions of the plant, all day long and all night. The trains ran right through, unless there was something to prevent by holding the crossing.

199

At the time I was there in 1906, some portion of the interlocking system or device or function of this plant had been cut out. As to the extent to which it had been done as to particular switches, I can describe, only that, if I recollect right, the safety devices, or catches on No. 18 lever were taken off, portions of them. That destroys the interlocking system, with regard to that portion, so far as that is concerned.

200

When I left in 1905, in the year before, the interlocking portions were all working first class; operated in good shape.

Mr. Averill offered in evidence the blue print referred to in the testimony as Exhibit 5 for identification.

Received and marked Exhibit 9.

CROSS EXAMINATION by Mr. Hubbell read by Mr. Matson:

I was sent down there in 1906, by the General Railway Signal Company, to make some changes

*Testimony of J. M. Walshe read.*

201

in the plant. My company for which I was working, told me to make them. Mr. Wuerpel and Mr. Dodgson both told me, just before I started down there, to make the changes according to plue print No. 2350-7. I have that here. That is the blue print. It will aid me in answering the questions as to what changes I was ordered to make.

202

Q. What changes were you ordered to make in 1906?

A. I was ordered to move 15 cross-over to the position shown here, west of the tracks; move No. 17 derail to the position know as No. 18 here; move No. 23 dwarf signal to the position shown here; put a 2 arm in the place of it; move No. 19 switch to the position shown here.

203

Mr. Averill: I object to it, as going entirely out of the scope of the cross examination. I object to it as incompetent and another action pending as to that very feature of it.

Received. Exception.

A. Move No. 25 signal to the position shown here; place dwarf signal in the position shown here at No. 1; change No. 7 derail to No. 17, and place No. 7 derail in the position shown here; place No. 6 dwarf signal in the position shown here and No. 22 dwarf signal. That is about all. Those are not the very changes that I found had been made when I got down there.

204

Q. None of them?

A. Part of them. My company ordered me to go down there and make certain changes which I have just enumerated. When I got down there, I did not find that all of the changes that my

205

*Testimony of J. M. Walshe read.*

company ordered me to make, had been made. Some of them had been. I could not tell what ones had not been made without looking at my report.

206

Q. We were talking about the changes which you were directed to make by the officers of your company, when you went down to Texarkana in 1906; were you informed that there had been a meeting of the officers of the different railroads on the one hand, and Mr. Wuerpel and Mr. Cade, and somebody else, representing your company, on the other hand, at which those changes had been agreed upon; had you been informed of that before you went down?

207

Objected to, as incompetent and not proving anything.

The Court: You may show by him if you can, that he was informed that the changes which actually were made had been authorized, but I will sustain the objection to this question.

Mr. Hubbell excepted.

208

This is the paper I used on my direct examination when I enumerated the changes which I found had been made in the plant in 1906. The items on this paper are numbered. There are twenty-six. About twenty-three are numbered, but not consecutively.

When I got to Texarkana in 1906, I found only portions of these twenty-six items had been done.

No. 15 cross-over had been taken out of the original position and moved west of the T. P. crossing. That is a cross-over on the Cotton Belt Line. No. 22 moved south of the tracks of the

*Testimony of J. M. Walshe read.*

209

Cotton Belt Line. That is in the limits of the interlocking plant.

Q. Is it in the Cotton Belt yard?

A. That is a question of how much the Cotton Belt yard takes in.

Close to the plant there was a yard used there by the Cotton Belt Line, which had about 18 tracks for switching freight cars on, and the original interlocking plant took in a portion of those spur tracks in that yard. The dwarf switch that I am talking about was on the main line. 210

Q. In that yard, or near it?

A. I don't know where the exact limits of the yard were—no. I know where some of those eighteen tracks branch off the main track, and there was a large number of these tracks used for switching freight on. I wouldn't say from 10 to 18. I don't know as I could state. It was used to make up their trains. That is what is called a yard. I did not know where the Cotton Belt yard was there, nor what portion was within the working of this interlocking device, because the limits of the yard is probably way beyond any portion of these tracks. I was familiar with this interlocking plant, and I went all over it. 211

Q. Then you went to that point that we have agreed upon as being the yard of the Cotton Belt line; tell us how many switches in that yard and how many of the tracks in whole or in part were controlled by this interlocking device? 212

Mr. Averill: When was that, before the changes were made, or subsequently?

Q. I don't care; any time?

213

*Testimony of J. M. Walshe read.*

A. I haven't yet a clear idea of what constitutes the yard.

214 The place you show me on the right hand side of the blue print, Exhibit 2, where various tracks seem to branch off, is what I call the yard, right there, the main yard. One or two of those tracks run down to the junction of the main freight tracks. The other runs into one of those two. There were a lot of other tracks there besides. Our interlocking device took in three of those tracks, in what we call the yard, at the spot I am pointing out. When a car or an engine stood on one of those three tracks, the result as to the working of the balance of the whole system was that it locked out that portion of it which would interfere with that portion that is being stood on. When cars stood on either of those three tracks within the limits of the device, under certain conditions, either of the other two roads could cross over the track of the Cotton Belt on the Kansas Belt on the Kansas City Southern. It could not on the other road. Whether it could on the Kansas City Southern, depends upon the position of the track. Sometimes it could not. I know they were constantly shifting cars back and forward from the main freight tracks and on to these three tracks.

215

216

Q. And that interfered greatly, did it not, with the operation of trains on other lines?

Objected to as immaterial and incompetent.

Mr. Hubbell: It is not for the purpose of showing that the device was not right.

*Testimony of J. M. Walshe read.*

217

I want to show by this witness who has talked about the changes just what the changes were.

Received. Exception.

A. Sometimes, and on some other line.

Q. What was the change that was made, within that portion of the tracks in the yard of the Cotton Belt Line that I have pointed out, so as to take it out of the operation of the device? 218

A. Do I understand counsel to mean what was connected?

Q. What was done at that point to change it?

A. No. 17 switch and derail were moved.

Q. Moved which way; south?

A. I should call it west. 219

Q. Moved to the left-hand on the map, as you face it?

A. Yes, sir. It was moved to the west.

It was conceded that the left-hand side of the map was the west side, and the right-hand side the east side.

Q. Where was it located, the eastern extremity of it, of the working of the device, or the device itself? 220

A. About 220 feet, I should judge.

It was a little west of where these sidings ran off, or spur tracks in the yard. The operation of the device ended just before we got to this portion we call the spur track. Of these changes we have been talking about that I found had been made down there which occurred in and around where the change was made near the yard was first No. 17 switch movement was left out, taken out entirely but the derail was used over again.

221

*Testimony of J. M. Walshe read.*

That switch was not needed. One No. 23 dwarf signal was taken out entirely.

Q. That was not needed?

A. It was not needed.

Objected to as incompetent and immaterial.

222

Received. Exception.

No. 16 crossover movement taken out and the crossover left.

Q. No. 16 movement was not needed there?

Objected to, as before.

The Court: You mean, that it was not necessary after the change was made?

Mr. Hubbell: Yes, sir.

223

A. No, sir, it was not needed, after the change was made. No. 18 derail movement of switch taken out entirely. It was made unnecessary by these changes. I believe these are all the changes around the original position of No. 17. The other changes on that Cotton Belt line among those that I have indicated on my list as having been found by me when I went down there; No. 15 crossover taken out of the original position

224

and moved west. On this blue print it is the crossover next east of the point where the Texas & Pacific crosses the Cotton Belt on the right of the map. That was moved over to the west crossing. That crossover was simply a track so that a train can pass from one through track across to the other. A signal there was moved from between the two tracks to the south of the tracks where it is now. I don't know if it was the same signal, it was the same character of signal, I don't know it was a different one. Other

*Testimony of J. M. Walshe read.*

225

changes on the Cotton Belt line was a switch and derail and dwarf signal were placed on the spur track in between the Kansas City Southern crossing and the limits of the plan near No. 10. (Witness indicates on map). The spur track I speak of is not indicated on the plan. I found it there in 1906 in between No. 10 and No. 11 on my map. It was connected with the tower by wires. I don't know whether that worked from the tower; I never saw it work. No, I do not know it wouldn't work and never was worked. No, sir, I don't know that fact, I know that it was in place and in position there. No, sir, I don't know whether it was connected with the tower or not. I wouldn't have occasion to know. Another change in the list I had, there along this Cotton Belt Line was a dwarf signal placed near this derail on this spur track. I didn't say I didn't know whether it was connected with the tower or not. I haven't mentioned it before. We were not just talking about this. This was a dwarf signal. I believe the wires were connected to it. It was a signal that was used with the spur track I have spoken of. The wires may have been connected with the tower but if they were connected whether the fuse was out or not is another question. I don't know whether the fuse was in or not. Without the fuse it could not operate, I don't believe I ever saw it operate.

226

227

228

Another change that was made on the Cotton Belt line among those I have listed here, is two crossings circuits 11 and 14 were taken out of commission. They were not needed after that change that I have spoken of at the yard. They

229

*Testimony of J. M. Walshe read.*

were used to prevent the use of any of the levers while a train was on the crossing. The circuits were taken out of use, out of commission. I cut those out of the storage battery in February, 1905, at the time I was there, only temporarily.

Q. When the tracks and circuits were in such  
230 poor condition that they wouldn't operate; you left them unconnected when you left didn't you?

A. Possibly they were out of commission at that time.

Q. Give us another item.

A. That is all I seem to know of now.

Q. What changes outside of those you have  
231 mentioned, as being in connection with the Cotton Belt were made, included in that list?

A. Why, I think we have gone over all the changes I found made.

All the changes that had been made were in connection with this change in the Cotton Belt line I have mentioned. I believe that includes all the changes I found when I went down there.

Q. Was there any change that you were directed to make when you went down there not  
232 included in that list?

Objected to, as incompetent and immaterial.

Received. Exception.

A. Yes, there were a number of changes.

Q. Did you make any changes?

A. Yes, sir.

Q. Under the direction of your company, when you went down there in 1906?

Objected to as before.

Received. Exception.

*Testimony of J. M. Walshe read.*

233

Mr. Averill: At the direction of the General Railway Signal Company?

Mr. Hubbell: Yes, or the Pneumatic.

A. After I had received instructions from the T. P. to go ahead, I reported to my company and they advised me to proceed.

Q. So that whatever changes were made there by you, were made by the consent of the company which sent you down there? 234

Objected to as incompetent and immaterial, and matter of argument.

The Court: Whatever changes he made, he may state whether they were made with the consent of his company after consultation with the defendant. 235

Mr. Averill excepted.

A. They were made.

Whatever changes were made there by me were made with the consent of my company.

Q. These changes which were made around the yards of the Cotton Belt line which you have described to us took so much load off from the device, did they not?

Objected to. 236

Received. Exception.

A. They took some of the load off the plant.

RE-DIRECT EXAMINATION by Mr. Averill read by Mr. Averill:

At the time I was there in 1906 trains were being run across these crossings and this signal apparatus was being used. What I have called the spur on the Cotton Belt had been installed between the time I was there in 1905 and the time

237

*Testimony of J. M. Walshe read.*

in 1906. The wires were run into the tower, but whether it was connected up so as to operate or not I don't know.

238

Changing the location of these various portions of the plant that I have narrated did necessitate changing the switch machines, and signal machines and derail machines that operated these various signals, switches and derails which were moved. When a switch was moved, a machine had to be moved. When the location of one of these machines was changed it was necessary to take out the wiring or put in wires. The wiring was run in trunks.

239

Q. Counsel has asked you if any changes that you made there in 1906 were made with the knowledge and with the consent of the General Railway Signal Company; state whether or not an action is pending now and is on the calendar to recover from this defendant for services which you rendered there in 1906, by the General Railway Signal Company?

Objected to, as immaterial.

Sustained. Exception.

240

These changes that were made by the Cotton Belt did necessitate the making of changes in the interlocking machine, in order to keep and preserve the various interlocking features of the device. When I got there these changes were not made in the interlocking machines. Portions of the interlocking feature was cut out of some of the various functions when I got there.

RE-CROSS EXAMINATION by Mr. Hubbell read by Mr. Matson:

*Testimony of J. M. Walshe read.*

241

They were not cut out because they became useless after the change, that wasn't the reason. The reason was because they couldn't operate the movements in their new position.

Q. Haven't you testified that both times when you were there that the plant worked all right?

A. I did, but—

242

Q. After these changes the plant worked all right?

A. The plant may work all right, but the safety feature may be eliminated.

Q. Explain what that means; when I am talking about the plant I mean the interlocking device?

A. The mechanical interlocking apparatus prevents one set of levers being pulled when another set is set. If you disconnect any portion of it, it therefore eliminates the safety of that portion.

243

Q. That was taken out from the operation of this device?

A. That wouldn't prevent the machines or the plant operating.

Q. Do you mean to say that the plant didn't operate for the purpose for which it was intended when you were there in 1906; is that what you mean to say now?

244

Mr. Averill: I object to the form of the question.

Received. Exception.

A. The switch and signal movements and the movement to allow the operation of trains were operating satisfactorily, but a portion of the

245 *Testimony of J. M. Walshe read.*

safety device of the machine itself were eliminated.

Mr. Hubbell: May I have the answer stricken out?

Denied.

246 Q. So, you wouldn't say, as an interlocking device, that the apparatus was operating safely and successfully when you were there in 1906?

The Court: I do not think that is necessary.

Q. Where was the portion you speak of?

A. On the face of the machine.

247 Q. What part of the plant did that have to do with, if any particular part; these parts that had been changed and taken out from the system?

A. No, sir.

Q. What part?

A. Why, it would allow the operator, accidentally or otherwise, to set up a wrong or opposing route.

Q. Anywhere on the plant?

A. No, sir.

Q. Where?

248 A. A few portions of it.

Q. Tell us where?

A. It would not be a question that would come in my field of work.

Q. You do not know; is that the answer; do you mean to say that you do not know?

Objected to.

The Court: Can you tell where it would set up the wrong signal?

A. I could, by studying a few moments.

The Court: Well, study it out; counsel wants to know.

*Testimony of J. N. Beckley read.*

249

A. It might set up so many changes, it would take some time to work them out.

I do not know what a dead bar is in that system. A tappit bar is a bar running down from the lever. It is a part of the mechanical interlocker.

250

Plaintiff rested.

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Testimony of John N. Beckley given at the preceding trial read by Mr. Cooper, together with statement made by Mr. Tompkins at the close of the testimony of said witness as follows:

251

I reside in Rochester and am and have been President of the Pneumatic Signal Company ever since it was formed. My recollection is that this contract, as a contract, was not assigned to the General Railway Signal Company at any time by the Pneumatic Signal Company. The American assets were assigned, in which assignment the Pneumatic Signal Company transferred to the General Railway Signal Company all the obligations and duties of the Pneumatic Signal Company subject to certain limitations. The General Railway Signal Company was not specifically authorized to deal with the defendant in this case. This was the arrangement. In the first place an inventory was made of all of the physical assets, outside of patents, of the Pneumatic Signal Company, all the American assets, merchandise, machinery and so on, and another schedule which was attached to

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253

*Testimony of J. N. Beckley read.*

it of all the accounts receivable and a statement was made of all incomplete contracts. The same sort of statement was made by the Taylor Signal Company, the concern that was bought out by the General Railway Signal Company, and then a formal bill of sale was made by each company to the General Railway Signal Company of all the property specified in it. Deeds of course were made for record of the ordinary conveyance of realty. The agreement between the General Company and the Taylor Company and the Pneumatic Company provided that each company selling its assets to the General Company, should assume or guarantee the collection of the accounts, as the General Company had no means for knowing absolutely with respect to whether the accounts were correct or not, or collectible. The Pneumatic Company received from the General Company in compensation the amount owing under this contract, whatever it was, and later on when the amount was not collected, the Pneumatic Company repaid to the General Company the entire amount of this claim and took an assignment of it. There was no specific reference in the agreement to this particular Texas Pacific contract as I remember it, except that it was in the list of contracts with the other contracts. I may say further, whether this was in the agreement or not I can't state at the moment, I have no recollection, but it certainly was the understanding between the two selling companies and the buying company that the buying company should step into the shoes of the selling companies from the date when the con-

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*Deposition of R. A. Thompson read.*

257

tract took effect and go on and complete uncompleted contracts, doing whatever might be required under the provisions of the contract by the respective contracting parties. That was in a general way the arrangement that was made. The sale took effect July 1st, 1904, but I may be in error about that. It was some time that summer. The actual transfer of the property and the bringing into effect of the agreement was as of a date. It occurred as matter of fact, as my recollection is, sometime after the date fixed by the papers, but that was as of a date and I think that date was the 1st of July. 258

The Court: This transfer then took effect, according to your recollection as of July 1st, 1904, then you say there was a time when the Pneumatic Signal Company repaid the money and took a formal assignment from the General Railway Signal Company? 259

A. Of this account, yes sir.

Q. When was that date?

A. I can't state from recollection but it must have been several months after this time. 260

Mr. Tompkins: We have the assignment in court and we can fix that. The re-assignment was shortly before the action was begun, the formal assignment. It is acknowledged and executed by the General Railway Signal Company.

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Mr. Cooper then read from the deposition of R. A. Thompson, sworn and examined on the 21st

261 *Deposition of R. A. Thompson read.*

day of November, 1908, on interrogatories under a commission issued out of the Supreme Court.

Inty. 1. What is your name, age and place of residence, and state by whom you are employed, and in what capacity at this time, and what are  
262 your duties?

My name is R. A. Thompson; I am 39 years of age; residence, Austin, Texas. I am Chief Engineer of the Railroad Commission of Texas, and have occupied this position since November 1st, 1898. My duties are to inspect railway properties, track and structure, road-bed and appliances and to report to the Railroad Commission with respect to their physical condition and value;  
263 also I inspect and report to the commission upon all plans and specifications presented for interlocking devices and after construction, upon application of the railroad companies, inspect such interlocking devices in order to ascertain whether or not they conform to the rules and regulations prescribed by said commission.

Inty. 2. If you have stated that you are the engineer employed by the Railroad Commission of Texas, then state whether or not you were so employed on September 16, 1903, and prior thereto; if so, how long prior thereto, and whether you have held the same position since that date and now hold the same position?  
264

A. I was employed as engineer of the Railroad Commission of Texas on September 16th, 1903, and prior thereto since November 1st, 1898. I also hold the same position today.

Inty. 3. The crossing of the Texas & Pacific Railway Company, Texarkana & Ft. Smith Rail-

*Deposition of R. A. Thompson read.*

265

way Company and the St. Louis Southwestern Railway Company of Texas, at Texarkana, Texas, was ordered to be interlocked by the Railroad Commission of Texas. Please state whether or not you approved the plans and specifications for the interlocking of said lines. If so, please attach as part of your answer to this question the plans and specifications so approved by you. 266

A. I did approve the plans and specifications for the interlocking of the lines referred to in this interrogatory, and I beg to attach hereto a copy of the plan for said interlocking device, which plan was approved by me and recommended for the approval of the Railroad Commission, and signed and approved by said commission on May 29th, 1903, as shown by the signatures of the three commissioners thereon. I attach this plan hereto and mark it "Exhibit No. 1", and subscribe my name on the back thereof for identification, as an exhibit to my deposition. The Commission does not require that the Railroad Companies file copies of detailed specifications for the construction of interlocking devices, and only requires that the general plan showing the layout be filed. All interlocking devices must be constructed in accordance with the general specifications issued by the commission, as Circular No. 1597 effective July 1st, 1902, a copy of which is hereto attached and marked "Exhibit No. 2", upon which I have subscribed my name for identification. 267 268

Inty. 4. The plaintiff herein, the Pneumatic Signal Co., made and entered into a contract with the Texas & Pacific Railway Company to construct an interlocking device at the crossing of the

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*Deposition of R. A. Thompson read.*

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Texas & Pacific Railway Company, Texarkana & Ft. Smith Railway Company and St. Louis Southwestern Railway Company of Texas at Texarkana, Texas, in compliance with the order of the Railroad Commission of Texas. By the terms of the contract said plant was to be constructed satisfactorily to the Railroad Commission of Texas. Please state whether or not you were instructed by the Railroad Commission of Texas to inspect said plant after its construction, and whether or not you did so inspect it giving the dates of the various orders to inspect, and the dates of your various inspections. Also state whether or not you made a report of the condition of said plant at the time of your various inspections, to the Railroad Commission of Texas. If so, please attach copies of said reports as part of your answer to this question, and state whether or not copies of said reports were furnished the Texas & Pacific R'y. Co.

A. Upon application of the Texas & Pacific Railway Company, whom I am advised was the contracting party for all of the interested railway companies, and in accordance with the instructions of the Railroad Commission of Texas, I inspected said Texarkana interlocking device on June 27th and 28th, 1904, for the purpose of reporting to the said commission whether or not the same had been completed in accordance with the plans filed and approved by said commission and also in accordance with its specifications governing in such matters, and made report to the commission on July 5th, 1904. The orders from the commission for the various inspections, were not in writing, but verbal. In accordance with instruc-

*Deposition of R. A. Thompson read.*

273

tions from the commission, I made a second inspection on November 12th, 1904, and as I found conditions substantially the same as recorded in my report to the commission of date July 5th, 1904,—

Mr. Tompkins: I ask that that part, “As I found conditions substantially the same as on July 5th, 1904” be stricken out and omitted. 274

The Court: Strike it out. He can describe it and not give his summary of it. That is the reason for his action. I decline to receive it; what he did I do not rule out.

Mr. Cooper excepted.

275

Mr. Cooper continued reading the answer:

I so reported verbally to the commission and made no written report. Upon the application of the Texas & Pacific Railway Company, and in accordance with instructions from the Railroad Commission, I made another inspection on July 31st, 1907, for the purpose of finally passing upon said device, and reporting to the said commission as to whether the same was being operated safely and in accordance with the commission’s rules and regulations governing in such matters. I attach hereto my said report of July 5th, 1904, marked “Exhibit No. 3,” and subscribe my name thereto for identification; also I attach my report to the commission of date August 9th, 1907, thereto for identification. Copies of these remarked “Exhibit No. 4”, and subscribe my name 276

277

*Deposition of R. A. Thompson read.*

ports were furnished to the Texas & Pacific Railway Company.

Mr. Cooper: I wish to read Interrogatory 5 and have a part of the answer read, reserving the rest.

278

Mr. Tompkins objected to the interrogatory, that the interrogatory did not call for the approval of the Railway Commission and furthermore asking this witness what the condition of mind was of the Railroad Commission of Texas.

Mr. Cooper: I want to stop there—

The Court: Read what question you asked.

279

Inty. 5. State whether or not said interlocking device at Texarkana was ever approved by you, or was ever satisfactory to the Railroad Commission of Texas.

280

Mr. Tompkins: The contract does say the labor and material must be satisfactory and acceptable to the engineer of the Railroad Commission of Texas. Our position is this, that they may have anything showing his satisfaction or dissatisfaction that is competent, but what his state of mind is at the time the question is asked is immaterial.

The Court: I think I better let that in under the contract.

Mr. Tompkins excepted.

A. The said interlocking device at Texarkana was never approved by me and was never satisfactory to the Railroad Commission of Texas.

Mr. Tompkins asked to strike out the words "The plant was never acceptable to

*Deposition of R. A. Thompson read.*

281

me" as immaterial, irrelevant and incompetent.

Declined and exception.

Mr. Cooper read interrogatory No. 6.

State whether or not you ever made a final inspection of said plant under instructions from the Railroad Commission of Texas. If so, give the date of your final inspection, and state what action, if any, you took, and what report you made to the commission, attaching a copy of same as part of your answer hereto.

282

A. On July 31st, 1907, I made a final inspection under instructions from the Railroad Commission of Texas of the Texarkana interlocking device and finally disapproved the same, as shown by my report of date, August 9, 1907, a copy of which has been heretofore attached, marked Exhibit No. 4. At the time of this final inspection I found that the recommendations as agreed to by Mr. Wuerple and Mr. Lang as specified in answer to Interrogatory No. 5 above, had never been carried out. I was advised at this time that the arrangement agreed to by specifications in answer to interrogatory No. 5 had been entirely satisfactory to the Texas & Pacific Railway Company, but the same had not been approved by the general officers of the General Railway Signal Company.

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Mr. Tompkins asked that the words in the answer "and finally disapproved the same" be stricken out, upon the ground that the witness has testified that he made a written report, which is the best evidence.

285            *Deposition of R. A. Thompson read.*

The Court: I decline to strike it out. It is simply a statement that he made a report and what he reported is in writing. He undertakes to say what the report amounts to, but I will let it stand.

Mr. Tompkins excepted.

286            The Court: With instructions here to the jury that they must find from the report itself what he reported.

Mr. Cooper read interrogatory 8 down to the words "as part of your answer to this question" as follows:

287            Were you furnished by the operator of the plant at Texarkana daily reports as to its workings between September 16, 1903, and August 9, 1907? If so, attach copy of same as part of your answer to this question.

288            A. Monthly reports had been filed with the Railroad Commission of Texas upon prescribed forms, showing the operation of said device. By request of the Commission the daily reports of the tower men operating said device were filed with the Commission, covering substantially the period from April 7, 1907, to October 31, 1904. These original reports I attach to my deposition and mark the same "Exhibit No. 5."

Mr. Cooper offered in evidence the report of R. A. Thompson, the engineer of the Railroad Commission of Texas, dated July 5th, 1904, and marked Exhibit 3 attached to his deposition.

Mr. Tompkins objected to the words following "all electric machine of late inven-

*Deposition of R. A. Thompson read.*

289

tion," upon the ground that the same merely states as to what he is advised.

Mr. Cooper: I offer it as the evidence which was before the Railroad Commission of Texas in its finding of July, 1904. Certain evidence was before the Commission; whether that evidence is or is not the fact is not material now. It is simply the evidence that was before the Commission on which they based their finding. 290

The Court: Why is the evidence proper unless they attack the finding? Why should you ask for the evidence?

Mr. Cooper: One of the issues is that we prevented the acceptance by the Commission by not complying with certain requirements. Immediately thereafter the statement of the Commission is material. I shall subsequently introduce evidence that the Commission acted upon these reports of Mr. Thompson and assumed the truth of them, therefore, this was the evidence that was before them. I am perfectly willing at this stage to concede that certain statements in this may not be statements of fact, but they are the statements which were before the Commission. 291

The Court: You intend to show that their action was not caused by non-compliance with provisions 4, 5, 6, and 7? 292

Mr. Cooper: Exactly.

Objection overruled and exception.

Mr. Cooper offered in evidence the report of R. A. Thompson to the Railroad

293            *Deposition of R. A. Thompson read.*

Commission of Texas, dated August 9, 1907, being Exhibit 4 in the deposition of Mr. Thompson.

294            Mr. Tompkins: I suppose that in putting these reports in evidence, it is understood the report itself is not necessarily evidence of the facts stated therein, especially where it states that the maker of the report has been advised.

The Court: It is competent to be put in as having gone before the Commission. That is all I rule on.

295            Mr. Tompkins: I don't know whether it is pertinent at this time to ask the court to instruct the jury that these various statements that are made in here are not to be considered by them as statements of fact proven by competent evidence, those statements in which Mr. Thompson says he is advised of certain things.

The Court: They are not evidence the advice is true. I so instruct the jury.

296            Mr. Cooper offered in evidence an order of the Railway Commission of Texas, dated August 12, 1907, being Exhibit 4, in the deposition of E. R. McLean, the Secretary of the Commission.

Mr. Cooper: I want to read parts of the deposition of R. A. Thompson in response to interrogatories attached to a commission issuing out of this court in August, 1911, with the same understanding that the parts of the deposition not read I will reserve for further introduction.

*Deposition of R. A. Thompson read.*

297

Mr. Cooper read Question No. 5 as follows:

“In your opinion was or was not said plant constructed in a first class and workmanlike manner? What was the character of the materials and workmanship in general?”

Mr. Tompkins objected to the first part of Question No. 5 as incompetent, irrelevant and immaterial. 298

Overruled and exception .

Answer to Interrogatory 5 read by Mr. Cooper as follows:

“In my opinion the workmanship of the plant was not first class, and the materials and workmanship in general were not up to first class standards. In general in my opinion, the design of the plant and of the functions to perform the work of interlocking, were imperfect and in an experimental stage, and not perfected up to the point where such design could properly perform, if ever, the functions of an interlocking plant in a safe and first class manner, as required by standard practice and in accordance with the rules and general requirements of the Railroad Commission of Texas governing the construction, installation and operation of interlocking devices.” 299

Mr. Tompkins objected to the last sentence which is a criticism of the design of the plant and it is objected to upon the ground that the contract states it specifically. 300

Overruled and exception.

301            *Deposition of R. A. Thompson read.*

Mr. Cooper read Interrogatory No. 9 as follows:

“Your attention is called to the following parts of the plant:

- (a) Machinery in the tower;
- (b) Dwarf signals;
- 302 (c) Track circuits;
- (d) Indication boxes;
- (f) Selectors and high signals;
- (g) Underground cables;
- (h) Switch machines;

303            Taking up each of these separately, please state whether or not they were satisfactory in respect to materials, workmanship, design, operation, or any other respect; and please state fully why they were or were not satisfactory.”

Mr. Tompkins objected upon the ground that his opinion or his testimony at the present time as to whether they were satisfactory is incompetent and immaterial.

Overruled and exception.

Mr. Cooper then read answer to Interrogatory No. 9 as follows:

304            “(a) The machinery in the tower, which was constructed along the lines of machines which had been used successfully in other systems of interlocking was in general satisfactory, except that the machinery operating track circuits and electric lockings, did not successfully perform its functions, as shown by the fact that the track circuits were abandoned shortly after the machine was placed in operation.

*Deposition of R. A. Thompson read.*

305

(b) The design of the dwarf signals was faulty, due to the fact that these signals could be cleared by hand outside of the interlocking, and by persons other than the operators from the danger position, and after being so cleared, remained stationary, thus permitting false indications to be given to trains.

306

(c) The track circuits were imperfect and faulty as to both design and materials, and same became defective and were taken out of operation shortly after installation.

(d) The indication boxes became burned out and failed to perform their functions shortly after the installation and permitting arcing of currents, causing general disarrangement of machinery operating signals.

307

(f) The selectors operating high signals frequently failed to work properly, due to imperfect arrangement for transmission of current through switch and indication boxes to the signals. Also the motors operating the high signals were weak and appeared to be too light and frequently burned out. Also, when reversed, the levers operating the signals failed to put them to normal or danger position, leaving the signals cleared and giving false indications. This last feature was regarded as a most serious objection.

308

(g) The underground cables deteriorated rapidly under the action of the weather, and the corroding action of cinder ballast, causing much short-circuiting and promoting failure of towerman to operate signals; also making false indications possible. Between the time of my inspections in 1904 and 1907, it became necessary to

309                    *Deposition of R. A. Thompson read.*

take out and practically renew all outside cables and underground circuits, due to their becoming defective.

310                    Failure of the machinery and its parts to work properly and safely in accordance with the requirements of first class and standard interlocking specifications, as particularly described above, during the time in which the plant was permitted at the request of the Pneumatic Signal Company to remain in operation, made it imperative upon me as Engineer of the Railroad Commission of Texas, as a final conclusion, to report and recommend its absolute disapproval and suggest that the Commission order its removal from the premises and require the railroad company to install a device that would be first class and permit the safe operation of trains such a device as had in other cases proved that it was constructed in accordance with principles of design and erection that would permit trains to operate safely through it. An order to this effect was issued by the Commission upon my recommendation while still in its service.”

311

312                    Mr. Tompkins asked that the words “did not successfully perform its functions” in answer A, be stricken out.

Denied and exception.

Mr. Tompkins asked that it be stricken out upon the ground there is no evidence showing it did remain there at the request of the Signal Company.

The Court: I strike out what he talks about at the request of the Pneumatic Signal Company. There is no evidence he

*Deposition of R. A. Thompson read.*

313

knew anything about any request or that there was any request.

Mr. Cooper: May that be reserved?

The Court: Yes.

Mr. Cooper: We will strike out the close of this sentence and proceed with "made it imperative upon me as engineer of the Railroad Commission of Texas." 314

Mr. Tompkins: I ask the answer be stricken out upon the ground that this is an opinion of an expert and it does not appear what facts of his own knowledge were before him, or what were the hypothesis upon which his opinion was based.

The Court: His answers state his reason for his conclusions, I think. I deny the motion. 315

Mr. Tompkins excepted.

Mr. Cooper then read Interrogatory 11 as follows:

"Please state whether or not you made an inspection of the plant on or about November 12th, 1904, and if you did make such inspection, state whether you made it in the company of any other person or persons, and if so, of whom? Please state whether or not you made any report or gave any account of such inspection to B. S. Wathen, the then Chief Engineer of the defendant, in the form of a letter, written to him a few days after such inspection or otherwise, and if you did, whether such statements in such report or account were true?" 316

317                    *Deposition of A. Mayfield read.*

Mr. Cooper then read portion of answer to Interrogatory 11, as follows:

318                    “II. I made an inspection of this plant on or about November 12th, 1904, accompanied by Mr. O. H. Lang, Assistant Engineer of the Texas & Pacific Ry. Company, and Mr. Wuerpel, a representative of the Pneumatic Signal Company. I wrote a letter on November 14th, 1904, to Maj. B. F. Wathen, Chief Engineer of the Texas & Pacific Ry., a copy of which I hereto attach, marked Exhibit ‘A’ for identification.”

319                    Mr. Cooper offered in evidence the letter referred to in this answer of Mr. Thompson dated November 14th, 1904, addressed to Maj. B. F. Wathen.

Mr. Tompkins objected as incompetent, irrelevant and immaterial, that it was merely a communication of this engineer to a party to this action and does not appear to have been communicated to the plaintiff.

The Court: I will receive it and give you an exception.

320                    Exhibit 10.

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Mr. Cooper read from the deposition of ALLISON MAYFIELD as follows:

Int. 1. Please state your name, age and residence.

A. My name is Allison Mayfield, age 50 years; and residence Austin, Texas.

*Deposition of A. Mayfield read.*

321

Int. 2. Please state your present position or office, and how long you have occupied the same.

A. At present I hold the position or office of member of the Railroad Commission of Texas, and have held that position continuously since January, 1897.

Int. 3. Please state whether or not you have ever been a member of the Railroad Commission of Texas, and if so how long you have been a member of the same, and if you were a member during the month of August, 1907, and if you were ever chairman of that Commission, how long you were such chairman. 322

A. As stated in answer to Int. No. 2, I have been a member of the Railroad Commission of Texas since 1897, and held that position during the month of August, 1907. I was chairman of the Commission from January, 1907, to January, 1909, and from about May, 1909, to the present time. 323

In connection with the interlocking plant at Texarkana, as I now recall the matter, no personal inspection on the ground was made by any member of the Commission. The Commission's inspections of this plant were made through its engineer, Mr. R. A. Thompson, and the action taken by the Commission with respect to this particular matter was based upon and in pursuance of the reports made to it by its engineer as to facts and conditions, and his recommendations with reference to the matter. 324

Int. 4. Your attention is called to the following papers on file in the office of the said Commission, relating to the interlocking plant at the

325

*Deposition of A. Mayfield read.*

crossing of the lines of the Texas and Pacific Railway Company, the Texarkana and Fort Smith Railway Company, and the St. Louis Southwestern Railway Company of Texas, at Texarkana, Texas, the originals or certified copies of which papers are handed you by the officer taking this deposition:

326

Report of R. A. Thompson, then Chief Engineer of the Railroad Commission of Texas, dated July 5th, 1904.

Order of the Commission, dated July 7th, 1904.

Report of said Thompson, dated August 9th, 1907, recommending that this device be disapproved and the construction of a new one ordered.

327

Order of August 12th, 1907, disapproving the device and ordering that a new one be constructed in its place.

Your attention is particularly called to the following language contained in the last-mentioned report of said Thompson;

328

“1st. The conditions imposed by your order of July 7th, 1904, have only been partially carried out, but the features of your order which have not been completed would not now be considered material to the question of final approval or rejection of this plant.”

You are informed that Mr. E. R. McLean, the Secretary of the Railroad Commission of Texas, has testified in this case that the above mentioned orders, together with the order of June 5th, 1902, requiring this and other crossings therein mentioned to be interlocked, and circular No. 1597, containing general rules governing the installa-

*Deposition of A. Mayfield read.*

329

tion, maintenance and operation of interlocking devices, are all the orders up to the date of the said order of August 12, 1907, which have been made relating to the Texarkana interlocking device; and that Mr. Thompson has testified that the two reports above mentioned are all the reports at said date made by him concerning said device. Please state whether or not in the matter of the said device and of the order of August 12th, 1907, finally disapproving of the same, the Commission made independent investigation, personal or otherwise, or acquired other information than that furnished by the reports of its engineer, Mr. Thompson; and whether or not the commission received as true the information and conclusions contained in said last mentioned report of said Thompson, including the language above quoted, and acted upon the same." 330

331

Mr. Tompkins objected to interrogatory No. 4 as incompetent, irrelevant and immaterial and upon the further ground that one member of a commission, or judicial body cannot say what the Commission as a whole thought or believed, and that the truth of the statements made in the report of Mr. Thompson cannot be established by a belief in their correctness by the Commission which acted upon them. 335

Overruled and exception.

The Court: He must speak from his own knowledge as to independent investigation, and I assume he does.

A. Int. 4. As before stated, the action of the Commission was based upon its engineer's re-

333

*Deposition of A. Mayfield read.*

ports as to conditions; that is, the failure to have the plant up to the standard outlined in the Commission's previous orders, and the fact that the plant was within itself defective. We accepted as true, the report of the Engineer, Mr. Thompson.

334

Int. 5. Having refreshed your memory by the examination of the above mentioned papers, please state whether or not the non-acceptance of the device by the Commission was because of non-compliance by the railroad companies or any of them with the requirements and conditions of the order of July 7th, 1904.

Mr. Tompkins objected to interrogatory No. 5 upon the same grounds.

335

Overruled and exception.

A. It was not accepted on account of the report of Mr. Thompson.

336

Int. 6. Please state whether or not the Commission was satisfied with the said interlocking device, in and of itself, as the same was constructed and installed at Texarkana, but withheld its approval thereof for the reason that the Texas and Pacific Railway Company or either of the companies, party to the crossing, did not make all the improvements and additions required by the Commission, or comply with the details specified for managing the same; and if such were not the reasons for its non-acceptance of the plant, please state what those reasons were.

Mr. Tompkins objected to the 6th interrogatory upon the same grounds.

Overruled and exception.

*Deposition of A. Mayfield read.*

337

A. Int. 6. The engineer's reports speak for themselves, and the Commission's action was based thereon.

Mr. Tompkins read cross interrogatory and answer thereto as follows:

1. Assume the following facts in regard to the interlocking plant located at Texarkana, Texas, at the junction of the Texas & Pacific Railway, the Texarkana and Fort Smith Railway and the St. Louis Southwestern Railway; 338

That on July 31st, 1907, the wiring of the entire plant was in very bad condition, some being torn up and exposed above ground over practically the entire plant; that the insulation was decayed, and the wires corroded to the extent that the exposed wires often fused together and thus short circuited the functions and gave false indications; that the machinery operating the switches and derails often failed to work and parts broke frequently; that such parts as broke could be replaced by the Railway Company operating the plant; that the clutches holding the signals clearing often did not release when the levers were put normal because of the probable magnetization by induced currents on the wires, which induced currents resulted from the imperfect condition of the insulation; that the detector bars throughout the plant were in very bad adjustment, and that some of the railway crossings were in bad repair; that the foundations of the machinery operating the derails and switches needed renewing. Assuming the foregoing facts and no others in regard to this plant, would you as a member of the Rail- 339 340

341            *Deposition of Hon. O. B. Colquitt read.*

way Commission of Texas, have felt justified at that time in making an order permanently approving the use and operation of this plant in connection with these railway crossings?

A. My action was based upon the facts as reported by Mr. Thompson. I do not know what  
342 my action would have been upon a different state of facts.

Mr. Cooper read the deposition of Hon. O. B. Colquitt.

Mr. Tompkins: The questions are the same and I don't think it is necessary for me to renew my objections to them.

The Court: The point is just the same:  
343 it does not need to be repeated.

The interrogatories propounded to HON. O. B. COLQUITT are the same as those propounded to the former witness, Allison Mayfield, and so are not repeated. The answers to these interrogatories by the witness Colquitt are as follows:  
344

A. 1. My name is Oscar Branch Colquitt; age 49; residence Terrell, Texas.

A. 2. I am now Governor of Texas and have held that position since the 17th day of January, 1911.

A. 3. I was a member of the Railroad Commission of Texas from January 3rd, 1903, until January 17th, 1911, when I was inaugurated as Governor of Texas. I was a member of the Railroad Commission of Texas during the month of

*Deposition of Hon. O. B. Colquitt read.*

345

August, 1907. I was never chairman of the Railroad Commission of Texas.

A. 4. I have noted the orders of the Railroad Commission and reports of its engineer to which reference is made in your third interrogatory. I did not make a personal inspection of the interlocking plant at Texarkana, and do not recall that such personal inspection was made by either of my associates on the Railroad Commission. The inspection of this plant was made by Mr. R. A. Thompson, engineer of the Railroad Commission, under the direction of the Commission. I am sure that the Railroad Commission's action with reference to this matter was largely based upon reports made to it by its engineer, Mr. Thompson.

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347

A. 5. As previously stated, the Commission's action was largely based upon the reports of its engineer, Mr. Thompson, who made a personal inspection of the device.

A. 6. My answers to interrogatories 4 and 5 apply to this inquiry.

Mr. Tompkins then read the cross interrogatory propounded to the witness Colquitt, which cross interrogatory was the same as that propounded to the witness Mayfield. His answer is as follows:

348

A. As stated in answer to direct interrogatories, my action, as a member of the Railroad Commission, was based upon the report of our engineer, who, under direction of the Commission, had investigated the interlocking device at Texarkana, and conditions surrounding same,

349            *Deposition of Hon. O. B. Colquitt read.*

and reported to the Commission his findings. Under a different state of facts, he being an expert, I would have been influenced by his recommendation, for I had full confidence in him.

350            Mr. Cooper: In order to save time, if it is agreeable to your Honor, I should like at this time to make a motion for the direction of a verdict for the defendant. Of course I do not want to conclude myself from going on with the case if the motion is denied, but the making of the motion at this time will save a large amount of time for the court.

351            The Court: Has the other side any further evidence to offer relative to the action of the Railroad Commission of Texas?

Mr. Tompkins: We may have some evidence to give that will tend to controvert or explain certain of the evidence that has been given. We have as to statements that have been made.

352            The Court: If this case is to be determined by the intention of the parties, that is a question of fact and not of law necessarily. I think I will take the verdict of the jury anyway in the first instance, and deny the motion and give you an exception.

Mr. Matson: The question of whether or not the defendant intended to waive the acceptance by the Railway Commission, is the question to be submitted to the jury?

*Testimony of M. Wuerpel read.*

353

The Court: Yes, there still remains the question open under the pleadings as to whether or not the machinery was good for anything.

354

Mr. Cooper read the testimony of MORRIS WUERPEL from the transcript of the last trial, as follows:

“I am 41, reside at Rochester, N. Y., and am assistant general manager of the General Railway Signal Co., with which I have been connected since 1904. Prior to that time I was with the Taylor Signal Company as resident manager at St. Louis. Prior to being assistant general manager of the General Railway, I succeeded Mr. Cade as manager of the sales and installation. I have had to do with the installation of Signal plants in Texas. The plant at Fort Worth was installed under my general direction sometime in 1903, and was completed in 1904; in a general way I had to do with the plant at Texarkana, I should say the first was early in 1904, I cannot give you the date offhand. As I recall it I was present at an inspection made by the Railroad Commission’s engineer, Mr. Thompson, about the 1st of July, around there some place. I think he subsequently submitted a report, or rather the Commission submitted a report dated July 7th, 1904. I was present at that time and that was the first I had to do with it. I was requested to attend by the president of our company, which was the Taylor

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*Testimony of M. Wuerpel read.*

Company at that time. That was just about the time of the formation of the General Company.

Mr. Tompkins:

Q. This particular time you attended as a representative of the Taylor Company, or the General?

358

A. At that time I was representing the Taylor Company, but it was assumed at this time—I want to modify this. I was at the plant before that as an actual representative of the Taylor Company, before the formation of the General Railway Signal Company. While we had not been officially advised that the General Railway Signal Company had been formed, we were assuming that it would be formed and I was there actually at this meeting in July as a representative of the General Company. It had not been formally announced yet.

359

I had been over that plant previously and gone over the ground. I knew of the plant. The next time I saw the plant I think was on the 14th of December, 1904. I was also there in October when there were a number of railroad officials and I think Mr. Thompson was there also.

360

Q. Aren't you thinking of still another one in November when Mr. Thompson was there?

A. Possibly, the dates are rather vague. I think I was there in October, and also in November, I am not certain; it may have been in September. Then I was there again at an inspection which was the 12th of November, when Mr. Thompson went over the plant.

When I was there in the fall at these various dates I have mentioned, namely in September or

*Testimony of M. Wuerpel read.*

361

October and early in November and also in December I represented the General Railway Signal Company. The object of my making these visits was this plant was in what was called my territory at that time, being southwestern agent or resident manager in St. Louis, and that plant was in my territory and generally I had charge of it, nothing in great detail but in a general way it came under my supervision and jurisdiction. I happened to be supervising this plant because in the nature of our organization it came under my territory. I had perhaps no specific instructions in regard to the plant. The plant naturally fell to me under the general instructions I had. All the work in that territory, the installation being made in that territory. This was not one of the plants installed by me. The installation was completed. I was working there because they requested some additional work, there were some charges to be made and changes contemplated and I was down there more or less in reference to that.

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Q. When was it first contemplated there was to be changes?

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A. There was some work to be done after the report of July 7th, there was certain specific work to be done on the part of the Signal Company, certain specific work ordered to be done on the part of the Railroad Company, and acting as agents for the Pneumatic Signal Company apparently, the General Railway Signal Company instructed me, or rather not any specific instruction, but it naturally came to me to look after these things that had to be done by the Signal

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*Testimony of M. Wuerpel read.*

Company on account of Mr. Thompson's or the Commission's order and that was my connection with the plant. I don't think I went down there again, after Dec. 1904.

366

As far as the General Railway Signal Company was concerned, sometime in February I believe it was, 1905, we received a request from the Texas Pacific Railroad I think over the signature of Otto Lang as assistant chief engineer to give him a figure on some changes of location of apparatus at this plant. They were contemplating some track changes in order to facilitate operation and they wanted the proposition for making these changes. The General Railway Signal Company made the proposition for furnishing so much material for a specific amount and the labor or force account on a percentage basis.

367

Q. Had you ever heard of those contemplated changes before?

368

A. Yes, they had been suggested, the track changes, by several parties in connection with the Signal Company. Those changes had been suggested that would facilitate the operation of the plant, changes in the track layout. There was no objection to such changes by the Signal Company. On the other hand the changes in the track layout were very much advocated by the Signal Company so as to simplify the layout. The crossing of the Kansas City & Southern and the Texas Pacific was right at the head of the Cotton Belt yards and on account of the nature of the apparatus, the Cotton Belt was so situated there they tied up all the crossings with switching and that was the trouble with the plant from a prac-

*Testimony of M. Wuerpel read.*

369

tical standpoint. The tracks were wrong. We had several times I think recommended they make some changes in order to eliminate the derail and signal apparatus from the Cotton Belt as far as possible. That change was subsequently made. I think I expressed my opinion to Mr. Thompson about this plant. Mr. Walshe was formerly employed by the Pneumatic Signal Company and was subsequently paid by the General Railway Signal Company, he was a foreman. He was sent to Texarkana in the early part of the year 1906 to make the changes that were agreed to be made between the Texas & Pacific Company and the General Railway Signal Company, changes in the track layout. Changes in the location of the apparatus to conform to the track layout. He was there as a foreman. He was a working foreman, he did some work himself and employed one or two men, possibly. He was supposed to work along and do the work with his own hands in some cases. He was an electrician and knew about the wiring.

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CROSS EXAMINATION by Mr. Tompkins:

372

I was at this plant prior to July, 1904. I was then employed by the Taylor Signal Company. That was a competitor at that time of the Pneumatic Signal Company. I was engaged in promoting the installation at that time of the devices of the Taylor Signal Company. The Taylor Signal Company devices were also all-electric.

373

*Testimony of R. B. Ayres read.*

Mr. Matson read the testimony of the witness RAYMOND B. AYRES from the transcript of the last trial as follows:

374

I am fifty-three. Reside at Marshal, Texas. Am Division Superintendent of defendant. The line from Texarkana to Fort Worth is within my jurisdiction. From 1901 to 1911 my division was from Texarkana to Whitesboro and the Texarkana yard was located in the division of which I was in charge. Reports were made to me by the employees working on the interlocking system in the Texarkana yard at Texarkana between the year 1904 and the year 1907, inclusive.

375

To the Court:

Those were in writing. We had control of this interlocking system, that is, being a senior road we operated it. We employed the help that did the work. All of it, not only on our road, but on the other roads. The help was joint help, they were joint employees. They were under our special supervision.

376

To Mr. Cooper:

The bundle of papers you show me are all reports of the operation of the plant made to me. They are filed reports. This other bundle is reports we made to the Railroad Commission of Texas. I made those reports from the data furnished on the reports of the towermen. They are condensed, not each daily report. This is a monthly report to the Commission. We made a condensed report of the condition of the plant

*Testimony of R. B. Ayres read.*

377

and operation. I have examined these before. They are continued from November 3rd, 1904, to August, 1908. This second bundle of reports correctly embody the reports of the towermen made to me during that period.

CROSS EXAMINATION by Mr. Tompkins: 378

My deposition was taken and I testified in the State of Texas on the deposition taken for the purposes of the prior trial.

Q. Did you, or did you not testify in that deposition "At the time these reports were made to me after September, 1904, I made monthly reports to the management of the Texas Pacific Railway, which reports made by me showed in detail the daily reports made by the several towermen to me"? 379

A. Yes, I said that I made them. If I did so testify that was correct. And the fact is that these reports in Exhibit No. 1 were reports that were made by me to the management of this defendant for the railroad commission of Texas. The reports were not made directly to the defendant. 380

To the Court:

I sent the reports to my immediate superior, the Assistant General Manager, and those reports as I understand were sent direct to the Railroad Commission of Texas. I didn't send them to the Railroad Commission. These reports were made by me, I signed them. Made up by my clerk. I inspected them.

381

*Testimony of R. B. Ayres read.*

Being re-called by Mr. Cooper testified as follows:

382

When Mr. Walshe came to Texarkana in 1906, I saw him. He asked me for instructions in regard to the work. Mr. Walshe came down in February, I think it was, 1906, and came into my office and stated to me that his company had sent him to Texarkana on the request of Major Wathen, our Chief Engineer, to make some repairs in the plant, and he asked me if I knew anything about it, and I told him no, I had no instructions and had not heard about any changes to be made, and that if he was sent there on the request of Major Wathen, that I would suggest he would go in the telegraph office and wire the Major he was there. His reply was no, that his company had instructed him that if there were no instructions at Texarkana when he reached there, to notify them. I did not at any time give him any instructions as to the repairs.

383

CROSS EXAMINATION by Mr. Tompkins:

384

I don't remember whether this conversation I have spoken of was before or after certain changes had been made in the Cotton Belt.

Q. I do not suppose you recall at this time the exact words of the conversation with Walshe?

A. That was about the substance of it.

Q. I don't suppose you remember whether he used the word "repairs" or some other word at this time?

A. No, I couldn't say about that.

*Deposition of R. A. Thompson read.*

385

Mr. Cooper: I desire to read the portions of the deposition of R. A. Thompson which were reserved previously and I will read interrogatory 5, beginning about nine lines down of the 5th answer.

Interrogatory 5. State whether or not said interlocking device at Texarkana was ever approved by you, or was ever satisfactory to the Railroad Commission of Texas. 386

Mr. Tompkins: The latter part of the question is this, "or was ever satisfactory to the Railroad Commission of Texas," I object as incompetent, immaterial and irrelevant and incompetent for an employee or officer of the Commission to state what the action was. 387

The Court: I sustain the objection. You can show what they did.

"At said inspection on or about November 12th, 1904, Mr. Wuerpel, representing The General Railway Signal Company, which was the successor to the plaintiff, was present, together with Mr. O. H. Lang, who was representing the Texas and Pacific Railway Company. At a conference regarding my report to the Railroad Commission of Texas, I having stated that I would recommend that said device be disapproved, Mr. Wuerpel stated that he would recommend to his company that the present device be taken out and a new device be installed in accordance with the Taylor System of electric interlocking, which, having been used in connection with other interlocking devices in Texas, had been approved by the commission. I stated that such an arrange- 388

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*Deposition of R. A. Thompson read.*

ment would be entirely satisfactory to the Railroad Commission of Texas, and Mr. Lang agreed to recommend that his company approve the same and pay the amount of remuneration which the General Railway Signal Company would receive upon the bid which had originally been made by the Taylor Signal Company for the original construction of this device, the General Railway Signal Company being also the successor of the Taylor Signal Company. This plan appeared to be very satisfactory to all parties concerned, and was agreed by all parties present, Mr. Wuerpel, of course, stating that his recommendations would be subject to the approval of The General Railway Signal Company."

391

Mr. Cooper then read Interrogatory Six and answer thereto as follows:

Int. 6. State whether or not you ever made a final inspection of said plant under instructions from the Railroad Commission of Texas. If so, give the date of your final inspection, and state what action, if any, you took, and what report you made to the commission, attaching a copy of same as a part of your answer hereto.

392

A. Int. 6. On July 31st, 1907, I made a final inspection under instructions from the Railroad Commission of Texas of the Texarkana interlocking device, and finally disapproved of same, as shown by my report of date August 9th, 1907, a copy of which has been heretofore attached, marked "Exhibit No. 4". At the time of this inspection, I found that the recommendations, as agreed to by Mr. Wuerpel and Mr. Lang, as specified in answer to interrogatory No. 5 above, had never

*Deposition of R. A. Thompson read.*

393

been carried out. I was advised at this time that the arrangement as agreed upon specified in answer to interrogatory No. 5 had been entirely satisfactory to the Texas & Pacific Railway Company, but the same had not been approved by the General Officers of the General Railway Signal Company.

394

Mr. Tompkins: I shall object to the last sentence upon the ground that it is a conclusion and not a statement of fact.

The Court: I will not receive the phrase "as agreed to".

Mr. Cooper excepted.

Mr. Cooper read from the words "On July 31st, 1907, I made a final inspection" down to the words "had never been carried out".

395

Mr. Cooper read Interrogatory 8, as follows:

Int. 8. Were you furnished by the operator of the plant at Texarkana daily reports as to its workings between September 16, 1903, and August 9, 1907? If so, attach copy of same as part of your answer to this question, and give your opinion, as an expert, as to what said report indicated as to the condition of said plant, and its ability to properly perform its functions.

396

Mr. Tompkins objected to the Interrogatory No. 8 upon the ground that there is no proper foundation for the same, that the reports themselves are not in evidence.

Overruled and exception.

Mr. Cooper then read the answer to Interrogatory 8, as follows:

397

*Deposition of R. A. Thompson read.*

A. Int. 8. Monthly reports have been filed with the Railroad Commission of Texas, upon prescribed forms, showing the operation of said device. Upon request of the commission, the daily reports of the tower man operating said device were filed with the commission, covering, 398 substantially, the period from April 7th, 1904, to October 31st, 1904. These original reports I attach to my deposition, and mark the same "Exhibit No. 5" and endorse my name thereon for identification. Said daily report in my opinion, indicated that said device was not properly performing the functions for which it was designed; and that numerous failures of derails, switches and signals were constantly occurring, endangering the safe operation of trains, due to 399 faulty design in the original conception of the device, and parts thereof, and to inferior materials and workmanship used in the construction thereof. As stated in my said reports to the Railroad Commission of Texas, the principles upon which this device was constructed were new, experimental and had practically been untried in a situation of the importance of Texarkana, 400 where the test would be a severe one. The parts of the machines as constructed were weak at points, and were continually breaking down under the strains imposed. The construction of the device in general had not at this time had the advantage of practical operation in other situations, and its weakness had not been discovered. As a whole, it was an experiment, and naturally failed in many places, which, however, might have been strengthened had the benefit of experience

*Deposition of R. A. Thompson read.*

401

in other situations been secured. The successful construction and operation of such devices of this character is necessarily the outcome of experience, which affords opportunity to re-design, re-arrangement and the strengthening of the many parts entering into the construction of signals, switch movements, etc., to meet the needs of practical operation. So far as my knowledge goes, no attempt was ever made on the part of the Pneumatic Signal Company to replace, or renew, such parts of machines and fixtures, as this case has demonstrated, were weak and inefficient.

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Mr. Tompkins objected as incompetent to the words "where the condition would be a severe one".

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Stricken out.

Mr. Tompkins: The entire balance of the answer is wholly unresponsive and is a question of opinion as to the construction of the device.

Mr. Cooper then read Interrogatory 6 from the second deposition of the witness R. A. Thompson.

Int. 6. What in your opinion do the reports of the towermen identified by you and attached to your deposition previously taken, show?

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Mr. Tompkins: That question is based upon certain reports which are not in evidence, reports made by employees of this defendant, and his opinion would assume that the matters in those reports are true and it seems to me an opinion based upon reports which are not in evidence and

405            *Deposition of R. A. Thompson read.*

which perhaps are not competent if they are not offered in evidence—

Mr. Cooper: I offer those in evidence, the reports attached to the deposition.

Mr. Tompkins: You are offering what reports?

406            Mr. Cooper: The only reports that were attached to the deposition. I will offer in evidence at this time the reports attached to the deposition of the witness Thompson, covering the three months from the 1st of July to the 1st of October. If I can find the others I will offer those.

407            A. Int. 6. In my opinion, the reports of the towermen showed that the functions of the plant failed to operate safely and satisfactorily, and that the failures of the functions to properly operate continually increased and became more numerous, and demonstrated conclusively that the design upon which the plant was built and the materials and workmanship contained therein, were faulty and not first class and that the operation of trains through said interlocking  
408            plant was continually becoming more dangerous and unsafe.

Mr. Tompkins: I object, I don't know just what counsel means by offering everything.

Mr. Cooper: I offer all those that are attached to the deposition.

Mr. Tompkins: I object to any reports except the three months, upon the ground that the same were reports made by the employees to the defendant and are not evidence of the facts therein contained.

The Court: Does expert testimony based on hearsay amount to anything. 409

Mr. Matson: I think those reports are all competent upon the question of our intention to accept this plant. I think every report made from beginning to end is competent to show what the trouble with the plant was.

The Court: I receive them. 410

Mr. Matson: Your Honor receives all reports attached to these depositions?

The Court: Yes, reports made by employees pursuant to the directions of the Railroad Commission, or of the Railroad Company.

Mr. Tompkins: The court permits any report that has been made by an employee to the Railroad Company, pursuant to the Railroad Company's direction? 411

The Court: Yes.

Mr. Tompkins excepted.

The Court: I do not receive them as a basis for an expert opinion, but I receive them as competent evidence on the question of whether the Railroad Company was dealing with this instrument as its own, or was seeing what they could do to find out whether they would take it or not. 412

Mr. Tompkins: Are they received as evidence of the correctness of the facts therein contained?

The Court: Not necessarily, no. I do not think they prove themselves to be abso-

413 *Deposition of R. A. Thompson read.*

lutely true; they prove what the company was doing and what intention it had.

Mr. Cooper read Interrogatory No. 11.

414 Int. 11. Please state whether or not you made an inspection of the plant on or about November 12th, 1904, and if you did make such inspection, state whether you made it in the company of any other person or persons, and if so of whom. Please state whether or not you made any report or gave any account of such inspection to B. S. Wathen, the then Chief Engineer of the defendant, in the form of a letter written to him a few days after such inspection or otherwise, and if you did, whether such statements in such report or account were true.

415 Mr. Cooper then read from the answer to Interrogatory 11 as follows:

416 A. Int. 11. I made an inspection of this plant on or about November 12th, 1904, accompanied by Mr. O. H. Lang, Assistant Engineer of the Texas & Pacific Ry. Company, and Mr. Wuerpel, a representative of the Pneumatic Signal Company. I wrote a letter on November 14th, 1904, to Maj. B. F. Wathen, Chief Engineer of the Texas & Pacific Ry., a copy of which I hereto attach, marked "Exhibit A" for identification. The statements contained therein were in all things true. I also had a talk about this date with Mr. J. W. Everman, Assistant General Manager of the Texas & Pacific Railway, in regard to this plant, to whom I stated in substance that in my opinion the plant was faulty in general conception and design, as well as in materials and workmanship, and could never be made to operate successfully and fulfill

*Deposition of R. A. Thompson read.*

417

the requirements of a first-class interlocking device. I stated to him that while I felt inclined to recommend that the Commission order its removal at once, that, on account of the fact that the parties erecting same had spent a great deal of money, that it would be fair to them to permit its operation for a time, to give them an opportunity to experiment further with same with the view of remedying its defects as to design and materials, if they could possibly do so; and if it was found that it was not possible for them to perfect the plant, to give them an opportunity of installing another plant and system of interlocking that would be safe and meet with the requirements of the Railroad Commission. This, the Pneumatic Signal Company were never able to do, or failed to accomplish, and failed to install an interlocking system of materials and design which was regarded as standard and first-class and had been approved by both myself and the Railroad Commission, and hence it became necessary for me to finally disapprove the plant, and I so reported to the Commission.

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Mr. Tompkins: I object to the entire balance of this answer which consists of about a page and a half, which is a sort of special plea for the Railroad Company and wholly irresponsible; it contains many statements that are not made of his own knowledge, an opinion as to what has taken place and what has been done by the Railroad Company and what had not been done by them.

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421

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Mr. Matson: We claim it is all competent on the question of our intent, as to whether we would accept it or not.

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The Court: I receive what he told Mr. Everman and also Exhibit A, which was sent to the chief engineer. When he says what the Pneumatic Signal Company was able to do. I do not receive that.

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OTTO H. LANG, sworn on behalf of defendant, testified on examination by Mr. Matson:

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I reside at Dallas, Texas. My present business is architect and structural engineer. At one time I was Assistant Engineer of the Texas & Pacific Railway. I had the technical education given in Germany, polytechnical at Carlshrue. I was Assistant Engineer of it from 1900 to August, 1905. During this time this plant was installed at Texarkana. I made the general layout of the interlocking scheme at Texarkana. By this I mean

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we located the derails, the signals and different safety devices on the map according to the rules prescribed by the Texas Railroad Commission. This map was prepared by me and was sent to the different signal companies that are in business to install interlocking plants and different signal devices, with a request to submit a proposition for how much they would install that plant. This map, that is the layout, was approved by the Railroad Commission of Texas before it was sent to the various signal companies. The only experience I had in interlocking plants at that time was

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425

in the nature of information received from the different agents of the different interlocking companies. The interlocking was a new thing in Texas and it was pretty hard to get any information about the matter, so we depended entirely, practically on the information we would get from the interlocking companies. In fact we sent as a rule, invited as a rule, the interlocking companies to go over the ground. I was not familiar with the details of interlocking devices myself. All I did was to prepare and obtain the approval of the Railroad Commission to the layout, the place where the instruments should go. Mr. Ellis, the representative of the Pneumatic Signal Company who solicited this contract, told me that he was on the ground prior to the time when any plans and specifications were drawn up by the Pneumatic Signal Company. He told me he was at Texarkana prior to the installing or signing of the contract. This conversation was some time in the spring or summer of 1903. After receiving a bid from the Pneumatic Signal Company, they presented a specification and general layout accompanying their proposal, their bid. The specification was not prepared by me in any way. No changes in the specification were made by me from the time that the negotiation commenced between us and the Signal Company up to the time the contract was signed, nor was any change made in the general layout, but some changes were made in the general layout after the contract was signed.

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During the installation of this plant I went to Texarkana at the rate of about twice or three

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times a week at the beginning of the construction and after the plant went in operation I went there at the rate of perhaps once or twice a month. Outside of building the tower and looking after the work that the railroad company had to install, I merely went there to look over the ground, familiarize myself with the scheme in general, and look what they were doing. During the construction of this plant I never in any way supervised, directed, or said how they should put in this work. While they were putting in the plant, I observed what they were doing. The Signal Company had a man in charge of installing the plant named Caruthers. I met Mr. Ellis there once and Mr. Dodgson during the construction. Detector bars called for by the specifications were not put in this plant. I don't know exactly the time that I discovered that, but I did discover it. It was during the course of construction and I called their attention to it. I wrote a letter, if I am not mistaken, to Mr. Ellis, called his attention to it. I had a conversation with them in relation to it, with Mr. Ellis and Mr. Thompson and I think also Mr. Wuerpel and Mr. Dodgson. I called their attention to it that they omitted detector bars and put in track circuits, the Railroad Commission orders did not admit track circuits and I told them that if they put in track circuits they put it in on their own responsibility and they would have to get the approval of the Railroad Commission, we would have nothing to do with it and that we were on good and friendly terms and I told them I would use my influence with Mr. Thompson, the Railroad Commission Engineer to see what could

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be done, that I thought that the scope of a track circuit in this plant might give perhaps more protection and I would have no doubt that Mr. Thompson would see it the same way. Mr. Thompson later on came and we showed it to him and he promised he would use his influence with the commission to pass a track circuit in place of detector bars. Later on track circuits were put in and used and then afterwards disconnected, sometimes by the Signal Company's men and sometimes by our men. They were disconnected because they gave continuous trouble. 434

Q. In what way?

A. They didn't afford any protection to the crossing. 435

Mr. Tompkins objected to the characterization without giving the facts.

The Court:

In the first place, what was the function of the track circuit or detector bar?

(Witness explained that he had been in an entirely different business for seven or eight years and might make mistakes.)

Detector bars are bars about fifty feet long that go on each side of the rails on a crossing, and the idea is that a car or an engine standing over that crossing will press down on that bar. It is a bar that lays along the rail and is moved up and down by a lever in the tower. If an engine or car stands over the detector bar, the tower man trying to give a signal for safety, he cannot pull that lever because the detector bar can't be pulled up. That has got to be pulled up first before he can give a signal for safety. If he could give a safety sig- 436

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nal, somebody is liable to run into that car and that engine.

Q. To sum it all up, it is just like this; if a train or car is standing on this crossing the detector bars which are on the track would prevent the man in the tower from lining up an opposing route so that a car might come from the other way and hit this car on the crossing?

A. Yes, sir.

The Court:

The bar is pressed down by the flange of the wheel?

A. Yes, and he can't raise it until the engine is gone.

439

A. The detector bar protects of course only the immediate neighborhood of that crossing, and a track circuit, that sphere of protection can be extended a good ways, can be extended from here to here and practically over the whole interlocking part for that reason. That is an electric circuit and that electric circuit prevents also the tower man from giving a clear route of an engine or car or train, if it is anywhere standing inside of that track circuit limit.

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Q. To sum that all up, these track circuits were wired up so that if a car was standing on them anywheres within the radius of where those wires were, it prevented the tower man from letting other trains go through there?

A. Yes, sir.

Q. Prevented him from setting his signals and letting other trains go through?

A. Yes.

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441

Q. What did occur there that caused the signal company and your people to discard those track circuits?

A. They didn't give us the protection that they should give. I think the tower man could tell you more exact. I only can tell from the reports that I got in the office.

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I observed in what manner they put in the trunking and I recall what the specifications required in relation to trunking. I called their attention to the manner in which they were putting in their trunking. I spoke to the erection foreman there, and called his attention to it first, that he didn't paint and creosote the trunking as specified and also that he didn't erect them and construct them as specified. The trunking was practically a wooden conduit into which the wires were laid and from which the different wires to the different signals branched off. Those trunkings went underground and the idea was to construct trunking that was damp and waterproof.

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Mr. Tompkins asked to strike out what the idea was.

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The Court:

The office of the creosote would be to prevent dampness and moisture?

A. Yes, and prevent it from rotting out.

Motion to strike out declined and exception.

The specifications called for that this trunking should be made out of four by four with a groove chased in, into which the wires should lay. That was only complied with on the branch wires. The

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branch wires were only a few wires and they took a two by three and chased out about an inch by inch space and the cover was made out of another piece of lumber just nailed on top. But the main trunks that were constructed out of one by six at the bottom and one by four on the side and one by six again on top, nailed in a fashion like you would nail a drygoods box. The nails were kind of staggered about every—I really don't remember how close they were nailed, but just nailed enough to hold the top down and sides down. It would make a conduit about six by six on the outside, six inches on the bottom and four inches side and top and bottom made about six inches. This was nailed together with inch boards. Of course that created a joint at the bottom where the two sides go on and created a joint at the top where the top came on besides, created a joint which was very hard to overcome where the boards lapped over each other. Those trunkings were supported by wooden posts driven in the earth and the whole supposed to go under the earth. Where the branch wires branched off from the main trunks and where the trunks made some bends, there was supposed to be junction boxes together there so in case we have to get to the wires that we would not need to tear up the whole conduit. Those junction boxes were not put in. The first thing that happened to these trunkings is they had to tear the top open and re-wire some parts. The first man who did that was Mr. Dodgson. He came there and had to re-wire some parts. That was between January and February about a week or two before the plant was put in opera-

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tion and during its construction. It seems like some things were wired up wrong and he had to get at it. He was the first man who had to take off the top.

Q. What did they do after taking off the tops?

A. You take an inch board with nails driven in from the top and you take that off and put it back again and nail it back again, it doesn't improve a box and doesn't improve a conduit. The nailing naturally weakens the side part and the nail will not have the resistance that it should have in an important conduit like that. The result was that the top after a while wouldn't stay on it. The weather naturally swelled the wood and warped it, hot weather coming on, and then the dampness in the ground besides had a tendency to warp and open up everything in this conduit. This relates to the bigger conduits. The other conduit was not exposed so bad because it only had two joints, practically one joint, the top and bottom. This condition showed up pretty soon, so much so that the Commission's engineer made some remarks about it. About June, 1904, there was an inspection of this plant by the engineer of the Railroad Commission. The Signal Company said something to me about an inspection of this plant. I don't remember whether Mr. Dodgson or Mr. Ellis said it. Mr. Dodgson was on the ground. They said they were ready to let the trains go over this interlocking plant.

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I then went to the different division superintendents' offices of the interested roads and told them at a certain date, which was a day or two after I went there, the interlocking plant would be

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open for trains, but not to be used in a regular way. Before that the train stopped at the railroad crossing, whistled and somebody got off the train and swung the gate, opened the gates and let the train pass through. Now I gave instructions that the engineer instead of stopping at the crossing, 454 he must stop at the home signal which is all the way from 350 to 500 feet away from the crossing, there whistle for the signal and when he got the signal to proceed. The idea was to get the men used to the operation and to the ways of the system. It must have been in February, 1904, when the plant began to be operated in that way. After we started in the tower men did the work of 455 throwing the levers, etc. I think the Railroad Company put in the tower men to operate this device and then the Signal Company had their men in there instructing them how to do it. It was operated in that manner from February until June, during which time I think there were two men from the Signal Company there instructing and attending to the plant. Neither Mr. Dodgson or Mr. Ellis remained. It was simply the repair 456 man and the general foreman that had charge of the electric part. In June, 1904, a request was made that the plant be inspected by the engineer of the Railroad Commission. He came at someone's request and made an inspection. There were present at that time Mr. Ellis, Mr. Wuerpel, Mr. Thompson. Mr. Ellis and Mr. Wuerpel represented the Signal Company.

Mr. Tompkins: I think there is some question with regard to who Mr. Wuerpel represented at that time.

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Witness continuing: Also some signal engineers from different roads. We had formed a railway signal engineer's association, and I invited the different signal engineers to inspect this device because it was an absolute new device and I invited Mr. Wuerpel also. When Mr. Ellis came there, he went over the plant with Mr. Thompson. I went along. The other engineers went along different places. Mr. Thompson went in the tower and operated the plant himself. He looked what the tower machine would do; then we went down on the ground and he inspected all the switches, all the signals and made his notes what he thought was right and what he thought was wrong.

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The last part of the answer stricken out.

A. Made his notes and afterwards made his recommendations. He made a written report. Mr. Thompson walked over the yard and he took the dwarf signals that was set for danger and lifted them up to safety and they stayed there. That is very serious thing in a yard especially in Texas, because the railroad track and railroad yards over there are, so to speak, public thoroughfares and anybody could walk around there and just set that signal.

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Q. You may state whether or not you observed whether that same thing could be done to all the dwarf signals?

A. It could be done to every one of them.

There must have been about a dozen dwarf signals there. That condition of the dwarf signals was not remedied that I know of from this time in June, 1904, when Mr. Thompson discovered it,

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up to the time I left in August, 1905. Another thing Mr. Thompson discovered and showed in regard to the working of this plant was the machine, the arcing, you couldn't pull a lever without getting sparks. He discovered also that the tower man could give forced indications.

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Q. Explain what you mean by forced indications?

A. Well, I am a little bit green now myself.

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When a tower man pulls his lever or a certain signal should have made a move, that is indicated back in the tower and the tower man can't make, —for instance, he closes a derail or opens a derail, that should indicate in the tower that it is really closed, or really opened before he could clear the signal. Now supposing he shuts a derail or opens a derail or opens a switch and the indication doesn't come, he could go and force it and then without knowing practically that the function in the yard has been done and then clear the signal. When the arm of the signal stands horizontal it indicates danger and when it comes down, it is at safety and the red and green lights

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are correspondingly changed under those circumstances. There was a signal at each place where there was a derail. If a train passed through on the Texas & Pacific coming this way across the Cotton Belt, these derails would be closed and the arm thrown down to safety, which means, proceed, and allow an engine to cross through there; in the meantime this other is locked so it can't be moved. After the train has passed through and you want to throw the signal of safety back to danger, it requires the pulling of a lever in the

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tower house. The lever is shoved in; it goes in a certain distance and if it doesn't go the entire distance, it indicates that the function has not been performed out there of lifting that up to danger. The scheme of the plant is that that has to be lifted up to danger before the derail can be moved that is locked. I mean the tower man could force this indication without going out there to the switch, by short circuiting some circuit by using some little point, iron piece; put on machinery so that it would release the locking of the derail and allow you to go on operating with that signal still standing at safety. He could do all that right in his tower without going out. 466

Q. What other things did Mr. Thompson discover there at that time in relation to the operation of this plant and show to the rest of them? 467

A. The switch box was missing, that he required to be put in and he also required some improvement in the wiring of the home signal. Then the contact points of all signals were just about the same as in the tower, they were weak and arcing constantly and the cogs on the wheels they had originally stripped off and they afterwards still made trouble. They replaced them with some better material but they still gave trouble afterwards. The cog wheel, or moving signals up and down, switches, and so on. Then the track circuits were not in proper order. That was spoken of at that time. I don't remember what the condition of the track circuit was. It was a long time ago, but they were complained of. Mr. Thompson called my attention at that time to the motor boxes, the motors that ran the 468

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switches, the signal motors. I don't quite recollect now, all the details of the thing. The subject of signal motors was brought up at that time, that there was something the matter with them. In my examination where I said no detector bars were put in by the Signal Company, I referred  
470 to the crossings; detector bars were put in at de-rails.

After this inspection there was conversation between Mr. Ellis and myself as to the results of this inspection. As well as I recollect Mr. Ellis promised to put the plant in good shape. He said he would go at it right away and put the whole thing in shape and make it satisfactory. I think  
471 Mr. Ellis left with the party. Mr. Thompson, Mr. Wuerpel and myself left that evening. The next inspection was in November. Between this time and November the Signal Company put in switch boxes and that straightened out the wiring on the home and distance signals and they worked on the cog wheels and the general repairs, kept the men there. During all this period up to this  
472 second inspection, the actual manual operating of it was done by our men in the signal tower and their men were observing how it went. During that period between July and November when this second inspection occurred, I had a talk with Mr. Wuerpel. This conversation took place during the inspection when we went over the plant and at the end. I mean the first and second inspection. I had a conversation with Mr. Wuerpel between the first and second inspection. I can't fix the date exactly, but I saw Mr. Wuerpel frequently on account of the Ft. Worth interlock-

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473

ing plant he had a contract for. I would say it was in July, 1904. I can't say exactly where we were; it might have been at Ft. Worth or on the train, I couldn't fix just exactly. Mr. Wuerpel said that this plant couldn't be fixed up and the only way to make it work and perform its function properly would be to tear it out and put in a Taylor Signal plant, or take the apparatus out and put in Taylor appliances, and asked Mr. Thompson if that was satisfactory. Mr. Thompson said yes, it would be satisfactory if they would do it; he was willing to condemn the plant right now, but we were, Mr. Thompson was friendly to Mr. Ellis and I was friendly to Mr. Ellis and Mr. Wuerpel.

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Mr. Tompkins objected and asked to strike out.

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Stricken out.

I told Mr. Ellis or Mr. Wuerpel that we would like to give the Signal Company a chance to make good first and not condemn the plant now. The Signal Company might have asked of me personally for the inspection the second time. I am not quite sure about that, but I think it was done by asking and by letter. There were present at that inspection Mr. Wuerpel, Mr. Thompson and myself.

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Q. After the first inspection in June, 1904, the Railroad Commission issued these orders: First, all switches and derails must be provided with switch boxes; those were performed were they?

A. Yes, sir.

Q. By the Signal Company?

A. Yes, they put in Taylor switch boxes.

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Q. All distance signals must have wires carrying the current operating them, etc.; was that done?

A. That was done.

Q. Third, all facing point switches, etc., was that done?

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A. Yes.

I think telephone communication was performed in some places. I am not quite sure now if it was in all. We had indication, I think, on the east and west end. If we had it in the south, I don't know. I think there was a telephone there, but I don't remember now. The general telephone communication was not put in. These indicators on this telephone didn't have any direct connection with the interlocking plant.

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Q. Did it in any way make the interlocking plant work any differently?

A. No, it didn't make it work any better in itself.

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Mr. Tompkins objected as incompetent, immaterial and irrelevant, upon the ground that it does not make any difference whether it made the interlocking plant as a plant work well, or worse.

The order had been made.

The Court: That is true but still it is competent if they show what the defects of the plant were and while this was ordered, it did not affect the integrity or working of the plant at all; it simply means communication between the stations that was all.

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Witness: That was all.

Objection overruled and exception.

The effect it had was just to give the towerman a little bit notice ahead of the approach of the train. The towerman could see a train a good ways off, but if he had direct information that a train is going through a signal, it helped him a little bit to keep another switching crew, or somebody else out of the yard, but otherwise it didn't affect the plant at all. In other words it would give him some advance information by which he might perhaps make his arrangements so he could handle the traffic a little quicker at that station. Guard rails referred to in No. 6 were installed. As to crossings in No. 7, the Texas & Pacific crossing was on good foundation, that is, what we call in Texas at that time splendid foundation, was a new road and the Kansas City & Southern, they didn't have any rock ballast. When the road made general improvements later on, they put rock under it, foundation.

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Q. What was the general condition of those foundations after this work was done?

Mr. Tompkins objected as too general. 484

Overruled and exception.

A. The crossings were generally in good shape.

Mr. Tompkins asked to strike out as too general.

Denied and exception.

No. 8 was done. At the second inspection in November, Mr. Thompson, Mr. Wuerpel and I were present. We went over the plant again like we did in the first place. Mr. Thompson made a

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report. I don't recollect that report, it is some years ago.

Q. I want to get it generally; did Mr. Thompson in words or substance say at that time he was not satisfied with the working of the plant?

A. Yes, sir.

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Mr. Tompkins objected as leading.

Overruled and exception.

487

Mr. Thompson called attention to those dwarf signals again; he called attention to the arcing of all contact points and he called attention to the machine, there was nothing done to that at all. It was just like it was put in originally, and to the track circuits and also requested the railroad company to keep their tracks in first class condition. I observed the condition of the wiring and of the trunking at that time. The top was warped, the top was exposed and where it was underground it was exposed and warped and the joints were wide open in a good many places, the boards not only worked up and down but worked the boards sideways, naturally destroyed the conduit as to what it should be. Some of the wires where the insulation was rotten, was off.

488

The dwarf signals had not been changed. I don't remember whether—at the time I left they had not made the change of the Taylor. The forcing of indications at that time was the same as before. There wasn't anything done to the machine at all. After that inspection I don't think the Commission made any order in relation to that. Right after the inspection, Mr. Wuerpel said that he was going to go home and tell his folks to take this plant out and put a Taylor

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plant in, that was the only way to fix it up and he would recommend that to his company.

We had, that reminds me, we had some little conversation there. In the meantime an interlocking plant in Ft. Worth was installed, which, if it had been installed according to the Commission rules, it would have destroyed the most principal yard in the State of Texas, and we tried to get some changes of those Commission rules which we got through. The change was that in place of the derails being located from four to five hundred feet away from the crossing, we were allowed to place them about 150 feet to the crossing. That simplified matters a good deal and did not destroy the yard. Mr. Wuerpel when he was in Texarkana he said, "Well, Mr. Thompson, as long as you have granted that concession at the Ft. Worth yard, if you grant it in the Texarkana yard we might get rid of some complications in this plant relative to the traffic." The idea was this, and this crossing was interlocked so that if a train passed through here the train couldn't pass through here, they were close apart, so close located that we had to treat it as one crossing. Of course after we got the concession from the Railroad Commission to reducing the distance of the derail we could separate this crossing from this one and put a derail in here to protect this crossing separate and protect this crossing separate, so that where a train came on here it did not effect this crossing at all. Of course that had nothing to do with the operation of the plant itself, it simply simplified the operation and the handling of the traffic and we were willing to

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help the plant out and even willing to go to the expense of making these changes in order to get better results out of the plant.

494 This led to the changes which took place in the Cotton Belt track, which in substance were the narrowing of the limits of the interlocker on this general plan so as to allow this simpler operation and the taking out of the necessary switches and derails and reinstalling them. That was required in order to do that work. The further conversation about doing this was that Mr. Thompson said that he would agree to those changes and recommended that they be put in, if it is all right to the railroad company, he had no further interest in it. That was in November.

495 The next time we were in Texarkana was in December. That meeting was called through the arrival of Mr. Cade of the Pneumatic Signal Company. At that time Mr. Cade, Mr. Dodgson, Mr. Wuerpel and a representative of each interested railroad was on the ground. We went over the plant with Mr. Cade, he seemed to have been the spokesman of the party, and he informed

496 himself and took notes of everything that should be done and he requested in turn what the railroad company should do and we proposed then those Cotton Belt track changes.

We said if it would help them any we would be willing to make those changes in there. They all saw it was a good thing and the railroad companies and signal company agreed that they wouldn't have any objection to this, go ahead and do that work and we left for Dallas. In Dallas the next morning we went to the office of the chief

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engineer, Mr. Dodgson, Mr. Wuerpel, Mr. Cade and myself. Mr. Cade told Major Wathen that there was no reason why anybody should get uneasy about this plant, that they were going to fix it up, no matter what it would cost, that they were in a position to do it, and promised that they would do it at once. He mentioned those track changes and spoke something about there might be some extra to that work and he hoped that the railroad company would take the proper view of this extra work. The Major then told him that as far as extra work was concerned, that the railroad company was willing to do what was right and proper, but the plant would stand and fall and the extra also would stand and fall with the acceptance of the plant. Something then was said about making a little agreement, and the Major said Mr. Cade might come in the afternoon, and at that meeting in the afternoon I was not present, but I remember when Mr. Cade stepped out of his office and went to my desk and told me good-bye in the evening. During that conversation also, and on the train, Mr. Cade referred something to the wire and he said "Mr. Lang don't you think those wires are getting in pretty bad shape and something should be done about that wiring?" I told him "As far as I am concerned, I have no authority to make any promises whatever, but I am going to use my best efforts to help you people out. You go and write a letter to us touching those points so that I have a chance to bring it direct again to the attention of the officials and if you do your part and show that you are willing to make this plant work properly, I am

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sure the railroad company are going to help you out with whatever is right." Mr. Cade then wrote me that letter, but nothing was done about the plant. The first intimation I had was to get a letter from Mr. Wuerpel stating to O. K. some extra bill of material necessary to make changes in the yard. I don't remember if I answered that letter or not, but when the thing came up the second time, I remember I brought it in to the chief engineer and that, of course, brought up the question of what should be done with this.

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I referred the matter finally to the chief engineer. That was the last conversation I had with Mr. Cade, Mr. Dodgson, Mr. Ellis, or Mr. Wuerpel in regard to this matter. I wrote a letter or two and I know up to the time as late as August that nothing was done with that plant.

503

I believe there was a telegraph apparatus in the tower. That was put in later on and connected the tower with the despatcher's office and would enable you to get the same information that you would over the telephone.

504

Q. I show you a letter dated October 8th, 1903, addressed to G. E. Ellis, and ask you if you wrote that letter?

A. Yes, sir.

Mr. Matson offered it in evidence.  
Marked Exhibit 11.

Q. I show you a letter; you sent that letter to Mr. Thompson October 29th?

A. Yes, sir.

Mr. Matson offered it in evidence. Exhibit 12.

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Q. Letter of November 3rd, 1903, from you to Mr. Ellis; did you write that letter?

A. Yes, sir.

Mr. Matson offered it in evidence. Exhibit 13.

Q. Did you write that letter of November 14th, 1903?

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A. Yes, sir.

Mr. Matson offered it in evidence. Exhibit 15.

Q. Did you write this letter of January 9th, 1904?

A. Yes, sir.

Mr. Matson offered it in evidence. Exhibit 16.

Q. Is this the letter you received from Mr. Cade, dated December 25th, 1904?

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A. Yes, sir.

Mr. Matson offered it in evidence. Exhibit 17.

I instigated that letter, requested him that he should write it to me. He requested that I should take up the matter as to what the company would do to help him out. After that letter the matter was taken up and the question of these Cotton Belt changes; it was agreed to do that and we started in to make the Cotton Belt changes.

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Q. I ask you if you wrote that letter in relation to those Cotton Belt changes to Mr. Wuerpel?

A. Yes, sir.

Mr. Matson offered it in evidence. Exhibit 18.

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*O. H. Lang, for Deft., Cross.*

There was some sort of a gasoline engine didn't work, something blew up and there was a dispute as to who was to blame for it. I left August 1st, 1905.

CROSS EXAMINATION by Mr. Tompkins:

510 Q. I show you a letter dated February 14th, 1905, addressed to O. H. Lang; that is a copy of a letter received by you, is it not?

A. I think so.

Marked Exhibit 19 for identification.

Q. I show you letter dated March 11, 1905, addressed to Mr. Wuerpel and signed O. H. Lang, that is the original of the letter you identified as Exhibit 18?

511

A. Yes, sir.

Q. I show you a letter dated April 4th, 1905, addressed to the General Railway Signal Company and signed Otto H. Lang; is that written by you?

A. Yes, sir.

Marked Exhibit 21 for identification.

512 Q. I show you a copy of a letter dated February 7th, 1906, addressed to O. H. Lang; that is a copy of a letter received by you?

A. I think that is so.

Marked Exhibit 22 for identification.

I prepared the original plans for the layout of this plant at Texarkana, which plans contained the location of the derails, signals and switches. The tower man kept records of how many trains and switching engines passed through this interlocking. The interlocker took in a part of the yards of the Cotton Belt on the east end of the

*O. H. Lang, for Deft., Cross.*

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interlocker, which is indicated on the left hand side of this large map in evidence. Every time that a switching engine came down from those yards into the limits of the interlocker, it had the effect of stopping any train from passing over the Kansas City & Southern here, or also over the Sulphur Cut Off of the T. & P. Every time a switching engine came down into the limits of the interlocker, if there was a train to go across it stopped the traffic. I don't know whether there was a delay or not. There was a large number of switching engines came down there. I never made any objections to those delays which were occasioned by the engines coming down in there. Mr. Neff might have objected, to somebody else, but I never heard it. He never did to me.

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Q. When those changes came to be made on the tracks of the Cotton Belt, one object of those changes was to do away with the delays which I have just spoken of, by reason of switching engines coming down from the yards into the limits or confines of the interlocker, was it not?

A. That was not the most reason.

Q. Wasn't that one reason?

516

A. Of course it shortened the interlocker plant, but then the engines still came on it. It simplified the yard, no question about that.

Q. It lessened the delays, did it not?

A. Yes, I think it did.

Q. Isn't it a fact that it did lessen the delays?

A. I don't know in what term you mean delay.

517

*O. H. Lang, for Deft., Cross.*

Q. The delays that would be caused when an engine came on the Cotton Belt and there was a train on either the Kansas City & Southern or Texas & Pacific which was ready to cross and which was prevented from crossing by reason of the fact that the switching engine was within the limits?

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A. It might stop traffic and at the same time not be a delay. On those tracks, the Sulphur Cut Off and Kansas City Southern, there was very little traffic.

Q. It stopped whatever traffic there was?

A. Yes, sir.

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These changes did not have any effect upon the operation and use of the interlocking devices on those parts of the yard. That should not have any effect upon the use and operation of the devices which were left in. It simply cut out certain parts of the interlocking, certain functions, and didn't effect the apparatus itself. It should not effect the working of the apparatus. Some of those changes were actually made on the Cotton Belt before I left I think. I am not quite sure on that point. I was over it this morning myself, but I am not very clear on that, what change was made if there was any. I know the changes were made ultimately, but I don't know whether they were made before I left. I don't recall.

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I was not giving any special attention to the operation of this interlocker during the last few months I was there. I don't think I was there after that December meeting. When I stated that nothing was done by the railroad to remedy these

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devices during the time I was connected with the road, I knew from letters. I was not stating from my own inspection. I have seen copies of the report that was made by Mr. Thompson of the inspection in June, 1904. I think the report states the inspection was made June 27th or 28th. I don't remember the date. I had some conversation there with Mr. Thompson and Mr. Wuerpel and Mr. Ellis.

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Mr. Thompson said in words or effect to me, "If you want me to condemn this plant without any second inspection, I do it right now". He also told me that he would be very glad to see the Taylor plant go in, inasmuch as he didn't regard this structure as a success and he knew the Taylor plant and knew what it was doing, or something to that effect. He preferred a Taylor plant to this plant. He knew what the Taylor plant was.

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Q. It is a matter of fact, is it not, that the Union Switch and Signal Company had as many of their plants in operation in the State of Texas as the Taylor Company did?

A. But they didn't have all electric.

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Q. No, but they had as many plants, about as many plants?

A. I don't think they had as many plants. They had a few mechanical plants, but I don't think they had a single interlocking plant. I term a mechanical plant interlocking, but that is a different thing. The mechanical plant of the Pneumatic Signal Company was no experiment at all, that was all right. I don't remember of any interlocking plant that the Union Switch

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*O. H. Lang, for Deft., Cross.*

& Signal Company had in the State of Texas at that time. Not any kind outside of mechanical.

When Mr. Thompson told me "If you want me to condemn this plant without any second inspection, I will do it right now," I told him not to do it. When he said he preferred a Taylor plant, that was in Mr. Wuerpel's presence. Mr. Wuerpel was a representative of the Taylor Company and the Taylor Company was installing a plant for our road at Ft. Worth at that time. At that time the Taylor plant was the only all electric plant in existence in this country. I make that statement broadly.

Q. Or do you mean to except the all electric of the Pneumatic Signal Co.?

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A. That was the first installation that they really did, Texarkana; outside of that—

I stated on my direct examination that I again saw Mr. Wuerpel either on the train or at Ft. Worth and had some conversation with him in regard to this plant after this June conference and prior to the November inspection, at which meeting he said he would recommend to his people, which people at that time, he informed me that the Pneumatic Signal Company and the Taylor Company had combined, in other words they controlled the Pneumatic Signal Company now and he said he would go and recommend to his people the installation of the Taylor plant, that that was the only way by which this plant could be made successful. He did not say in words or effect, that he would go back to his company, have a conference with his company to see that this plant was put in good shape. I am sure

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about that. I testified as to that conversation on the last trial. I was called as a witness on behalf of the defendant.

Q. Was this question asked you, "Did you have a further conversation with Mr. Wuerpel at the time when he mentioned that he was at Texarkana in September or the early part of October, 1904," and did you answer, "I can't fix the date exactly, but it was sometime in September that I was with Mr. Wuerpel in Texarkana"; did you testify to that? 530

A. If it is there, I guess I did.

Q. Was this question asked you "At that time state the substance of the conversation which occurred", and did you reply to that "He stated that he would go back to his company, have a conference with his company to see that this plant was put in good shape;" did you so testify? 531

A. I don't know; it is a long time ago.

Q. Will you say you didn't so testify?

A. I can't say to the wording. I don't certainly remember every word I testified to. If that is in the report I suppose I did.

Q. And if you testified to it, you testified at that time to the best of your recollection, did you not? 532

A. I guess so.

I had a conference with Mr. Wuerpel at the time Mr. Thompson was there in November, about November 12th.

Q. At that conversation, didn't Mr. Wuerpel tell you that he would fix up this plant and that he would try and get his company to fix up this plant in good shape?

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*O. H. Lang, for Deft., Cross.*

A. That is in November, after the second inspection.

Q. After the second inspection, or at the time of the second inspection?

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A. Well, I guess he used some remark like that, but I think that is the time too, that he said he would recommend the installation of the Taylor plant. That is what he continuously spoke about when he spoke about putting the plant in shape.

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At that conference he said in words or effect that he would try to get his company to fix up the plant in good shape. The next conference was in December at Texarkana. My recollection is that the Texarkana conference preceded the Dallas conference. We went on the train to Dallas together, after the conference. I afterwards returned from Texarkana to Dallas, but not in company with Mr. Cade and Mr. Wuerpel and Mr. Dodgson. I don't recall it. I am sure about that.

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At Texarkana there were several representatives of the various roads that were interested in this crossing. Mr. Neff representing the St. Louis & Southwestern was there and also a representative of the Kansas City Southern. There was some talk at that conference as to what was going to be done by the Signal Company and what would be done by the railroad company. Mr. Cade made a memorandum of what he observed at the plant. It might have been Mr. Wuerpel who made the memorandum. The reason why I fixed it on Mr. Cade is, that Mr. Cade was the spokesman all the way through. He seemed to have more authority

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than anybody there at that time. That was the only reason.

I heard Mr. Wuerpel testify at the last trial and recall that he produced certain memoranda on that trial. I did not know in general what that memoranda contained from either Mr. Cade or Mr. Wuerpel. I didn't know anything about the contents until the last trial. At this conference Mr. Cade said that they would fix the plant up and that they were able to fix it up and they further said they would ask the railroad company to put their track in and do all necessary track work that was to be done. At that conference some mention was made about changes to the yards of the Cotton Belt. That is what the track work refers to. It was the railroad company that was to do the track work. The reasons for making those changes I think were discussed at that time. Mr. Neff had something to say about it, because the changes couldn't be made without the consent of the railroads. I don't know who spoke about it. I think that I laid out the scheme, the way it could be done and presented it to the whole conference there. That was right in Texarkana at the crossings. I don't mean I laid out the plan on paper, but just explained how it could be done. I had to do it to the railroad officials, because they didn't need to do it, were not bound to do it. I don't know whether they allowed that it would benefit them.

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I believe it would benefit the working of the interlocker, but if the interlocker is properly installed it doesn't make any difference what track changes you make, it works all right. The ob-

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*O. H. Lang, for Deft., Cross.*

ject of those changes was to relieve some of the trains from having to stop, relieve traffic conditions, and at the same time help out the interlocker, that it didn't have to make so many moves. That is, it would help out the man in the tower. We thought a simple interlocker of that kind would work better perhaps than a complicated one. The men in the tower wouldn't have to throw so many levers. That would be a benefit to the company who had charge of the maintenance, benefit all the companies.

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At that meeting the representatives of the Signal Company criticised the conditions of the track there, they spoke about some cinder ballast. They spoke about loose bolts in the crossings and bolts. I remember that they spoke about that. It is a fact there were loose bolts at the crossings. You find them at any crossing. You might try a crossing every hour and it is liable to get loose.

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Q. If the track is in proper shape, isn't it possible to keep the bolts that hold the various pieces to the track, the derails and switches tight?

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A. That depends on how much traffic goes over it. If it is a crossing with heavy traffic it would be hard.

Q. It can be done if you give care enough to it? The intention was—

The Court: If there was a man there to screw up a bolt and nut every time it gets loose, of course he could do it.

Witness:

That shouldn't throw out an interlocker every

*O. H. Lang, for Deft., Cross.*

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time a bolt gets loose. If the interlocker throws out, that is no plant.

Q. Did it every time a bolt got loose, throw out the interlocker?

A. According to—

Q. I am asking whether it did as a matter of fact?

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A. I don't think it did.

They criticised the fact that there were cinders used to ballast the track. Mr. Thompson spoke about it, the cinders were there.

Q. Did the representatives of the Signal Company ask that the Cotton Belt people should put in heavier rails in order to give better service generally to the plant and especially to the track circuits?

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A. That was one of the conditions. They spoke about it at that meeting and Mr. Neff promised to do so as soon as they could. We went from Texarkana to Dallas and there had a conference with Major Wathen, at which, besides the Major and myself, Mr. Wuerpel, Mr. Cade and Mr. Dodgson were present. I think Mr. Dodgson was there. At that conference Mr. Cade said that they would fix the plant up and put it in good shape. And furthermore some talk was had in regard to making these changes on the Cotton Belt line. In that respect Mr. Cade said that he thought they ought to be paid for that as extra work and Major Wathen said in reply in effect, that he thought the railroads would do what was fair, and he did also say if you prefer to make an extra agreement, I am not in a position to do that, I myself, couldn't do it,

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*O. H. Lang, for Deft., Cross.*

and if you want to stay over until I consult with the management of the Legal Department, and Mr. Cade replied that he could not stay over, he wanted to get home for Christmas. I had no further conversation with Mr. Cade, except he told me good-bye. When Mr. Cade spoke to me in regard to wiring, it was before on the train going to Dallas. He might have spoken of it in there. I know the fact is that he spoke to me about the wiring, whatever it was it is pretty hard to place.

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Q. Didn't he say in words or effect to you that the wiring is damaged some, some derailments have happened on the plant and I want the railroad company's representatives to help us out, he spoke to me privately about that?

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A. Yes, privately, that is what I mean when I speak of on the train. He spoke I should use my influence to help him out in the matter as much as I could.

Q. He claimed, did he not, that the wiring had been damaged by the use of the plant by the railroad company and he thought the railroad company ought to make some repairs?

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A. No, he didn't put it that way. We knew the wire was damaged, we didn't need knowledge for that. The question was, who was responsible for that, was it the cinders, was it the water, was it the bad trunking, or what was it.

Q. He claimed, did he not, it was due to the railroad company and wanted the railroad company to pay?

A. He put it to me in a form of like you would ask a man to do me a favor and use your influ-

*O. H. Lang, for Deft., Cross.*

553

ence for that to see that the wiring is in such and such shape, its repairs and so on.

He wanted the railroad company to help out. I told him I would use my best influence. I don't think anything was said about wiring or re-wiring the plant at Major Wathen's office. If it was, it wasn't very much. He might have mentioned it in a way, but not with the idea of an understanding. 554

Q. Did you testify on the previous trial "Do you remember what if anything was said at that conference (referring to the conference at Major Wathen's) in regard to the wiring of the plant or the condition of the wires upon the plant" and the answer was "No, there wasn't a word said about that"? 555

A. About the wiring?

Q. That is correct, is it?

A. I wouldn't be surprised.

Q. That is your recollection?

A. I know I had a private talk with Mr. Cade.

The only talk I had with Mr. Cade was the private talk. I asked him to write that letter and he said that it would be wrote. 556

One of the criticisms by Mr. Thompson was that there were forced indications, he could do it. The towerman, I think, showed him how to do it right in the tower.

Q. None was given in the ordinary course of doing the business at the plant, at the time Mr. Thompson was there?

A. Well the machine made different failures, what it was I don't know now, but I know that

557

*O. H. Lang, for Deft., Cross.*

the machine, the levers failed in several ways there.

Q. I am talking merely about forced indications.

558 A. You talked about the machine then and the towerman showed him how it will do it. Of course, it is pretty hard for me to remember after eight years.

Q. Do you remember how the towerman showed him, what the towerman did in order to show how a forced indication could be made?

A. It looked like he had a screw driver, or something like that to work on, I don't remember now.

559 Q. It wasn't done in the ordinary manipulation of the machine?

The Court: I don't understand it could be, but if he wanted to get back the signal to show he was right, he could do it by short circuiting and therefore by changing the circuit of electricity he could do it instead of getting it back naturally, but if the towerman had made a mistake and wanted to show himself right, he could do it himself and make himself good, that is the fact, isn't it?

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A. Yes, sir.

Q. Do you know whether that was peculiar to this controlling machine?

The Court: The short circuiting wouldn't be peculiar to any machine. Electricity will work the same in two different machines if you give it a chance.

*O. H. Lang, for Deft., Cross.*

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Mr. Matson: We claim other machines are locked so they can't do the short circuiting.

This thing was practically all open, you could get at most any part of the machine. It wasn't locked, in fact Mr. Thompson decided it was a very crude affair, especially the machine. I testified that some parts of this plant have not had the test of experience. 562

Q. What particular parts of the plant?

A. Well, I think if a cog wheel is put into the machine and you operate the machine and the cogs strip off—

Q. I want to know what particular machine you are referring to that had not had the test of experience? 563

A. This machine.

I am not familiar with the Ft. Worth machine. I had charge of its installation, but I don't believe I could be able to tell you any of the details now. There were seventy or seventy-one different, separate and distinct machines used outside of the tower to operate the various switches, signals and derails at Texarkana. 564

Q. Will you refer to any particular machine and state which machine or what kind of machine had not in your opinion had the test of experience?

A. Well, there is cog wheels in the switch boxes.

Q. Some of the switch machines then?

A. Yes, then in the signal.

Q. I will take up just the switch machines; the switch machines consisted of, did they not, a motor and a gear?

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*O. H. Lang, for Deft., Cross.*

A. Yes, sir.

Q. The motor was the ordinary standard motor made by the General Electric, was it not?

A. I couldn't tell you.

566 I never examined those motors to amount to anything. I never examined the gear of the switch machines. I had no reason to. I have no knowledge at all in regard to those switch machines. I have no knowledge at all in regard to the machines which operate the signals, except to know it broke. It is a fact that several of the gear wheels were made of cast iron on the start and were later replaced by cast steel.

567 Q. And you knew the reason they were made of cast iron was because they couldn't get the cast steel in time?

A. I don't know the reason, I only know they put it in because it broke. I wasn't employed there as an expert at all. I didn't care what plant they put in, that wasn't my office at all. It was up to the Signal Company to put up a plant according to their own plans and specifications.

568 I testified that the trunking was not made according to specifications. Specifications said they should not have less than four by four, or made out of four by four, or something like that. I think I have seen the specifications. I know I did. I cannot fix the exact time. It was about the time the contract was let. I couldn't give you the exact wording at the present time as to what the specifications were in regard to trunking. I did say that the trunking as constructed there did not conform to specifications.

*O. H. Lang, for Deft., Cross.*

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Q. Did the specifications say that all the trunking should be grooved?

A. That is the way I took it.

Q. Then the reason for your saying that the trunking did not conform to the specifications was because you thought the specifications contained the provision that all the trunkings should be grooved? 570

A. That was one reason and the other reason is I never could imagine how a man could make a water tight box, unless it is grooved and put in there.

Q. Did you understand the specifications called for a water tight box?

A. I haven't seen the specifications for a long time, but I remember at that time I objected to it, my impression was it should be grooved. 571

I stated there were no junction boxes. I know what the specifications were in regard to junction boxes. I think they said that the junction boxes should be placed either where necessary or where shown, or something like that. I know their plans didn't show any places for the junction boxes, never submitted that plan. 572

The track circuit consists of three parts, that is the insulated portions of the track, a relay and battery. I did not say that I did not approve the track circuit myself. I don't think Major Wathen ever approved them. Major Wathen paid very little attention to details of that kind. I don't know whether Major Wathen sent a telegram before the track circuits were installed stating that if the track circuit were installed they should have certain insulation. It might have been done

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*O. H. Lang, for Deft., Cross.*

after they were approved by the Commission. I am pretty sure it couldn't be done before, because we informed the Signal Company that the track circuits were up to the approval of the Railroad Commission, that we know Mr. Thompson wouldn't approve them.

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Witness shown telegram dated, Dallas, Texas, November 13th, 1903, from deposition of Major Wathen.

A. I think it was sent.

Offered in evidence. Marked Exhibit

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"If you furnish track circuits, they must have Webber insulated joint, wooden joint not satisfactory B. S. Wathen."

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There is another letter about that that will explain that somewhere, I don't know where it is. I think we informed them about the crossing bars in place of the track circuits. We informed them by letter. I guess we can get a copy of the letter. The track circuits were installed. In order to have the track circuit work properly, it is absolutely necessary that the insulated portions of the tracks themselves should be done properly and the insulation should be complete and perfect. I think in order to insure such proper insulation, it is better if both ends of the rail are of the same size, you will get a better insulation and there will be less wear and less liability of the insulation giving away. As matter of fact there were several of those insulated points on the track circuits at Texarkana where there were what is known as compromise joints, that is one rail being larger than the other. The insulation

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*O. H. Lang, for Deft., Cross.*

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through use of the traffic would become more or less defective with continued use and needed, I guess, to be constantly looked after and kept in repair. I do not know whether, if the rail on one of the rails was a light fifty-six pound rail, it would not last as long as though it were a heavier rail. I haven't got any practical experience of that kind. 578

The batteries which were used in the case were the ordinary gravity batteries and the relays were the ordinary relays. Both the batteries and the relays were furnished by the Signal Company. I think the track circuits gave trouble right from the start, before Mr. Dodgson left. The towerman could tell you better about that. Reports were furnished during the three months trial period, with the railway commission and show the history of the operations to some extent. It was the duty of the towerman making the report to make a full and complete report. 579

Q. Isn't it a fact in the reports for the three months from August 1st, 1904, to November 1st, 1904, that there was but one failure of a track circuit indicated? 580

Mr. Matson: Does he know what those reports contain?

Witness:

No, I wouldn't know.

Q. If that is a fact, assume that but one failure of the track circuits were indicated through a period covering from August 1st, to November 1st, doesn't that show that the track circuits were giving pretty good service?

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*O. H. Lang, for Deft., Cross.*

A. August 1st, 1903?

Q. 1904.

A. I believe they stopped reporting the track circuits, that was the way it was done.

Q. I am asking you as an expert if that would not be good service, if there is only one shown?

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Mr. Matson: We will admit it if there was only one.

Q. If the track circuits worked properly when they are installed, the insulation being perfect at the time and the battery and relays working as they should, and the track being kept in proper condition, is there any reason why if they continued to keep the insulation perfect and to keep the battery operating and the relays, that you should not have good service?

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A. Yes, you can have good service, the only difference is the crossing bars, don't need practically any attention as the track circuits continuously needs it. The difference between crossing bars and track circuits is that track circuits always require more attention than crossing bars. It isn't matter of cost, it is matter of annoyance.

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The least little thing throws them out of work.

It is a fact that a strict compliance with the rules of the Railroad Commission so far as the location of the various devices was concerned, sometimes interfered with the traffic as I already spoke of at Ft. Worth and a strict compliance with the rules of the commission in regard to this contract, interfered with the traffic in regard to the operation of the Cotton Belt and the other roads there I guess. We had to get the commission to change their rules to simplify. You

*O. H. Lang, for Deft., Cross.*

585

can complicate an interlocker or simplify it. There was too long distances in the yard. The rules were all right for the open crossings, but for these we had to find out by practice they were too long distances. The rules were not fitted to this particular crossing.

Q. Assume that this particular plant had been in operation at Texarkana, that it had been in continuous operation at Texarkana for a period of something like two or three years and that after it had been so operated the wiring became in very bad condition, as some of it was torn off and exposed above the ground over practically the entire plant, would that indicate or would it not, a proper maintenance by the person or party operating the plant, in respect to those wires in your opinion? 586

A. That just depends, if the thing belongs to you or don't belong to you. If the thing belongs to me I might maintain it in quite a different shape. 587

Q. Question repeated.

Mr. Matson objected. Objection sustained. 588

Q. I will add to the question, assuming that it was the duty of the person operating it to maintain it?

Mr. Matson: That don't apply to the facts in this case.

The Court: I don't think it is a question for an expert at all. If it was guarded from moisture and exposure, it wouldn't rust off in a year or so, you can take that without any fear of contradiction, and if

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*O. H. Lang, for Deft., Cross.*

it wasn't so protected somebody didn't take care of it, that is all. The question who is responsible for it is another question entirely. It is self evident it seems to me as far as the abstract question is concerned.

590 I requested Mr. Thompson on one or two occasions not to condemn the plant. I did not desire to have the plant accepted. I decided to give him a chance to make good. I wanted the plant to be ultimately accepted. I would like to see these people make good and give them all the chances to make the plant good. It was only humanitarian feeling for them.

Q. It didn't make any difference to you, did it?

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A. No.

Q. Whether the plant was accepted by the Railroad Commission or not, as long as you could continue to operate the plant in connection with the railroad?

592 A. At the start of it, I didn't have any interest in this matter. The Railroad Company certainly rather operate that plant except they are not expected—

Q. What difference would it make?

A. Gives you trouble continuous, you have something that don't belong to you.

Q. Would the Railroad Commission accepting the plant prevent it getting out of repair?

A. No, it becomes your property, then it becomes your duty to maintain it and all the responsibility is on you, but this way it was always a question when things became deteriorated, the company didn't want to fix it and put any expense on it and the Signal Company either, that becomes an annoyance, anything of that kind.

*O. H. Lang, for Deft., Cross.*

593

By Mr. Matson:

Q. Why did you continue to use this plant after the final inspection by Mr. Thompson in December, 1904?

Mr. Tompkins objected as calling for a conclusion.

The Court: I sustain it. He is not the corporation and he cannot give the reason of the corporation. 594

Q. Did you understand at that time that you had any right to discontinue the use of this plant without the permission of the Railroad Commission?

Mr. Tompkins objected as incompetent and immaterial.

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A. I knew we couldn't use the plant unless the Railroad Commission gives permission to use it, and I knew we couldn't tear it out without permission from the Railroad Commission. We had to use it after it was in, no matter if we wanted to or not.

By Mr. Tompkins:

Q. Did you know that the rules of the Railroad Commission contained a provision that in case the plant was not efficiently operated and maintained, it was the duty of the Railroad Commission to discontinue its use and revoke its permit? 596

A. Yes, I think there was a ruling of that kind.

By Mr. Matson:

Q. Then you knew that if you did not get the approval of the Railroad Commission to this,

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*W. N. Neff, for Deft., Direct.*

that at any day they might revoke their permit and you would have to take it out?

A. That is the idea.

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WILLIAM N. NEFF, sworn on behalf of the defendant, examined by Mr. Cooper:

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I reside at Tyler, Texas, and am first Vice President and General Superintendent of the St. Louis & South Western Railroad Company of Texas. Under my jurisdiction are the St. Louis and South Western, Paragould Southern Railway, Pine Bluff and Arkansas River Railroad, Eastern Texas Railroad, Dallas Terminal & Union Depot Company. There are about sixteen or seventeen hundred miles. I have been engaged in railroading work since June, 1889. I started in as helper at the station, station baggage master, general roustabout, telegraph operator, station agent, roadmaster's clerk, division superintendent's clerk, superintendent's clerk, chief clerk of the general superintendent, chief clerk of the general manager, assistant superintendent, superintendent, and my present position. I have been connected with the Missouri Pacific, Great Northern, Montana Central, St. Louis Southwestern, and St. Louis Southwestern of Texas. In the latter part of 1903 I was superintendent of the St. Louis Southwestern of Texas, and held that position until November, 1907, and came back to that position in 1909. During that period I was familiar with the track and its con-

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*W. N. Neff, for Deft., Direct.*

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ditions on the road under my jurisdiction including the track and its condition in and about Texarkana, also the track and its condition covered by this interlocking system.

Q. What was the condition of that track?

A. The track was good.

Mr. Tompkins asked to strike out as being too general and a conclusion. 602

Denied and exception.

Our main line through here, clear through our yard was 75 pound heavy rail. The next track is what we call the hostler, the track next to the main line immediately south of it, that was fifty-six pounds. This stock track was also fifty-six pounds. Then the only other track was this one that led up to our passenger station, paralleling the Texas & Pacific and that was also 75 pound rail. 603

Q. At that time was fifty-six pound rail the common weight of rail in Texas?

Mr. Tompkins objected as incompetent and immaterial.

Mr. Cooper: The point is being made by the plaintiff that we have an extraordinary light rail there and therefore the plant would not work properly. 604

Mr. Tompkins: The lightness of the rail to some extent coupled with compromise joints.

Objection overruled and exception.

A. Yes, and within my observation I would say largely predominated. Such rail obtained on the main line where trains ran at a high rate of speed, also almost wholly in yards. In fact very sel-

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*W. N. Neff, for Deft., Direct.*

dom you find anything except fifty-six pound rails on side tracks. On or about that time we had on our system other yards in which there were electric interlocking plants, in 1904.

Q. What would be the weight of rail in such yards at that time?

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Mr. Tompkins objected as immaterial, incompetent, irrelevant, until it is shown that the apparatus that was used and the machinery that was used and the track circuits used were similar to these at this point.

Overruled and exception.

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A. On or about that time we had quite a number of interlocking plants on our line, a number of them were electric plants, this plant at Texarkana was all-electric. At Dallas, Texas, there was an interlocking plant there, all-electric, same plan, used by the Dallas Terminal and Railway Union & Depot Company of which I was Superintendent, by the Gulf, Colorado & Santa Fe, by the Missouri, Kansas & Texas and by interurban and local street car lines. Our

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main line of the Dallas Terminal was laid with sixty pound rail; the difference in the section of sixty and fifty, or fifty-five is so slight that no one could tell it without measuring, and that rail is in our track today through that interlocker. The Gulf, Colorado & Santa Fe rail through the interlocker was either sixty or sixty-three in my judgment, it was just about the same weight rail as ours. There were quite a number of side tracks in that interlocker for the reason that the railroads interchanged freight cars at that point.

*W. N. Neff, for Deft., Direct.*

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There were three of those tracks right about the center of the interlocker, right in the heart of it, and all those tracks, although they were on a curve as it was on our main line, were fifty-six pound rail. At East Waco, Texas, an interlocker there between the Houston & Texas Central and our lines and the Missouri, Kansas & Texas, three lines. The Houston & Texas Central main line was light rail, and this interlocking plant was located right at the throat of their train yard, just as this was located with reference to our train yard. Their side tracks were fifty-six pound rail, in fact all the side tracks in there were fifty-six pound rail. At Plano, Texas, there is another all-electric plant where the main lines are heavy rail but the side tracks are all light rail. At McGregor, Texas, at our crossing with the Gulf, Colorado & Santa Fe, another all-electric plant and at that time and until less than a year ago our main line was fifty-six pound rail.

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During this period I was quite familiar with the operation of this yard at Texarkana on our line. I went over the ground very often in the Texarkana yard and received reports from the men, my subordinates as to the operation of it. These reports were made regularly. We had a system of reporting the movement of trains and delays of trains, both by mail and by telegraph and I received those reports regularly.

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Q. During this period, did those reports and did your observation show that this was operating successfully, or otherwise?

Mr. Tompkins: Objected as not having a proper foundation, as based upon re-

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*W. N. Neff, for Deft., Direct.*

ports not in evidence, and calling for a conclusion.

Mr. Cooper: It is based on reports which are made to him by his subordinates and he is familiar with it by his own observation.

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The Court: He may state what he knows of the operation and the sources of his knowledge.

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A. Both from my personal observation. Texarkana is a very important point on our line. It is a terminal. My headquarters were located about sixty-one miles south of there and I had occasion frequently to visit that yard and have walked over every track in there time and time again, and it was my observation that our switching movements, as well as—

Mr. Tompkins: Objected.

—my observation on the ground and information given to me by our yardmaster and other employees at Texarkana, together with the reports which I received both by mail and by wire, indicated—

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Mr. Tompkins: Objected upon the ground that it is based upon what was told him by employees there and reports he had received.

The Court: He can state from his own knowledge because I want to keep within the rigid cast iron rule which has got to give way pretty soon, in my judgment.

Just as I previously stated, our switching movements, in the performance of our switch engines, and switch engines were very badly de-

*W. N. Neff, for Deft., Direct.*

617

layed, our switching was badly interfered with, the movement of our trains both freight and passenger badly interfered with, trains standing there from as high as forty-five minutes to an hour, made up and ready to leave that terminal and delayed that long simply because they were unable to get through this interlocking plant. I observed some of those delays personally and the balance of my information was gained from frequent investigations made at Texarkana of the conditions there obtaining at that time, the delays to our business, our switch engines and to our trains. It was my business to go there and investigate these things and I did it, and did it frequently and that was the conclusion that I came to, that this difficulty that I speak of was caused by the operation of this interlocking plant, and at times it was almost unbearable as far as operation was concerned.

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December 17th, 1904, I had a conference with representative of the other railroads about this crossing and representatives of the Signal Company relative to this plant. There were present three representatives of the Signal Company, including I believe Mr. Dodgson. Mr. Otto Lang of the engineering department of the Texas & Pacific, Mr. Rose of the engineering department of the Texarkana and Ft. Smith, Mr. R. B. Ayres, Superintendent of the Texas & Pacific and I. In that conference the subject of changes in the interlocking plant and the movement of the cross-over was discussed. The idea of the meeting was, as I understand it from my instructions and from

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*W. N. Neff, for Deft., Direct.*

my understanding after I got into the meeting, that it was a friendly meeting between all interests concerned, the Signal Company, the three railway companies and that we were to get together on the ground, we had had so much trouble that we were to get together and see if we couldn't do something to improve the conditions there. We went over the ground and a proposal was made to relieve this trouble by narrowing the limits of the interlocking at the crossings, not the distance signals, but the derails. The derails under the original plan, I believe, were located about four hundred feet away from the crossings and the new plan was to locate those derails about 150 feet from the crossings, which would eliminate a number of switches by the narrowing of the plan in this way, and in doing this, as far as our line was concerned, this crossover that you see immediately east of the Texas & Pacific, shown as No. 15 was to be moved immediately west of the Texas & Pacific, about where you see No. 22. This crossover is shown as No. 15, was to be located right in here, immediately west of the Texas & Pacific and there was an interlocking at the end of the stock track, that was to come out. Under this plan it took in as I remember it, about three of our switches on our west lead and under this plan those three switches were to be taken out of the interlocking and we would after that time close the switches by hand.

The three representatives of the Signal Company made no objection to this proposed change. They wanted to do it and asked that it be done. There was something said as to changing the

*W. N. Neff, for Deft., Direct.*

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weight of the rail on our track. The Signal Company asked that we substitute a heavy rail for the 56 pound rail on a portion of the hostler track, not the stock track but the hostler track, and I said that while I thought that was entirely unnecessary, I saw no reason at all for it and explained that 56 pound rail was used on side tracks at other places successfully, that I was only too anxious to do anything that I could to help this plant along and would gladly do anything within reason, and I said at that meeting that I would recommend that we change this 56 pound rail and substitute 75 as soon as we could get the rail. We then had an order in with the mills in Colorado for the rail, we were pushing the mill all we could but I said that as soon as we got it that I would recommend that we lay that short stretch in there between the derails on that hostler track, and it was afterwards done. I don't know when the changes in the interlocking were made. The changes to be made by the St. Louis and the Southwestern were completed in May, 1905. The crossover I think was moved before that time, considerable earlier. They were completed as soon as we could get the rails.

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No request whatever was made at this time by the representatives of the Signal Company with respect to changing the ballast on our line. It wasn't even mentioned. Our road through that yard was in good condition, exceptionally good condition for side track. The main line was in good condition. In respect to bolts at the crossing of our line and the Kansas City

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*W. N. Neff, for Deft., Cross.*

Southern being loose and shaky, I say that the Texarkana and Ft. Smith crossed three of our tracks, and while the Texarkana and Ft. Smith maintained those crossings, I had personal knowledge of their condition and I know that the crossings at all times were in very generally good condition. No doubt there were some loose bolts in those crossings and I have never seen a railroad crossing in my experience that didn't have loose bolts and it is not practicable to keep the bolts tight in a railroad crossing at all times. A man could go there and tighten them, but very shortly some of those bolts would commence to get loose. I have never seen one that was absolutely tight or free from vibration and I doubt whether I ever will see one.

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CROSS EXAMINATION by Mr. Tompkins:

We had an all-electric interlocking plant at Dallas. I don't know whether the crossings were protected by electric circuits. We had an interlocking all-electric at East Waco. I don't know whether the crossings were protected by track circuits or electric circuits. I don't know whether any of these places at which I have testified we had interlocking plants, or whether any of the crossings were protected by track circuits. I don't know how this at Texarkana was protected. I don't know about track circuits. I don't know about electric circuits. I do know what compromise joints in tracks are. It is where a heavier and a light rail are joined. I know there were a number of compromise joints in the plant at

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*W. N. Neff, for Deft., Cross.*

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Dallas, but I don't know their location with reference to track circuits.

Q. I suppose that is true of these other places?

A. They were close to the crossings.

I didn't say the switching from our yard there interfered to quite an extent with the passage of trains on the roads. I said the interlocking interfered. It wasn't when engines came down from the yards into the interlocker that there was interference. The interference was the difficulty we had with this plant. It is a fact that we made these changes, or proposed to make the changes in the layout of the plant in narrowing down the operation of the tracks that were covered by the interlocker and we expected that it would result in less delay to trains. 634

Q. That was the idea that both the representatives of the Signal Company and the various representatives of the railroads had?

A. We thought it would decrease the opportunity of failure of this plant by that much.

Q. It eliminated a number of functions?

A. On our track and that should not have been necessary, in fact we should have been able to add functions rather than take them off. 635

Q. Every time they increased the number of functions at any particular part it had a tendency to tie up the opposing lines while those parts were being operated, didn't it?

A. Not in an interlocking plant that was working properly, it should not have that tendency.

Q. Wasn't it a fact that that plant, as it was at the time you visited Texarkana in 1904, that whenever a switch engine came down from your

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*W. N. Neff, for Deft., Cross.*

yard into the limits of the interlocker, that so long as that remained in the limits of the interlocker that the lines of the railroad which crossed the Cotton Belt could not be operated?

A. Yes, and that is the condition today.

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It wasn't one idea of those changes to lessen the number of times that would occur. That is not my understanding of it. From what I know it didn't effect the movement of our switch engines a particle, they had to come down after it as they did before. A switch engine could hardly make a move in there after the three switches was cut out by this change, a switch engine could hardly make a movement in there without still coming into the interlocking plant. They might

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make some short moves in there occasionally and when they did that, that would be so. The object of changing the crossover was not to remove it further from the yards on the east. The reason for the change in the location of the crossover was because it was in the way of the new location of the derail, the derails being located one hundred and fifty feet east of that crossing instead of four hundred feet, brought the derails

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down there where that crossover was located and it was necessary to get that crossover out of the way. The change of the distance of one hundred and fifty feet narrowed the limits of the interlocker to five hundred feet, two hundred and fifty on each end. I had charge of the track work in changing that crossover, but I had nothing to do with the changes in the interlocking on the crossover. I had charge of the track work so far as the change of location of that crossover

*W. N. Neff, for Deft., Re-direct.*

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was concerned. It was done before May, 1905. The laying of the heavy rail which we were delayed in getting was not completed until May, 1905. The crossover was changed before that. I don't remember just when.

RE-DIRECT EXAMINATION by Mr. Cooper: 642

This interlocking system has been removed from the yards there and another has been installed.

Q. How did the delays compare that are caused by this new system as compared with the system under discussion?

Mr. Tompkins objected as incompetent, irrelevant and immaterial.

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The Court: He may state what the delays are now and what the delays were then.

Mr. Tompkins excepted.

A. I returned to my position as Superintendent of that line in April, 1909, and since that time we have had no complaint at all to make about the operation of the present plant, in fact some time ago when I asked the yard master how this plant was working, the way he expressed it was it goes over right now. 644

Last part stricken out.

We have had no complaint at all of this plant so far as the operation of trains—

Mr. Tompkins asked to strike out.

Denied and exception.

I have had no complaints at all and I have observed no delays either to our switching move-

645 *W. N. Neff, for Deft., Re-cross.*  
*C. J. Atkinson's Testimony Read.*

ments or to our trains, since this plant was installed.

RE-CROSS by Mr. Tompkins:

646 I don't know at what time this plant was removed. I don't believe I was in Texas at that time. I left Texas in November, 1907, and returned April 1st, 1909. I don't think it was in operation when I left in November, 1907. I don't say it is a fact. I am not sure. My recollection is that it was not, but I may be mistaken about that. It is a fact that no contract was made for the new plant until August, 1908, and that this  
 647 plant was used some time after that. I wasn't there. I don't know when this change was made.

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CHARLES J. ATKINSON'S testimony on last trial was read by Mr. Cooper, as follows:

648 I reside at Hemphill, Texas. I am a minister. I have been connected with the Texas & Pacific Railway Company as maintainer of the interlocking plant at Texarkana from November 1st, 1904, to December 6th, 1907. My duties as maintainer were to make all repairs necessary to the interlocking plant. I performed those duties. The repairs occupied a man's entire time. The kind of repairs I made were as follows. The taper pin connecting the motor to the switch movement had to be repaired, something like 25 or 30 of them during that time. The cogs operating the

*C. J. Atkinson's Testimony Read.*

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ratchet bar broke out frequently and some 20 to 25 of those had to be repaired. After we got to where we couldn't get them we had to carry them to the T. P. machine shop, drill holes into that shaft, tap the thread into it and screw bolts in there and cut them off the right length and the right shape to make it operate. The ratchet bars which operates in the gear movement, the switch and lock movement, some thirty or more of those broke. The leads to the clutch had to be resoldered in, they came loose. The bearings on those shafts that were in the switching gear movement often broke. The cut-out block which brought the motor cut-out knives out and in contact often came off. The contact springs on the beginning of the plant had to all be replaced by stronger ones and the first springs were of soft copper and had to be replaced by copper springs mixed with some kind of alloy to make it stronger. The motor cut-out knives were often carbonized and had to be dressed up. Also in the clutch. All that composition insulation had to be removed. It was of such a nature that in the summer time it softened and came on the face of the clutch causing it to give release report. That had to be removed and shellac put in there to preserve it.

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Coming to the switch and lock movement, when I first was occupied as maintainer of this plant, the indication box covers were very small and caused many grounds, or short circuits, which indication boxes were afterwards replaced by the Taylor indication box and gave less trouble from that time on. In that indication box, the contact

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*C. J. Atkinson's Testimony Read.*

posts became grounded, or short circuited and their springs carbonized, had to be removed. I believe that about covers the repairs to the switch and lock movement. I was called upon frequently to make such repairs. They were daily occurrences in some part of the plant, at some places. Something of the kind must be done daily. Also, I might say, on that gear movement when I first went there in the winter of 1904-5, water accumulated in the bottom of that base and froze into ice and bound the movements, and I went over those movements all and drilled a hole in the bottom of the base allowing the water to get through relieving that trouble. The semaphore signals, one trouble was that the motor fields often burned out and we had to take the motor out of the signal, take the fields completely out, remove the armature, take the fields completely out, put in new fields, connect them up, put the armature back and put the motor in service. Also the armatures became grounded. We had to either throw these armatures away or ship them to the General Railway Signal Company to be rewound. The operating circuits, very often those came in two. We had to make new repairs splices in the wire. That was outside the signal pole. The contacts in the signal pole in the operating circuit, on the motor cut-out kives, the contacts became carbonized and on the first construction were soft copper and very limber and it was hard to keep in contact and we had to take those off and replace them with stronger springs. And the contacts themselves on the first making were a piece of iron that ran out to the front with

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*C. J. Atkinson's Testimony Read.*

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insulation on each side and insulated washers which soon carbonized and caused grounds. That was remedied with the cut-out knife made of wood, about an inch and three-quarters or two inches long between that and the circuit and then the insulation put around that, I mean the contract put around that. That was done I believe in February, 1905. That was after the general inspection and they were shipped there by the signal company and I put them all in. And the insulation in those clutches in the signals was the same as the other and had to all be removed in order to keep the face of the clutch from sticking on the clutch and allowing the up and down rod to go clear down so that when it was operated the second time it operated properly.

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I was called upon to make such repairs to the semaphore signal apparatus quite frequently. I believe there were 17 or 18 high arm signals, until they was all removed, we had to go over the whole business and clear them all out, put on stronger springs, and also on the home signal and distance signals on the T. C. where they were out of sight, there was a reverse indication we had to get. That was constantly giving us trouble in burning off until we got the stronger insulation on it, better contacts. The stronger insulation was put on, I think, in February, 1905. That was the improvement suggested by the Signal Company; that is, rather, we found it was too small and as the maintainer of those plants, whenever we found a thing was too light in them we would increase its strength by making a better contact and put-

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*C. J. Atkinson's Testimony Read.*

ting on a better spring and use our best judgment along that line. There was trouble in the cable to the signal clutch. The cable that went from the post back of the semaphore under the pulley and over the signal clutch, which magnetized it and carried the signal clear, split and had to be removed. In regard to the lower dwarf signals I was very frequently called upon to make repairs to those. The babbitt that had been run on the spindle, on the shaft, was too thin and those spindles had to be carried to the machine shop and turned down and re-babbitted in order to be able to hold. On the edges the babbitt was barely thin enough to go around and wouldn't make a bearing that would hold. Those had to be changed. They were continually bursting and also the plunger of the core in the bottom of the solenoid had to be taken out and dressed off in order not to fit too tight in there, it would jam down and stick.

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As to the general construction of the dwarf signals they was hard to raise, the magnet wouldn't release and raise, seemed not to be sufficient to pull it from that position when once set in there and stuck. I made repairs on the cut-out boxes. The cut-out boxes were hard to keep in contact. The springs of the square boxes were weak and had to be replaced by stronger springs and in place of being that soft copper was also of a different nature with an alloy in it and had been tipped with aluminum tips and were stronger and better, and also that in the cut-outs on those derails they were put on the contacts with a small

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*C. J. Atkinson's Testimony Read.*

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set screw and they were hard to keep in place with that kind of fastening.

The wiring proved very bad from the time I went to work there on through.

Mr. Tompkins moved to strike out.

Denied. Exception.

On October 26th when I arrived in Texarkana and made application to the Texas Pacific for a position, at that time they had a supply man on, they sent me down to the plant to go over and get the detail and consider the proposition on the 1st of the month, and I went down on the 27th in company with the Signal Company's representative and that special maintainer. We went over the plant and did work that day in repairing the first wire. The representative was Mr. Walshe, and from that time on on numerous occasions the wiring came in two and I have made as high as thirty-two or thirty-three ties in one day, cable with four and six wires come completely in two such as that. It was a common occurrence in the time of that operation there, something like four or five hundred ties had to be made in the wiring and especially on a rainy time it just kept a man running all the time.

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Q. Did you have any trouble with the wiring which was not in the cinder ballast?

A. We had trouble all over, trouble in the dirt and every other place, even where it laid in crossings on the street. We had to dig through the streets sometimes three or four feet down and get it up from there, take it out from there.

There was a line of trunking which was not in the ballast, on the Texas & Pacific Transconti-

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*C. J. Atkinson's Testimony Read.*

mental, on the T. & P. main line from Texarkana to Marshal and on the Kansas City Southern there wasn't any cinder ballast to amount to anything. In fact some of the trunking was laid eight or ten feet, some twelve feet from the tracking down there. It wasn't in cinders only a portion of it.

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We had trouble all around. The trunking was of sap pine, that is part of it, one by six, one by four, like that, and then some of it was this two by three that had been put on a planer machine and grooved covered by a one by three. Sap pine began at the tower and ran out all along the Cotton Belt line and on the Kansas City and Southern in the main lines where the cables came off,

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went over on the T. C. division of the Texas Pacific railroad and that had been grooved stuff of two by three which fit in there, a small groove an inch square leaving an inch on each side. That held one cable and two wires to the east end signal and four to the west end, like that. The sap pine was made of just a common board, common sap pine board. It began, this section in the center would be nailed on and this joint over here

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would be nailed on and this joint put in here to make and brake joints all the way through, that is all, just nailed together. Those contained main lines of wires. The cables, wires and such things as that to most of the signals and derails. I remember the weight of the rail on the Cotton Belt. On the main line 75 pounds and on the stock track was 56. The rail on the Texas & Pacific was 75, all of it.

*C. J. Atkinson's Testimony Read.*

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The Court:

Can't you say whether at the crossings where this apparatus was in use, it was 56 or 75?

A. Yes, on the main line it was 75 and the next came down on the hostler and stock track was 56.

Q. It was your duty to attend to the power plant, was it not? 674

A. Yes, sir.

We had trouble with the power plant. We would go down in the morning to make a charge, we charged about once a week and in the morning to make a charge to charge the storage battery, we probably would start up and it would may be go a time or two and go out on you, and then you would turn on your crank and try to get another spark and work then a while and it wouldn't go and then you pump her up again and work on that and give her a few more turns and may be get a spark or two and sometimes get an hour or two charge. I have stayed there all night to get a charge when I ought to have got it in eight hours. 675

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The Court:

You have seen that happen with other gasoline engines?

A. I have seen them die out, but I have also seen them operate nicely day in and day out.

The first generator was one that the polarity on the machine would reverse and sometimes you would be charging along nicely, charging a current and all of a sudden the current go the other way, the machine would turn right the other way

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*C. J. Atkinson's Testimony Read.*

and the brushes would set to burning and carbonizing. The commutator would then have to be rubbed off and cleaned up and things of that kind. I believe there were no other troubles with the power plant.

678 The Court:

You only used the gasoline engine about once a week?

A. Yes, made about an eight or nine hour charge, raising your specific gravity from twelve ten to twelve thirty-five and running your voltage up to 110 until it would die and go back.

Q. Was that the direction that the Signal Company specified?

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A. Not to work down to 110. We have had trouble where the voltage would run down to 92 to 94, when you couldn't get it started and it was impossible to raise it. Our instructions were to hold it at 110.

The Court:

How long did this trouble with the engine last?

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A. The trouble with the engine lasted all along. We had to eventually supply a motor to operate it, mechanical power, a dynamo to help and cut in on the city current.

We had to supplement this power plant by going to the city.

Q. Mr. Wuerpel yesterday testified that Walshe went to the plant as a working foreman; did he work?

Mr. Tompkins objected to the question "Did Walshe work?"

*C. J. Atkinson's Testimony Read.*

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The Court: I will let it stand. It don't do any harm.

A. Very little.

Out of the three months and a half he was there the last time he worked two and three-quarter days, or three and three-quarter days. The track circuits didn't operate. They were cut in and cut out first on the track and then on the storage battery. We would cut out and put them on, start with them and they wouldn't operate an hour, or anything like that, or may be a day sometimes and then be cut out again and they were carried on in that style over until I believe in February, like that, of 1905, when Walshe came to the tower, cut them off the storage battery permanently and we left them there and carried them on the daily report. That is a report which the three tower men make to the Superintendent concerning the handling of the plant. I say Walshe cut them out. The Post Pipe track, so-called, was not connected up or operated from the tower.

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Q. Then when Walshe said that he found that Post Pipe track connected with the tower in his direct examination, he was in error, was he not?

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The Court—That follows, of course.

Q. The specifications required that the motor in the high arm signal should be of one-sixth horse power, were they?

A. One thirty-fifth horse power, 110 volt, 800 speed.

Q. There was a provision in the contract and specifications that the minimum size of underground trunking was not less than three inches by three inches with groove not larger than one

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*C. J. Atkinson's Testimony Read.*

by one inch; was that the case, was that the minimum?

A. There was two by three one-inch groove, one-inch by three on top, small.

Q. Was or was not a telegraph wire and telegraph key placed in the tower?

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Mr. Tompkins objected to the question as immaterial, incompetent and irrelevant. Overruled and exception.

A. There was.

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By means of the telegraph wire the tower man could get all that came over the main line train wire on the Texas & Pacific, and also was able to communicate with the tower at the K. C. S. and S. P. crossing, known as the International Works, two miles away, and get all that came over the K. C. S. from the south.

CROSS EXAMINATION by Mr. Tompkins:

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I don't profess to be a signal engineer. I have never had any previous experience at an interlocking plant of this design where the power was all-electric, nor had I had any experience with an interlocking plant before. I said the horse-power of those motors was one thirty-fifth, what they were labeled on the motor casing. There was something on the motor casing that said one thirty-fifth. It was one thirty-fifth h. p., which means one thirty-fifth horse-power. That is all I know about it. That was the label on the motor. Those were motors on the high arm signal, or semaphore signal motor.

The Court: What do you mean by the casing?

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A. I mean that the casing in which the armature and fields go.

Q. Is that a metal case?

A. Yes, sir.

Q. Part of the machine?

A. The cover and all that covers up the works of the machine.

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I don't know how much current was needed to operate the gears that were operated by those motors.

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EDWARD N. CULLUMS.

EDWARD N. CULLUMS, called by defendant, testified on examination by Mr. Matson:

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I reside at Crestline, Ohio. At one time I was tower man for the defendant in the operation of this plant. I went to Texarkana several days before the plant went into operation and was there until September 1st, 1907. The morning I arrived there, the regular construction gang was there, but a couple of hours after I arrived at the plant Mr. Dodgson and Mr. Ellis of the Signal Company arrived. Mr. Dodgson was there until after the plant was put into operation, a few days, something like two weeks, I should judge. Mr. Ellis was there about the same length of time. I devoted my time to becoming as familiar as I could with the various functions of the plant, as it was one which I never worked one like before, that is nothing of similar character.

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During that two weeks I observed and went about the whole plant and examined it thoroughly, with the foreman of the construction gang and with the electrician sent there by the Signal Company. That is Mr. Dodgson. I was around where they were. About the only instructions I received was, I was shown when they were testing it out. I watched them and was shown the effect of the pulling of any levers, that is, what movements would operate, where they were located, etc. In general, the matter was explained to me so I could be one of the tower men who operated the interlocker. The plant went into operation the latter part of February, and I was there until the 1st of September, 1907. During all that time I daily operated this plant, excepting possibly a few days that I was absent from duty. The first three weeks there were two men who operated the plant, after that, three. Eight hours each.

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The trunking along the mainlines of the Cotton Belt, in fact to make it general, all the main trunking was, that is along the Cotton Belt, the Texas & Pacific and the Kansas City Southern was constructed out of one-inch boards, six inches wide, with one-inch boards, four inches wide for the side, covered by six-inch by one-inch board. Along the Transcontinental Division of the Texas & Pacific leading from the main Kansas City & Southern Line with the trunking, where the K. C. S. and the Transcontinental Division crossed, leading from that point to the two derails and signals located on the T. C. division, Transcontinental Division of the Texas & Pacific, was constructed out of three-inch wide, two by three, with

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one-inch groove in it covered with one-inch board, and the trunking carrying some of the single wires and single cables, possibly ten to twelve, possibly twenty feet at a stretch, leading from the main trunking to the various movements was constructed out of similar that is, one-inch groove, one-inch cover. There were no junction boxes placed there. The one-six inch board was used as a bottom and four-inch boards set on edge at the sides, the extreme sides so that the edge of the four-inch board and the edge of the board on which it rested was flush and was nailed in that position. I didn't pay particular attention to the nailing of the bottom of the box, but on the cover they were two to four feet apart, one here and one on the opposite side, and so on along, the way they were nailed in general.

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.Q. Describe to the jury how those trunking boxes appeared as time went on from the time you went there in February, 1904, describe the way you found them from that time on, giving it from the beginning to end?

Mr. Tompkins objected to this testimony upon the ground that the condition of the various apparatus, like the trunking or other apparatus, after one year from the time the same was installed, as incompetent, irrelevant and immaterial, for the reason that the only obligation of the contract devolving upon the plaintiff was to renew anything that became defective within one year from the time of its installation, and upon the further ground that the condition of this various apparatus af-

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ter that time is not competent evidence in support of the defense of forfeiture.

Overruled and exception.

702 The morning I arrived in Texarkana first at the plant, the trunking, except in a few places, was closed, or the tops, the covers nailed on, and the main trunking in a few places was with the top flush with the ground. Between the Cotton Belt tracks and different places along the Kansas City Southern tracks, the majority of the balance, a great part of the balance was on posts, some as high as ten or twelve feet from the track and anywhere from twelve to eighteen or twenty-four inches, possibly above the ground—hardly that much, about twelve to eighteen inches above the ground to bring it on a level, the ground being uneven. As soon as they began to test out the plant to find out whether the movements were wired up correctly or not and some defects in the wiring found, the covers were torn from the boxes, or taken off and the wires which were found to be wired wrong were cut, pieces put in where necessary to carry them to their proper movements and the covers put back on again. That was done under the supervision of Mr. Dodgson. Outside of the outside wiring there was some of the inside wiring, that is the wiring from the generator to the storage batteries was re-wired. That was not on the start wired up correctly.

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Q. In what way wasn't it wired up correctly?

A. If the battery had been charged with electricity and such a thing possible as having the electricity conveyed, if it was connected the way the battery was wired the electricity would have

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what is called reversal, or come out of the battery, that is if it was connected up wrong and the dynamo, the generator, the gasoline engine was running when I arrived at the plant—

Q. State what you saw?

A. It had been running some time and there was no perceptible effect on the storage battery whatever. 706

Mr. Tompkins: Was this before the plant was put in operation?

A. When they were testing out.

Mr. Dodgson sent to Mr. Ledgwick, an electrical engineer, and secured the services of one of his electricians to come and rewire the switch board, dynamo and connections to the battery together. A local man in Texarkana was employed to correct the difficulties. Mr. Dodgson didn't locate. He called upon the local man to find the trouble. After the plant was put in service, the trunking remained for a period of time of two or three months in its normal condition without any alterations being made, and in June of that year a grounded circuit necessitated the tearing off of the cover and it was torn off in several places before the trouble was located and renailed. From that time on, June, 1904, those troubles became more in evidence and every time they occurred it was necessary to tear the covering of the trunking off, or if it was underground, dig it up until the trouble was found, as there was no junction boxes fitted to this and it was impossible to locate the trouble without making a test. We would make a test at the tower and we would find the current went out of the tower but did not arrive 707 708

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at the switch or signal, or we would find a current on the wire if it was short circuited and we would have to locate it, if the wire was short circuited we would have to locate a place in the wire where there was no current on it and then we would have to trace that wire back by tearing the cover off until we found the place where the short circuit occurred, or where there was current on the wire, and then after the repairs were made it was necessary to renail the cover on the trunking again, and tearing it off and nailing it, of course, split it and as time passed on the trouble grew worse, that is with the wires, and, of course, necessitated tearing the cover off more frequently from the trunking, and along in the summer of 1905 and during the entire winter, there were periods of a week or more at a stretch when it was almost an impossibility to keep the cover nailed on, and it got to a point where we would nail the cover on and inside of thirty minutes would have to tear it off again to locate trouble, and the cover became split and after all the surplus boards that had been left there when the plant was constructed was used up, it was a case of cover it as best you could in the condition it was in, split. The effect the action of the elements had upon this trunking caused the tops to warp, in addition to tearing up and it caused the sides to warp and spring apart and all over, it became very shaky.

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In the year 1904 the trouble was, we would have it possibly two or three times a month and in the fall it grew worse and in the winter of 1904 and 1905 the wires began to corrode in two

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where the insulation was rotted away and in a cable where the insulation was imperfect, decayed, peeled off, the insulated wires, that is the insulation on the wires inside of the cable, gave way the same as the covering and an induced current from moisture which accumulated more or less in the boxes, that moisture caused an induced current and when the current grew strong enough to overcome what insulation there was on the wires, upon a wire charged with electricity, a hundred and ten volt circuit, it would go to the ground or common, which was a grounded wire. In every cable there was one or more grounded wires, that is, it was either grounded on the machine or went to the main, common wire. The great trouble in the cables arose from the current going to the grounded, either return or indication wire inclosed in the cable and causing the fusing of the wires in two. That is burning up of the wires, and fusing of the ends of the wires together, knocking our automatic in the tower which is similar to a safety valve on an engine put there for the purpose of cutting out the machine in case anything of that kind arose, burning our fuse, and as soon as such occurred, disconnected those from the back of the machine and the trouble located. That is, it was for a man to go to the trunking and take off the cover and locate the trouble. Together with that and the corroding of the wires in two, which grew worse as time went on, and the insulation became worse this other trouble also increased with age and it was an impossibility to keep the trunking, if it

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had been in good shape later, to have kept it together.

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The dwarf signals were constructed in a manner which employed a solenoid or magnet, located in the base of the dwarf signal. It is understood that a dwarf signal is a signal, possibly two feet and a half high, located on the switch tracks and all unimportant tracks or on double track on the reverse movement, on double tracks to govern the movement of trains, which is the same as a semaphore or tall arm signal is placed to control the moving in the opposite direction on all important tracks. Those dwarf signals were cleared as I said before by a magnet on the interior of the base drawing the core of the magnet up, forcing a blade which is located on top as the magnet came up, it was forced down and as long as the current remained in the magnet in the base of the pole, the signal was supposed to remain in that position and as soon as released, the core of the magnet dropped and the signal goes to danger or normal position. Those blades, one bad feature of them, the blades did not lock in their normal position and a man passing along the ground could take his hand and clear them. By clearing, I mean, take hold of the blade and push it to the clear position, regardless of the condition of the track. Throw it to safety indicating a clear track. It would be well though to state that when the signals were first installed by the Signal Company, that they would lock, but after they refused to work on account of not being sufficient power apparently in the solenoid to draw the signal clear, to force it clear. They were re-

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adjusted at such a point that it was impossible to lock any of them and there wasn't a dwarf signal on the plant that would lock. The Signal Company went over the whole plant. First, it would be well to describe the trouble. The power of the magnet was not sufficient to force, as I said before, the blade to the safety position, and they

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tried several ways. They finally adopted a remedy by raising the core of the magnet which projected possibly an inch or more below the bottom of the coil or winding around the magnet in the base of the dwarf signal, and placed one or more blocks of wood in under that to force that magnet up to such a point that it pressed against the portion of the signal which forced the plate clear. In other words, they forced the magnet up

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closer to the signal, to a point, where the magnet when it contracted it would force it down. In fact, force it to a point where it was unlocked and after the signal was unlocked there was power enough in the magnet to clear it. All the dwarf signals didn't appear to work alike; in that respect they did, in another respect, they didn't. Some of those signals would clear after that, after

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they were fixed in that way, and those that would not, the Signal Company men went over and tied weights on the blade to assist in drawing the blade clear. That was along, well, after the plant had been in operation possibly a week or ten days, and from that time on they tried various means, but after they tied weights on the blade, one signal that I remember especially, there were weights on there the entire summer and about two times out of three after the signal

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was operated, it was necessary for a man to go to that signal after it was cleared and push it back to danger by hand, on account of the weights which had been tied to the blades were too heavy. Then again the same signal would go to clear and remain in that position because the babbitt metal bearings in the spindle, the part on which the blade operated, that spindle contained on the front the blade and on the back the counterweight, that is the weight which is supposed to carry the blade to danger after the power is released, the spindle on which that operated, the babbitt metal bearings broke and caused them to bind. The dwarf signal would go to clear and remain in that position. It was also necessary to send a man to it before we could use the route with safety. The route could have been used.

The effect the improper lining up of this route with the dwarf signals thrown at safety had upon our movement of the track at that crossing and the dangers in it were, as long as the tower man did not become confused, traffic remained at normal. The only thing that necessitated was sending a man out to the track and replacing a signal, causing possibly a delay of a few minutes until the dwarf could be set back to danger before he opened his derail, as there was an indication on the lever that as long as that dwarf signal remained clear, the lever remained about an inch from the normal position which it was in. The lever normally, shove it in and reverse pull it out, and the movement of that lever was from four to six inches, something like that, more or less, and we would shove the lever to normal

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position which would indicate at once. All the dwarf signals were not in sight at the tower and we could shove the lever to normal position and it would remain on what we called the indication point which would signify something was wrong, either a wire in two or some other reason, possibly mean a circuit in two, and possibly the signal standing clear. We would, after having so many broken wires, we got to a point where we considered it was a broken wire. We could almost tell, an experienced man could pretty near tell what was wrong by the action of the machine, but we could force an indication, thus: on the back of the machine is what is called a post bar, positive and negative, the positive carrying the current and the negative run to the ground or the return circuit, and it was called common.

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All electricity must have a common or return circuit, and in order to force an indication we would take a piece of wire, a screw driver or a small pair of pliers, anything handy, to get it in contact with the indication post on the back of the machine which was already grounded, and if the signal was set reverse, carry it to the indication post that was grounded to the bar carrying current, by touching those two it would force and crowd through that indication which the magnet in the base of the lever box or under the lever box which served the purpose of an indicating magnet, was an indicating magnet and caused the same action to take place in the lever box that would have taken place had that signal returned to danger as it should. We got a false indication and it unlocked our levers on the machine and al-

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lowed us to open the derail. With the signal blade standing at safety and derail open, we could line up an opposing route and allow a train to pass through. The result of that would be to ditch it. Had the train shown up on the opposing track with the derail open, a train or engine shown up on that track, they would take it for granted the route was lined, having a clear safety signal, and would proceed and derail themselves.

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One thing done toward remedying that was to turn down the bearing or the spindle rather of the dwarf signals and put in a heavier babbitting bearing, a thicker one. That done away with part of that, but the rest was never remedied, the old dwarf signals that were there. So that during this entire period these old dwarf signals would perform these things which I have described; at times vary; sometimes would not bother us for several days, and then again we would be bothered in succession, if the weather conditions apparently were not just right. So the condition was, all the time that I was there, that a man could go into the yard and pull those down. That never was remedied. And they worked worse during certain kinds of weather.

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After the changes which were made in the Cotton Belt yard referred to this morning, there was another style of dwarf signal, a two-arm dwarf signal installed in the yard, taking the place of what was known as signal 23 dwarf. That was the hostler. That was in place of one of those dwarf signals. That did work properly as long as the wires were in good condition. The operation of that depended upon the wire. There was

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no defect in that signal, it worked well and was all right as long as the current was there. Dwarf signals, I don't remember the exact number of, but I could figure them up, ten or twelve something of that number. The rest were never changed.

The high arm signals, that is the semaphore signals, on the start of the plant in operation, they cleared very slowly. It would take, well, they were timed and it would take three or four times as long for those signals to clear as it ought to have taken and that condition was never remedied up until May, the slow clearing of the semaphore signals. In May a Signal Company man by the name of Walshe came to Texarkana, and told me that he had instructions from the Signal Company, that he came direct from the factory and had instructions from the Signal Company to change the wiring on the motors, as the motors were not heavy enough to clear the signals, as there was an up and down rod in the signal pole. The signal poles were, I don't know the exact height of them, twelve or sixteen feet, between that, and there was an up and down rod operated by a mechanical contrivance in the base of those signals, which said mechanical appliance is operated by the motor, together with the weight of the up and down rod and the blade and the necessary power it took to operate the mechanism in the base of the pole, the motors didn't seem to carry it, and he says: "I have got instructions to re-wire them or change them from a series to a shunt-wound motor the coil." At that time I didn't know what he meant by series and shunt-

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wound, and he went ahead and wired them up and I watched him and seen how he done it. It did cause the signals to clear more rapidly, it would clear them in a reasonable space of time, but after the signal was operated three or four times, the coils or the fields and in fact the entire casing of those motors became heated and within the course of a year or such a matter the strain on the motor was too great and the fields burned out, some of the armatures burned out and it was necessary to have them re-wound and new fields ordered and placed into the casing.

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Those motors were one thirty-fifth horse-power, marked on the casing. That is the motor referred to in these specifications that should be one-sixth horse-power.

Mr. Tompkins: Was what was on the casing all that you know about the horse-power?

A. No, sir, I was told by Mr. Walshe and Young and Mr. Martin of the electricians of the Signal Company, that they were one thirty-fifth horse-power motor.

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Q. I read from the specifications, "High signal machines to consist of one-sixth horse-power motor with necessary gear wheels and electric circuit controlling machines, to be placed in suitable iron case;" those are the ones you refer to?

A. Yes; one thirty-fifth horse-power.

Q. And as I understand you from what you said, that the fact that these were one thirty-fifth horse-power instead of one-sixth made them so light that they couldn't do the work and they burned out?

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A. They were overtaxed with current. Those same casings with new coils which did not increase the capacity of the motor any were in the service when I left.

In the semaphore signal, the signal could be cleared, or after it was cleared and brought to normal position, a similar effect, that is an effect similar to that of the dwarf signals inasmuch as the blade would remain in the clear position with the lever cut-out or standing in normal position, or the normal indication point, but it would stick from a different cause. The semaphores were signals operating the through traffic. That is on the main tracks. And those are the tall arms where the signal stands out straight at danger and down at safety. What happened to that signal, for instance, first when it would be clear; first, you would line up a route for them to go through, you would clear those signals like that, close your derails and having shut off your other tracks you would let your train go through. After the train went through, this would happen to the signal that was down like this on safety; we would take, for instance, No. 2 signal, which you find right near you, the second signal from that end, say we have that route lined up for a train to pass through the main line of the Cotton Belt or the track. As soon as the train was through, we would set our lever at danger, cutting the current off the clearing magnet which held the signal clear. When the signal is down there clear and your train has gone by, to get it back we would place our lever controlling that signal in what is called the normal position, i. e., shove the lever

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in and immediately it should fly up to danger. It didn't, for at times we would pull a signal clear and attempt to return it to danger and the signal would remain in the clear position with the power cut off from it. After we shoved in this handle to throw this up she would still stick down clear.

750 One thing that caused it to stick was a composition in the face of the clutch. In warm weather that composition became heated and run and became apparently cemented to the opposite face of the clutch and would not allow the clutch to release and the clutch had to release in order to allow the up and down rod to drop before the signal could return to danger. That was binding.

751 Another one was that as time passed on and grew worse, was that an induced current from some other charged wire in the cable or in the trunking would come to that wire which carried the retaining current or the one that served the purpose to carry the current to the retaining motor or the point in the signal that caused the signal to remain clear, an induced current would apparently come on to that wire in some place and still cause

752 that motor to remain charged and the signal to remain clear; and hold the signal down. Those were the two ways in which it could be done, but there was three things by which it may have been caused, two as I have already mentioned—or I mean three ways in which it could be remedied, but one was when the switch boxes were put on the derails later, you could force an indication. I don't recall if there were any more than those two causes that I have given. In connection with that, we have got our signal, our danger signal

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clear and our train has gone by with our derails closed, we try to throw it back to danger by throwing in this lever; we know when we are in the tower house that we haven't got that back to danger, we can tell by the indication. Then I always either sent a man to the signal or went myself, and forced it to danger by climbing the pole or jarring the pole and went back and lined up my route. That was the safe way and I could see I had done it. From the tower house I could force an indication on that lever the same as the dwarf signals. In other words, by taking a file or screw-driver or anything and placing it on those two bars I have described about, I could short circuit and release that locker so that it would open up our derails; that is one way it could be done to force an indication. By forcing an indication I didn't change the position of the signal at all. Then I could leave our signal clear and open up our derails and go on operating the plant there. The remedies were,—one remedy was applied and part of another one, that is, we remedied one defect partly. The composition at the face of the clutch was removed from the signals, or all that could be got out, but yet in the summer time more of it would melt and run down and it was necessary to clean those clutches three or four different times before they got to a point where it would operate any ways safely. How often we had to do that just depended on the weather, winter times didn't bother so much but in the summer time bothered more frequently on account of the heat. That would do away with the mechanical part to a certain extent. Another was

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switch boxes which were put on the derail to protect the common. The switch boxes installed by order of the Railway Commission. They were put on all facing point derails.

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I don't know whether they bettered things or not, not apparently, because we had a good many failures after that, but a portion of one of the defects it could eliminate and that was by protecting the common. As I said before, all electricity must have a common to go to or ground to form a complete circuit and if the induced current which passes through that retaining coil, went to the common which was broken on the derail by the switch box, it would remedy it, but if it received

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a ground in the circuit at some other point it would not remedy it. Several of those were found grounded between the switch box, these commons and the signal at different times. In other words, it is like anti-toxin for diphtheria, it cures diphtheria but not other difficulties. It cured one of those difficulties but not the others, the rest of the signals. This difficulty of these signals holding down clear was never entirely done away with.

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If it was in the night time and we couldn't see the signal, it would be a case that a person would take it for granted that there was a wire in two if he had a great many non-indications, of the indication wire being in two or other causes which might occur, indication springs out of adjustment, or something of that nature, or something wrong with the lever boxes. There were various causes which would cause a signal not to indicate and when a person didn't see those signals, he

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might take it they were clear and force the indication either by short circuiting or by a hook which was handy on the machine to pull the indication without removing the top cover or there was a cup on the bottom which a person could get their hand under and force it up. Whenever a movement would fail for any reason, we would have to force indications but the first time the short circuit of the indication was applied was along in June, 1904, and from that time on it was used up until I left. The necessity for the use of the short circuit increased as time passed on. The indication wires burned in two and we would have to force indications frequently. Whenever a movement was out of service, we would have to force an indication but that would be a mechanical forcing of it, we wouldn't have to use electrical short circuit at all because there would be no circuit on the movement then.

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When this signal stands at danger like that your derails are open so that if an engineer coming along here runs by a danger signal he is ditched by the derail. That is the service of the derail. It wasn't necessary to open a derail for you to set a signal at danger. Lots of the frequently used routes, the signal or derails was left lined up after the signal was placed at danger, but in case we wanted to use an opposing route, it was necessary to open the derail unless the derail was out of commission through a defect of some part of it or the wiring or some other. If you were going to let a Kansas City & Southern train cross the Cotton Belt tracks and you had your signals at danger on the Cotton Belt tracks,

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before you could let that through on this you would have to open the derails, place them in normal condition, so that if your train came along on the Cotton Belt and passed the danger signal, it would be derailed in order that it might not meet the train coming this way; that was the purpose of the interlocker. I observed in regard to that there was hardly a day passed but what we had at least one or more derails out of service anywhere from thirty minutes to several days at a time. When the derail was out of service it would be closed and either spiked, closed or locked by mechanical locking. The bolt locking on the locking part of the mechanism of the derail taken out of service, we would throw it over and remain locked by its own mechanism the same as if a current was applied here would throw it over or have it closed and we could then use our signals whenever we lined up the route, and if we were using opposing routes or a cross track, that derail would remain closed just the same regardless of the position of its lever because the post was pulled on the back of the machine cutting the current off and the indication wires. Then to sum it all up, we have this condition where if an engineer run by this signal which was at danger at this track, the derail here would be closed because they were so frequently out of order and there would be danger of a collision from a train going the other way; run into the side of the train. During my period there, I noticed engineers going by these danger signals; we have had numerous engineers run by the signal of danger, some with the derail open and several with the de-

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rail closed and out of commission. I have had engineers go clear through the route and the derail at the opposite end of the crossing would not be clear although lined up for that, it would cross the crossing and while the derail which was in order at the opposite end, it would be open, they would control that because it wasn't reversed, the facing point was not toward them and others would pull up. I have known of a particular case where they would pull up within twenty feet of the crossing and the other right by and stood there as the train went. I have observed in my experience as a tower man that engineers don't always obey signals, it wouldn't be necessary for an interlocker plant if they did.

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The up and down rod in the semaphore signals at times would fail to return to the point on the two arm signals, would fail to return to a point where the selector circuit would cause the particular arm, depending on how the track was lined up, the particular arm to become connected or take the circuit. The selector dog, as we call it, to make proper contact, go into the slot provided for it, so when the up and down rod operated it would carry the upper arm down with it so as not to indicate which route was used, the straight or cross over route. That is what you call a double arm signal. I mean two arms like that. The top would indicate the main while the bottom would indicate the side. Those stand out on the same side of the pole. As we would clear the top arm and we would allow it to go to danger and the dog selector circuit which controlled

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that arm, the up and down rod would not go to danger far enough or go down far enough to allow that dog to release, it would remain in contact or in the socket provided for it and any time we would have to use the diverging route we would line up the cross over and clear the signal with the upper selector dog in contact for some reason, I can't say positively what that reason was, but it didn't release. The lower selector dog would go into contact in its place under that up and down rod, or the point which was made for the up and down rod, it would operate it slowly but it would operate it enough to carry both arms to a clear position and the engineer wouldn't know whether he was going over the cross over or down the main track. That occurred frequently.

We had trouble with the clutch inasmuch as the cable which wound around the center or around the spindle shaft, or whatever you call it, of the clutch, which carried the up and down rod in position when the signal was operated, it would split. We had several of those split in two or three places, be new cables and solid wire cables and didn't carry no current at all. The clutch would slip frequently. That began in a few days after the plant went into operation. The clutch instead of magnetizing and holding tight as it should, and carrying the face of the clutch with it, the magnet portion of it would slip. The effect it would have upon the operation was it wouldn't clear the signal at all. You could pull it down possibly a few inches and release it. Couldn't operate the signal. That was never remedied en-

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tirely, because that would occur up until the last summer I was there. It did occur, but that failure was not as frequent as some others. The different kinds of difficulties that would cause us to force indications and unlock our plant in that way, were, one would be the corroding in two or other breaking in two of the indication wire. We would get no current in the tower. Another was if the operating circuit to the signal was broken, operating circuit to the derail was broken. Of course, we had no indication on two or three of the semaphore signals. If we pulled a derail lever, it refuses and don't operate, it would stand at an indication point which would indicate it hadn't operated or the switch to which that wire led. That was the purpose of the indication. The others was the indication contacts inside the lever boxes may be out of adjustment, or if for any reason a switch or derail didn't operate, we couldn't get an indication but we could force an indication either way. I don't recall any other cause that led us to force indications. This poor wiring condition forced us to use forced indications. I referred to that a moment ago. Defective springs would do the same. Those are contact springs in the lever box, or the indication springs at the signal or derails. The burning out of motor knives and springs, they had to do with the operation. Of course, if they were burned off or the springs burned out, the switch or derail didn't operate, we couldn't get an indication. You could force one in any one of three different ways. Supposing the springs broke in the lever box, you could force an indication then. I have. And

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when these signals stuck clear I have forced indications. And the same with the dwarf signal, indications could be forced.

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Indication dogs were small dogs located in the top of the lever box that when you pulled your lever in the reverse position they would throw the indication dog in contact with normal indication springs for the indication to come in, or after we got the indication if for any reason that indication dog didn't go over and make good contact, these springs at times would slip, the little point on the side of the lever which caused them to trip would break off or slip out. I don't know as Mr.

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Dodgson done anything about that condition, but when the plant was originally installed, in the top of the front cover on the lever box was placed what I was told was a safety appliance placed there to prevent the forcing of indications. I mean that there was something constructed on these lever boxes originally when the plant was constructed so that you couldn't force this indication, that was the intention of it. So that when these wrong signals were there you couldn't

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unlock the plant. Those safety dogs, on account of the catching within about four months after the plant was put in service, they were all removed. A few of them were removed when the plant was put in service first by, I remember, a couple of them being removed by Mr. Dodgson himself. Then Mr. Young, he removed several, and there were several remained in the machine and after Mr. Walshe came there he took the balance out. The Signal Company took out this protection which would prevent you from forcing an

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indication, took out the whole of them. There was nothing substituted in place of it so you couldn't force indications.

In the switch motor boxes, the commutator of the motor through which the current is applied to the armature would become gummed and dirty and would have to be cleaned although only operated twenty-five or thirty times a day, sometimes more frequently and sometimes not so frequently, they would have to be cleaned maybe every day and sometimes may be three or four times a week. That is the carbonizing of the brushes and dirty, gummy commutators. About moisture in the motor boxes, that is what caused it apparently because immediately under the brushes and under the commutator and between the brushes, the brush holders, a hole was drilled in the casing of the box, possibly an eighth of an inch in diameter, and that accumulation of moisture which would accumulate in there would pass off and the motors kept in good shape after that. That work was done by the railroad company's maintainer. The railroad company drilled those holes in there so as to avoid that difficulty.

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The function of the track circuit was, as long as a train or engine stood on the crossing or within a certain distance of the crossing, to lock it, the interlocking machine so as to prevent a train on an opposing route passing over or into it, prevent us from lining up an opposing route as we couldn't unlock it.

Q. That means, that if any wires within the limits of this interlocker, a car or train stood, you couldn't let anything else in?

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A. No, within the limits of the track circuit which extended, I don't know the exact distance, fifty or seventy-five feet on either side of the crossing. Those track circuits only extended a short distance each side of the crossing, fifty or seventy-five feet; detector bars or crossing bars are supposed to be fifty feet in length. That would give them about fifty feet each side of the crossing, and this track circuit extended, I can't say exactly but something like that distance, fifty or seventy-five feet, so if the track circuit worked properly, the improvement of the track circuit over the detector bar was something like twenty-five feet on either side of the crossing, it was that long anyhow and may have been twenty-five feet longer. These track circuits didn't take in the whole yards, just a distance either side of the crossing. If a car was standing on that track circuit it was supposed to prevent us through a circuit passing from wheel to wheel. A short while after the plant was put in service it wouldn't operate at all. Why it wouldn't operate is something I can't say, I don't know. No one was ever apparently able to locate the trouble or reason it wouldn't operate except the Kansas City Southern and Cotton Belt crossing and anyway that was of no benefit whatever, because if the track circuit had worked properly, the Kansas City Southern crosses three tracks of the Cotton Belt and each crossing was fourteen feet from center to center and there being three crossings that would be twenty-eight feet with five feet at least on either side, or thirty-eight feet, a distance from insulated joint to insulated joint from north

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to south or south to north on the Cotton Belt, or I mean, on the Kansas City Southern track, immediately over the three Cotton Belt tracks which wasn't electrified there, or no way connected with the track circuit and as box cars, the average length then was about thirty-four to thirty-six feet and the wheel base between twenty-one and twenty-seven feet, that would be a long car, twenty-eight or twenty-seven feet wheel base, any box car could stand immediately over the crossing between the wired portions of the track and in no way affect the track circuit had it been working properly.

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If the track circuit was all right and was working, then the track between the first joint north and the first joint south was not electrified at all, and a car could stand in there and there would be no indication there to the tower man if he couldn't see it. The tower was right near there. In the night time a person couldn't see a car if it was on there, so that the train had to be long enough to go clear across this crossing and connect on to these two joints before you could get any indication. It was in use off and on, worked a short while, everything apparently in good condition and then quit and we couldn't get an indication and the switches which threw the track circuit levers from the track to the storage battery would be cut over and operated from one or two cells of the storage battery so as to allow us to unlock the machine and get the traffic moving. In the spring of 1905 it was cut out by Mr. Walshe, the Signal Company man. There was nothing ever done further with it. That was eliminated entirely and

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it was operated by depending upon the operator to see that there was nothing in the road or on the crossing before he lined up an opposing route.

798 That gasoline engine was like all gasoline engines at that time, it wouldn't operate from some unknown cause and it was made worse by being torn to pieces and put back again wrong. The first general foreman, constructing foreman or electrician of the Signal Company, took it to pieces and put it back together, removed the insulation between the head of the engine and the spark plug, mica insulation in there and, of course, the batteries short circuited and destroyed a set of batteries. I was present at the time it was taken to pieces and told them that that was  
799 wrong, but they says I didn't know anything about a gasoline engine, and I told them possibly I didn't, but I thought I understood a little about electricity and knew that electricity wouldn't form a circuit where the head was solid, it wouldn't pass through the spark plug. Electricity always takes the shortest way and it would go around before it would go through the spark  
800 plug. After they found out it wouldn't work they took it to pieces again and sent down and got new insulation and new mica and put in and put it back together again and it went to work and worked properly. Then they did another thing with it about capping the exhaust. The extension pipe from the top of the cylinder head which extended above the engine to about the level of the water in the water tank which furnished water to cool the head, when the water expanded there was more or less of it came out of

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the top of the extension pipe and the pipe was carried outside of the tower so as to do away with that wet on the inside, and after Walshe came, for some unknown reason I don't know what was in his mind when he did it, but I seen him place the cap on it and asked him why. He gave me some evasive answer and I never got an explanation why he placed the cap on, but it shut off the air from the head of the engine, the casing around where the water flowed and in draining the water off after the engine was stationary after he quit running it, only about half the water, or possibly that much, may be a little more, ran off, partially flowed off and the result was that in the winter of 1905 the head of the cylinder froze and split. It was taken to the Texas & Pacific shop and bands put around it and heated and brought together and put back in service.

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We had wires, a telegraph wire in our tower. We didn't have telephone connection there. When a man came to the distance signal, a telephone would no way affect him, because it would only have been between the office and the tower. We had a system of whistle signals that was in operation through there and known, published by bulletin in all the offices on the bulletin board of all the railroads operating through the plant, instructing them what whistle to give at a certain specified place. The other way we got information by telegraph wire how late the trains were etc., and when to look for them.

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Every time this plant broke down, we made reports to the Division Superintendent. Those reports were sent to the State Railway Commis-

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sion. This bundle of reports which is here in evidence, is part of them and in those reports we did not enumerate every break down that occurred to the plant. During this period I have tabulated those reports. I went through the entire list.

806 Q. During this period, how many times did that plant break down?

Mr. Tompkins objected as incompetent and immaterial, that the reports show.

The Court:

You made the reports yourself?

A. I either made or they were made for me and turned over to the Division Superintendent.

807 Q. You knew them to be correct at the time?

A. Yes, I knew them to be correct.

I was on duty from eight o'clock in the morning until four in the afternoon after the summer of 1904. I made a report for my eight hours on duty. The other man made a report and turned it over to the third trick man and the third trick man, with my report of the previous day and the report of the second trick man, turned them over to me.

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Q. What do you know about the correctness of the reports of the other men?

A. I knew the repairs that were made to the plant and if there was nothing wrong the report would be a blank. If there was anything wrong it would enumerate just what was wrong and I would go and look for it. If they didn't know what was wrong at all it would state that such and such a thing failed to operate. After I came

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on duty, I together with the mechanical maintainer, would locate that trouble and it would be repaired and when it was repaired.

Q. Weren't they ever repaired in your absence?

A. Oh yes, there was repairs made in my absence..

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Q. How would you know the report correctly stated it?

A. We could tell, the maintainer would make his report to me.

Q. All you know about it is what the maintainer told you?

A. Yes, but he was supposed to make his report to me.

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By Mr. Matson:

Q. How many times did that plant break down all together?

A. The reported times?

Q. I mean that you reported.

A. Something in the neighborhood of twelve or thirteen hundred times to my knowledge.

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CROSS EXAMINATION by Mr. Tompkins:

When the plant first went into operation there was supposed to be a preventative to forcing indications, but they were removed almost immediately.

The Court:

With this preventative could you force an indication?

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A. With the preventative on I never forced any.

When the controlling plant first went into operation, in the condition it was then you couldn't force an indication by the short circuit, but could by two mechanical means.

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Q. Not by short circuiting?

A. Not by short circuiting, I never tried.

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I should say from 150 to 160 or 165 trains and switch engines passed through that plant on an average daily during the time I was there. It didn't average 200. On heavy days it has run higher than 200. I kept an account of it for a certain time, that we were instructed to by the State Commission. We had a maintainer for that plant. His duties were to make repairs and look after the plant in general. I was not a maintainer. I was employed as tower man, tower foreman after the summer of 1904. Mr. Atkinson was a maintainer beginning with about November 1st, 1904. There were about four maintainers there at the plant from the time it went into operation until the time Mr. Atkinson took charge I should judge, as near as I remember.

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One was a Mr. Fisher. If I remember rightly he was the second maintainer they had there. I don't just remember how long he was there, for several weeks. I couldn't say whether he had ever been maintainer at a previous plant, all electric. I know the occasion of his leaving. There was a Mr. Strong who was a maintainer, he was the first maintainer. He was there for several weeks after the plant went into operation. I don't know as he had ever had any experience as

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a maintainer, but he was employed by the Signal Company on the construction work when I arrived in Texarkana. There was a Mr. Crump who was a maintainer. He was there about long enough to take off his hat, he just came and left. He was employed by the railroad company. There is one other man, I don't recall his name, then there was a couple sent there by the railroad company. They were there just for a few days. I don't remember what experience they did have. Some told me and some didn't, but I can't recall. I don't remember the names. They were there such a short time I didn't become acquainted with them.

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The plans and specifications called for a Fairbanks-Morse gasoline engine. This engine was a Fairbanks-Morse, four horse power.

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Whether the wires that were used were the Simplex brand, I can't say, as the tags had been removed from the wires.

Q. Did you at that time know anything about wires, as to whether they were good quality, or bad, or insulated, or otherwise?

A. Not as a judge.

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Mr. Matson: We haven't introduced any evidence on the quality of the wire.

I did ever assist in repairing those wires. Sometimes about 150% of the maintainer's time was taken in making repairs to wires, and other times just about half his time, just depended. A large part of the repair work was confined to the wiring, especially in the latter period. I heard Mr. Dodgson testify on Monday, as to the effect of cinder ballast upon the wiring that was laid in

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the trunking there, and that the effect of the cinder ballast upon the wiring tended to create sulphuric acid which eat into the insulation and caused the wires to short circuit. I agree with that only partially.

822 Q. In his second report, Mr. Thompson, the engineer of the Railway Commission, says "The wiring throughout the entire plant should be overhauled and renewed and placed in pipe conduits and otherwise secured from the corroding action of the cinders and ballast," do you agree with that?

A. That would have been one way, yes, of getting rid of the moisture.

823 There was no difficulty in the operation of boring a hole in the switch box in order to relieve the box of the moisture that accumulated in there, but it had to be done. Sometimes the brushes upon the motors got dirty and gummed up. Before the hole was drilled though, it was almost impossible to keep the motors in operation. After that they didn't become gummy, because they were cleaned once a week. After the hole was drilled cleaning once a week kept them in pretty good condition. Before that time the maintainer went over them once a week. Prior to that period he had to go over them—well, he might go over in the morning and clean a motor, commutator rather, and sometime that night or during the next twenty-four hours the same motor would go out of service and the next morning, or when he went to it he would find that the commutator was gummy and little globules formed.

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Q. When they were kept clean, however, they worked?

A. It was impossible to keep them clean.

Q. Question repeated?

A. Yes, they would work, that is, the motors themselves would work.

I knew what the rules of the Railway Commission required in regard to the apparatus that was to be used. The rules of the Railway Commission of Texas, Exhibit 3, required all signals to be locked so they couldn't be cleared by hand. That is my understanding of it. I haven't read the state requirements, it has been seven or eight years ago. I understand that there is a provision that the signals shall be locked so they cannot be cleared by hand. The rules should contain a provision so that signals couldn't be cleared by hand by outside parties. 826

Q. The rules are defective if they don't contain that? 827

A. Yes, sir, regardless of who made them.

I was familiar with the track conditions there. There were occasionally a few derailments. I don't remember what the average was. They didn't make any special impression on my mind, only derailments occurred according to the number of trains that passed. Those derailments injured some of the plant, broke some of the material. Reports were made of those derailments. This is correct "On September 6, 1908, ten-fifteen P. M. St. Louis & Southwestern hostler, coming out from the round house, damaged," if it is contained in the report, because I O. K'd. all of 828

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those reports before they went in to the Superintendent.

830 Q. Did this condition exist, during the month of October, 1906, in respect to the condition of the tracks; "St. Louis & Southwestern R. R. (South Track) and Texarkana and Ft. Smith crossing out of line by 2," south stock rail low, guard rail and wings high. One bolt out, three nuts off and three nuts loose.

St. L. S. W. Ry. (Hostler Track) and T. & F. S. Ry., line and surface good, twenty-three nuts loose.

831 St. L. S. W. Ry. (Main Line) and T. & F. S. Ry. line good, surface bad, nine nuts loose, five bolts out and four angle straps broken.

T. & P. Ry. (T. S. Div'n.) and T. & F. S. Ry., eight nuts loose, three nuts off, corner low, south-east corner and north-west corner very low, web of crossing on south-east corner broken.

832 T. & P. Ry. (Ea. Div'n.) and St. L. S. W. Ry. (Main Line), 1 nut off, nine nuts loose, angle bars connecting two crossings with but three bolts in, not put in because holes in bar and rail did not match.

T. & P. Ry. (Ea. Div'n.) and St. L. S. W. Ry. (Hostler track) one nut off, nine nuts loose, surface and line O. K.; did this condition exist at that time?

A. I can't say exactly, I didn't try to remember, but the reports went in to the Superintendent from the tower and it might have existed at that time, but if it did, instructions were issued to have it repaired.

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Q. The following month, the month of November, 1906; did this condition exist?

St. L. S-W and T. & F. S. (Main Line) four bolts out, twenty-three nuts loose; ties worn out, surface low and line bad.

St. L. S-W and T. & F. S. (Hostler Track) twenty nuts loose and surface bad.

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St. L. S-W and T. & F. S. (Stock Track) 1 nut off, 1 bolt out, 11 nuts loose, about 2 in. out of line and surface bad.

T. & P. (T. C. Div'n.) and T. & F. S., 22 nuts loose, 2 nuts off, 3 bolts out, web at south-east corner broken, line bad and surface low, especially north-west and south-east corners; Angle bars connecting T. & F. S. track and crossing have one bolt only caught; weber joint connecting T. & P. track to crossing cracked and bolts loose in the holes.

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T. & P. (Ea. Div'n.) and St. L. S-W (Main Line) 12 nuts loose.

T. & P. (Ea. Div'n.) and St. L. S-W (Hostler Track) 13 nuts loose, 1 bolt out.

A. It may have existed.

Mr. Matson: Is that a report of the entire month?

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Mr. Tompkins: I suppose it is.

The Witness: I understand it was the entire month.

Q. Did this condition exist as the general condition of the crossing frogs during the following month of December, 1906?

St. L. S-W (Main Line) and T. & F. S.; 16 nuts loose, 3 nuts off, four angle bars broken, surface low and generally worn out.

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St. L. S-W (Hostler Track) and T. & F. S.; thirteen nuts loose, one nut off.

St. L. S-W (Stock Track) and T. & F. S.; eighteen nuts loose, four nuts off, surface low and line bad.

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T. & P. (T. C. Div'n.) and T. & F. S.; eleven nuts loose, three nuts off, web broken in south-east corner, south-east corner low and generally worn out.

T. & P. (Main Line) and St. L. S-W (Main Line); four nuts off, eight nuts loose, one bolt out.

T. & P. (Main Line) and St. L. S-W (Hostler Track); twelve nuts loose, three nuts off, one bolt out.

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Q. Mr. Thompson in his first report made in July, 1904, makes this statement: "All railroad crossings within the interlocking shall be required to be placed upon suitable foundations of a permanent character, etc., these crossings on the Texarkana and Ft. Smith are at present not properly maintained and are unsafe;" do you agree with that?

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A. I don't remember it. I don't remember whether it made any impression on me or not. About 69 or 70 machines were there outside of the tower operating switches, derails and signals.

This plant during the entire time I was there from 1904 to when I left in 1907, was used for the purpose of controlling these various functions whenever it could be used, at the time of service. And each one of these various functions was used whenever the same was in order to be used. And the trains during that entire period of time I was

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there, passed through these crossings when the tracks were clear for them to pass without stopping at the required speed limit, after a certain specified time. In the beginning they didn't, only a short time.

There was never at any of those crossing, during the entire time I was there, a collision at a crossing resulting from one train running into another train on the crossing. 842

Q. When you forced those indications you knew they were being forced?

A. Yes, a person would have to force them.

Q. Was there anyone who was using the plant who would know that the indication was not forced?

A. No, there was no way to know it unless they would happen to see it, in case a signal stuck clear and they should happen to see it. 843

No accident ever happened because of forced indications while I was on duty. I only forced the indications when I knew that no accident could happen, that is they were used in lining up an opposing route.

There is one portion of track circuits where the Kansas City Southern crosses the Cotton Belt that was dead. At the time I figured out two or three ways I thought it could be done, remedied, if a suitable insulated frog could be secured. I don't know whether it could be secured, I never took pains to find out, but I did find out at the time that it was a dead piece of track. 844

Q. And the question was this in regard to that dead piece of track, that if a car which was short enough should happen to stop right on that par-

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*E. N. Cullums, for Deft., Cross.*

ticular part of the crossing, then a person on the tower might give a signal which would permit a collision?

A. If a car stopped immediately on the crossing.

846

I never knew a car to stop immediately on the crossing in that position, a single car. That crossing was about twelve or fifteen feet from the tower house. When you looked out of the tower window in that direction you could look right down on it, in the daytime when it was light. Weights were placed on the blades of some of the dwarf signals in order to make the adjustment more accurate. They were too heavy undoubtedly. Those weights were left on there some of them for several weeks.

847

There were at times derails out of service several days for two or three weeks.

We had the maintainor at those times. I have seen engineers run by the danger signals. They run by pretty frequently at times.

Q. I understood you to say that you were not an expert on track circuits?

848

A. I understand track circuits pretty thoroughly, or I think I do. I was never able to locate the exact trouble with those. We had ideas. I appreciate the necessity of perfect insulation. When insulation was broken it was replaced. If it was broken it was replaced, worn out in time, the insulation was replaced just like any portion of it. As I recall to mind two or three times it wore out. Of course they were not lasting, those Webber joints, that is the insulation in them. I don't

*E. N. Cullums, for Deft., Re-direct.*

849

think it is more trouble to keep up a track circuit than detector bars, crossing bars.

Q. You heard Mr. Lang testify yesterday, didn't you?

A. I don't think Mr. Lang understood the use of the track circuits thoroughly.

Q. You think you understand it better than he; you began your business life as a telegraph operator? 850

A. Yes, on a Michigan road.

I was a telegraph operator on the Pennsylvania road. When I first went down to Texarkana I was a telegraph operator. Then I had this position as tower man. I operated other electric plants previous to that. Since that time I have operated mechanical with electric signals. I have not operated any other all electric since that time. I am a telegraph operator to-day. 851

RE-DIRECT by Mr. Matson:

Mr. Walshe was sent there by the company, or came there from the company, in the spring of 1905. He remained there about, I should judge, ten months. something like that, near that. He came in May, 1904, to be exact and left in February of the next year, if I remember rightly. He was there in the Signal Company's interest. He came back again in 1906. I don't remember exactly how long he stayed in 1906, several months. At first, when I first came there, there were a number of maintainors sent there who were there for a very short time. They were there to learn the plant and take charge of it after the Signal Company withdrew their men. They were there 852

853

*E. N. Cullums, for Deft., Re-direct.*

at that time trying to learn how to operate that plant.

Q. You told Mr. Tompkins that cinder ballast had something to do with deteriorating these wires because of the sulphuric acid that came from them, what was the rest?

854

A. Part of it, as I said sulphuric acid would have an effect but there was undoubtedly some other cause, because the wires not underground showed the same deteriorating results that those underground showed and there must have been some other damage at work, the action of the moisture, the atmosphere in general, general conditions. Derailments were always repaired as soon as the maintainer could get at it. I had nothing whatever to do with the general operation of this plant.

855

Q. He has called your attention to 18 bolts being loose, nuts being loose in the month of November and a few things like that at this crossing; is that any different condition than is usually found in a railroad crossing?

A. No, they exist at all railroad crossings.

856

That was a report compiled with the maintainer and sent in to show the general conditions during the month.

Q. He asked you if there was anything else that would have protected this crossing, the dead point; would detector bars have protected it?

A. . Only partly. Of course it would have been short bars operated in there.

There was no collision during the time I was on duty. That is, I never at any time allowed them to get in there, forced those indications when

*E. N. Cullums, for Deft., Re-cross.*

857

*F. W. Kane, for Deft., Direct.*

there was this danger, we were always very careful in the handling of it, knowing the failings. There were times when there would be a great deal of traffic converge there, there was a time when we would have two or three trains waiting to get through.

858

RE-CROSS EXAMINATION by Mr. Tompkins:

Q. Isn't it a fact that there was no collision at those crossings, not only at the time you were on duty while you were employed there, but at any time?

A. There was no collisions at the crossing at all.

859

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FRANK W. KANE, sworn on behalf of defendant, examined by Mr. Cooper:

I reside at Dallas, Texas. I am an architect and engineer for the Texas & Pacific and have been since August, 1905. I succeeded Mr. Lang. Have been engineering and architect, construction work for railroads since 1880. I am acquainted with the line of the Texas & Pacific Railway and its condition and was so acquainted in 1905, as soon as I could be after I had taken Mr. Lang's position and from that time until the end of 1907. I was acquainted with the conditions in the yard at Texarkana at that period. I was there daily and observed the interlocking plant. I knew of

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*F. W. Kane, for Deft., Direct.*

a Mr. Walshe coming to Texarkana, about April 1st, 1906, which I think was the first time I met him. I noticed the work he was doing there then. I spoke to him about the character of that work. I went over it with him and called his attention to several things that he was doing there and the manner in which he was doing it.

862

Q. What did you say about the manner in which he was doing it; did you approve of it?

Mr. Tompkins objected as incompetent until it appears what this work was, and that the work was a part of the work which was done by the Signal Company in the fulfillment of this contract, because the fact is that an action was brought by the General Railway Signal Company to recover for this very work which is now being testified about.

863

Objection overruled and exception.

A. I was there looking after the interests of the work there, indeed I was sent there to assist Mr. Walshe in anything that he might require in reference to the tracks. The arrangement of the tracks we were to do, and while he was doing this work, I went over it with him and called his attention to several things he was doing there, the way in fact he was taking out the old material and trying to use it back in the tracks. He had no tools seemingly to make a weld with, or any forge, or anything and he was heating this alongside of the track and doing the best he could to weld them together, so I asked him, "Do you call that first class workmanship?" And he says, "As long as it holds it will be all right."

864

*F. W. Kane, for Deft., Direct.*

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The Post Pipe track or spur isn't shown on this map, it starts in about here and went up, I think it was 250 feet west from the crossing of the Kansas City Southern with the Cotton Belt and runs in a northwesterly direction to what is known as the Post Pipe Works, which was simply an industry located some distance from the railroad, and this industry wished a railroad connection. I went up there one day, I never noticed that first and about a week after I came back and I noticed Walshe working there, or his men. I asked him what he was going to do and he said he was going to wire that up. I told him, that has nothing to do with this contract of yours or the interlocking plans, my advice is to you to leave that alone and not connect it with the tower at all, it is a different proposition entirely from the contract, has nothing to do with it. He said he had instructions to wire it up and I tried to get him to tell me where he got his instructions from, and he said the Superintendent told him to wire it up. He did not connect it with the interlocking plant. It wasn't in his original plans or a work that he was sent down there to do. I told him, I says, "This of course will be an after consideration, if the company sees fit to wire that up and connect it with the tower, that will be an after consideration." Walshe went to Dallas about this time, in the latter part of April. When I first met him, it seemed he had been sent to Texarkana there about a month before we knew he was there and I think our chief engineer got a notice that this man Walshe was at Texarkana, and he says "Now, you go up there and meet him and go over

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*F. W. Kane, for Deft., Direct.*

that work with him," and I went up and found Walshe and then Walshe asked me for written instructions to go ahead with the work. I said "I have no written instructions to give you, it was always understood your company is going to make these changes and I suppose you know what they are, here is your plan." He fetched a plan and everything with him. I says, "All we want to do if we can, is to assist you now with our men to make any track changes, that is what I am here for." He insisted on getting written instructions and asked me to give him transportation to Dallas; I told him I couldn't do that, that when I went back I would mention that matter to our chief engineer. I don't think Major Wathen gave him any written instructions to do the work. I was present at the interview with Major Wathen. He came to Dallas. I had him taken into the Major and introduced him. The Major, up to that time, had never seen him or knew him and he asked the Major then about written instructions and the Major told him he had none to give him except what he had got from his company, to go ahead according to those plans that he showed us that the changes was to be made and to do the work. He went back and started to work. He was changing the signals and track in the Cotton Belt end of the yard. According to this blue print and plans that was agreed upon by the conference of all the railroads and the signal engineers. He used old material that was taken out of the plant.

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Q. You have heard Mr. Tompkins read to Mr. Cullums certain monthly reports made by the

*F. W. Kane, for Deft., Cross.*  
*B. S. Wathen, for Deft., Direct.*

873

tower man, covering certain months in the latter part of 1906, those reports referred to loose bolts and other circumstances; were the conditions which were recited in those reports at all unusual on railroads at such a place?

A. No, sir.

874

Q. In your opinion would such reports indicate a bad condition of the track?

Mr. Tompkins objected as incompetent and immaterial.

Overruled. Exception.

A. No, sir.

CROSS EXAMINATION by Mr. Tompkins:

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This work that was done by Walshe that I have just been describing, had to do with the changes on the Cotton Belt line which I made.

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BENJAMIN S. WATHEN, called on behalf of defendant, testified on examination by Mr. Cooper:

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I reside at Dallas, Texas. My age is sixty-six. My present occupation is consulting engineer for the Texas & Pacific Railway. I have been an engineer in railroad work since 1865. Have held my present position as consulting engineer since July last, previous to which time I was chief engineer, from 1892. I have had something to do with practically every branch of railroading and railroad engineering since I began in 1865. On

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*B. S. Wathen, for Deft., Direct.*

the Texas & Pacific the construction and maintenance of signals fell within my jurisdiction. The order of the Railroad Commission of Texas in 1902 requiring certain railroads including the Texas & Pacific to install interlocking plants was brought to my attention by the General Manager and Vice President. I proceeded to get bids for the erection of the plants called for in the order. I didn't advertise, but sent out circulars to the various signal companies. The Pneumatic Signal Company was one of the companies which responded. I had a visit from their agent Mr. Ellis, who was the General Sales Agent. He visited Dallas and opened negotiations looking toward the entering into a contract for installing an interlocking plant at Texarkana.

879

Q. What in the way of data regarding this interlocking plant did you furnish to Mr. Ellis?

Mr. Tompkins objected as incompetent, irrelevant and immaterial. Overruled and exception.

A. I had a complete map made of the territory of the yards where the interlocking plant was to go or be built and gave it to him and also required him to go on the ground and examine the situation in person.

880

He told me he did so. I didn't go with him but he told me he had.

Q. What did this map which you had made show?

Mr. Tompkins objected as not the best evidence. Sustained.

Q. Have you a copy of that map?

*B. S. Wathen, for Deft., Direct.*

881

A. No, I haven't a copy of it.

Q. What did this map show?

Mr. Tompkins objected. Sustained.

Mr. Cooper: We cannot produce the map, and if the paper is lost I take it that we have a right to put in secondary evidence of it.

882

The Court: It must appear it is lost to begin with. I don't think it is worth spending much time on.

Mr. Cooper: It is already in evidence by Mr. Dodgson's testimony that they made the specifications and I want to show that they had full knowledge of the situation, that they were not trapped.

883

The Court: There isn't any question of that. If they took the responsibility of making the contract, they can't complain now, and I don't understand they do. If they undertook to do a certain thing, which they did, they have got to do it, or show why they did not.

Mr. Cooper: Does your Honor rule that is not the effect of the testimony which is in?

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The Court: I do not rule anything about the effect of any testimony. All I say is, they undertook to do a certain thing, contracted to do it and they are bound by that contract. Performance must precede payment and if they have not performed they cannot recover, and they have not performed under that contract unless they can show you have accepted or waived

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*B. S. Wathen, for Deft., Direct.*

acceptance so far as the condition precedent of the acceptance by the Railway Commission is concerned. That is the whole amount of the case. You could have accepted anyway if you saw fit, so the whole case is on whether you people accepted that or did not.

886

Mr. Cooper: At the very start we took the position which we maintained throughout, that we were exacting the most rigorous terms from these people.

The Court: The contract shows that, that they signed it and it is not for us to make it over again. I do not think it is worth while and in fact I doubt the admissibility of the evidence at all.

887

This plant went into trial operation in the latter part of February, 1904. I had procured, at that time, verbal permission from the Railroad Commission to have it put into operation on trial. It was on trial from February until July, about the early part of July, or latter part of June. There was, in June, an inspection of this device

888

by the engineer of the Commission. A request came from the Pneumatic Company and then the Vice President or General Manager made the request to the Commission for the inspection of the plant. There was a subsequent inspection of the plant in November, by the engineer of the Commission, Mr. Thompson, and Mr. Thompson wrote me the letter in evidence, dated November 14, 1904. I told Mr. Cade about it or showed him the original, showed him the original down in Dallas, in December, 1904. I was not present at the con-

*B. S. Wathen, for Deft., Direct.*

889

ference between various representatives of the railroad companies and three representatives of the Signal Company at Texarkana in December, 1904. Subsequent to that conference I saw Mr. Cade. I never saw Mr. Cade any more. I saw him about the 20th of December, in Dallas. I had a letter from him dated on the 15th and the letter was from St. Louis asking for a conference, and I notified him that I would be in Dallas if he would come down and he showed up there about that time and came to my office. We had quite a conference relative to it and I invited him to stop over longer than the one day but he said he couldn't, his engagement was such that he must be in New York for Christmas. He said he had been in the habit of taking Christmas dinner with his family, he was a Johnny Bull and he always wanted roast beef and plum pudding on Christmas with his family, so I know I couldn't be mistaken about the date being close to the 20th. No other representatives of the Signal Company attended that conference beside Mr. Cade when I had my long talk with him.

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We went over the situation of the plant generally and I called his attention to the letter that Mr. Thompson had written and told him that Mr. Thompson had appealed to me to give the Signal Company another opportunity to make that plant good, that I would be just as lenient with him as I could, if he would give me his word, or agree to let a supplemental contract be signed, drawn up by the attorneys, that he would carry out everything that was necessary to put that plant in condition and acceptable to Mr. Thompson and

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*B. S. Wathen, for Deft., Direct.*

I would give him all reasonable time to do it. This question of this change at the Cotton Belt yard was mentioned, but I told him that was a matter nobody could pass on, it was not a matter within our province to say much about until we could learn whether or not Mr. Thompson or the Commission would sanction it; for that reason there wasn't anything done with that except to take up the preliminaries with the various railroads to ascertain their attitude and get the Commission's consent to the change. In regard to my attitude toward paying for this extra work that would be involved in adopting the Signal plant to the changes made in the railroad, I said, "If you will go ahead and make this plant acceptable to the Commission, we will pay for the change of the yard as an extra to the original contract. It is new work. If you will make this plant acceptable to the Commission so that they will accept it, I will agree that it shall be an extra bill." It was entirely satisfactory to Mr. Cade. He expressed himself that way. I never saw Mr. Cade after that time. I never saw Mr. Dodgson after that.

896

About these changes in the Cotton Belt. They were not made for a good long time afterwards. I think it was way down in 1906 before they were really made; before the changes in the Signal plant were made. I think during the summer of 1905 the Cotton Belt went ahead and made its changes. I haven't got the exact record on it. It was sometime in 1905. There was some correspondence with me in that same summer, with the Signal Company some correspondence about the

*B. S. Wathen, for Deft., Direct.*

897

bill of material. I read a letter dated September 16th, 1903, addressed to B. S. Wathen and signed G. E. Ellis, Pneumatic Signal Company, by G. E. Ellis.

Offered in evidence. Exhibit 24.

I sent this telegram dated November 10th, 1903, addressed to G. E. Ellis.

898

Offered in evidence. Exhibit 25.

This is a copy of a letter dated July 14th, 1904, addressed to G. E. Ellis, and sent to him.

Offered in evidence. Exhibit 26.

Q. I show you copy of letter dated October 22nd, 1904, addressed to B. S. Wathen signed Mr. Wuerpel; did you receive that letter?

A. I did.

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Offered in evidence. Exhibit 27.

Q. I show you letter dated December 15th, 1904, from John S. Cade; did you receive that letter?

A. I did.

Offered in evidence. Exhibit 28.

Q. I show you copy of letter dated April 24th, 1905, addressed Standard Signal Company, Manadock Bldg., Chicago; did you send that letter?

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A. Yes, I wrote that letter.

Offered in evidence. Exhibit 29.

Q. I show you a letter dated, Buffalo, N. Y., July 5th, 1905, signed General Railway Signal Company by W. W. Salmon, President addressed to yourself; did you receive such a letter?

A. Yes, sir.

Offered in evidence. Exhibit 30.

901

*B. S. Wathen, for Deft., Direct.*

By Mr. Matson:

I sent that letter to Mr. Salmon in reply to that.

Offered in evidence, dated Dallas, Texas,

July 20th, 1905. Exhibit 31.

I received that letter from Mr. Salmon dated  
July 27.

902

Offered in evidence. Exhibit 32.

I wrote this letter to Mr. Salmon on July 28th.

Offered in evidence. Exhibit 33.

On August 1st I received that letter signed by  
Mr. Salmon.

Offered in evidence. Exhibit 34.

I wrote that letter to Mr. Ellis.

903

Mr. Matson: I offer it in evidence, it is  
dated prior to the contract, and I simply  
offer one sentence in the letter to show that  
they sent Mr. Ellis at that time, informa-  
tion as to the weight of the rail on the Cot-  
ton Belt tracks.

Exhibit 35.

I sent that letter to Mr. Salmon, dated Septem-  
ber 8, 1905.

Offered in evidence. Exhibit 36.

904

I sent that letter to the General Railway Sig-  
nal Company, dated September 29, 1904.

Offered in evidence. Exhibit 37.

I received that letter from Mr. Wuerpel, dated  
October 6, 1905.

Offered in evidence. Exhibit 38.

I wrote that letter to Mr. Wuerpel, February  
20, 1906.

Offered in evidence. Exhibit 39.

I received that letter in reply to it dated Feb-  
ruary 23rd, 1906.

*B. S. Wathen, for Deft., Direct.*

905

Offered in evidence. Exhibit 40.

March 6, 1906, I received that letter from Mr. Wuerpel.

Offered in evidence. Exhibit 41.

March 12th, I replied with that letter.

Offered in evidence. Exhibit 42.

In reply to that I received that letter dated March 15th, from Mr. Wuerpel. 906

Offered in evidence. Exhibit 43.

I sent that letter to Mr. Wuerpel, March 19, 1906.

Offered in evidence. Exhibit 44.

That was this switch that was way off up here in the corner, the Post Pine company track. They wanted to connect it into it, it really had nothing to do with it, because it was a new track coming in there at the date those letters were written or shortly before, and it wasn't in any way connected up with the interlocker at all. I sent this letter of March 19th to Mr. Wuerpel. 907

Offered in evidence. Exhibit 45.

After writing that letter, I received this telegram.

Offered in evidence, dated, March 23rd. 908

Exhibit 46.

And the confirmation of it.

Mr. Matson offered in evidence the letter of confirmation dated the same day. Exhibit 47.

I received this letter dated March 24, 1906, from Mr. Wuerpel.

Offered in evidence. Exhibit 48.

On March 28th I wrote that letter in reply to the last one.

909 *B. S. Wathen, for Deft., Direct.*

Offered in evidence. Exhibit 49.

After writing that letter I received this letter from Mr. Walshe.

Offered in evidence. Exhibit 50.

On April 3rd, 1906, I wrote that letter.

Offered in evidence. Exhibit 51.

910 I received that letter from Mr. Wuerpel dated April 7.

Offered in evidence. Exhibit 52.

This is the enclosure which he enclosed in that letter.

Offered in evidence. Exhibit 53.

I wrote that letter April 10th, 1906.

Offered in evidence. Exhibit 54.

911 I wrote on April 17th, that letter to Mr. Walshe.

Offered in evidence. Exhibit 55.

On April 17th I wrote this letter to Mr. Wuerpel.

Offered in evidence. Exhibit 56.

I received that letter from Mr. Salmon, April 21st, 06.

Offered in evidence. Exhibit 57.

912 I wrote that letter on April 23rd to the defendant.

Offered in evidence. Exhibit 58.

I received this letter from Mr. Salmon about that time, dated April 23rd.

Offered in evidence. Exhibit 59.

In reply to that letter I wrote this letter April 27, 06.

Offered in evidence. Exhibit 60.

I received a letter in 1904 from Mr. Wuerpel, that letter.

Offered in evidence. Exhibit 61.

*B. S. Wathen, for Deft., Direct.*

913

After this last letter which was April 30th, I received some bill for the extra work that had been done there. Then later on in the year, I sent this letter with this enclosure to the General Railway Signal Company.

Offered in evidence letter dated September 3rd, 1906. Exhibit 62. Also the enclosure, dated September 2nd, 1906. Exhibit 63. 914

By Mr. Cooper:

On or about the 26th of September, 1904, I had a conversation with Mr. Wuerpel. It was at the inspection of the Ft. Worth plant that the Taylor Company was putting in for the Texas & Pacific at Ft. Worth. There was some conversation between us as to the Texarkana plant at that time. He said that he realized that plant was no good, that it was coming under the dominion of the General Railway Signal Company and that they would make that plant good by practically rebuilding it with Taylor Company's materials and devices, etc., that was the substance of the conversation. 915

Q. Did he characterize it?

A. He said the plant was no good. 916

I will state the conversation that I had with Mr. Walshe at Dallas in 1906, as briefly as I can. He came down there to know if I wouldn't give him some orders about the re-wiring of the plant, other than the work he had been sent there to do, and I refused to do so, told him it was a matter that I hadn't any orders to give him about, and I refused to give him any orders. I

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*B. S. Wathen, for Deft., Direct.*

had a conversation with Mr. Cade in Dallas in December, 1904.

Q. Did you as you said you would pay for the extra work that was done at Texarkana to adapt the plant to the Cotton Belt changes?

A. I approved such an account.

918

When the plant was being installed, I had a great deal of knowledge of the trunking, because I had two or three visits from Mr. Ellis on that very point.

Q. State what conclusions you arrived at?

Mr. Tompkins: Fix the time and place.

919

A. They occurred at Dallas, but the exact date I couldn't fix now, but it was between the time the contract was entered into and while the work was being done. He came to Dallas to know if he couldn't get some modification of the specifications on that point, and I told him there was certain materials if he would use I would consent.

Q. What materials?

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A. A certain timber that was possible to get there in that neighborhood. We call it Boisdock, it was very durable, hard timber, it was the longest lived timber that I know anything about when exposed to the weather or in the ground, and a box or anything of that kind made of it will last as long again as any timber that I know of in all that territory. He reported he couldn't find suitable timber and he wanted to substitute, he didn't want to carry out the specifications, said it was very difficult because he couldn't arrange his junction boxes, and I said: "You know what your contract is, don't you?" He says: "Yes."

*B. S. Wathen, for Deft., Direct.*

921

“Well,” I said, “If you put in anything there that is going to bring trouble in the future, you will have it all to rebuild because I will condemn it under the clause of that contract that gives me a year to do it, but if you will get some good, well-treated pine, well creosoted pine, and make your trunking of that and carry out the specifications generally, properly, in reference to this trunking, owing to the fact that we have already had to ask for an extension of time of the Commission formerly and you are now way behind with your contract and if there is much more delay, we will have to go before the Commission for another and I will let you put in that class of work, but you put it in at your own peril, remember, if it doesn’t give satisfaction.” He says: “I will do it,” and by that means I let him put in material that I realized was not exactly what I should have, or what under different conditions I would have excluded right then. He went on and put in a very sorry lot of material with the result, of course, that it brought a great deal of trouble, but he was responsible for it. He did not put in the kind of material I said I would let him put in. It wasn’t well treated material and very much lighter in quality. The dimensions I had spoke about were, that none of it should be less than two inches thick and be good well treated pine timber, both the trunking that was under the ground and the boxes and everything pertaining to it was to be good, heavy material and have good workmanship. I was there when some of the trunking was being put in and afterwards saw it and called his attention to it. I told him I would let it go for

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*B. S. Wathen, for Deft., Direct.*

the time being but it would all have to come out and be remodelled. Mr. Ellis said under the circumstances it would be better for us to remodel it than to tear out everything now. I said, if we undertake to tear it out now you won't get an inspection on this for the next four or five months, and the Commission, we don't know what they will do with us. They may invoke the law, \$500 penalty a week, and you will have it to pay, but under the circumstances, with the understanding that it will have to be remodelled, I will let you go ahead, because you are right down now to the point when you are asking for a temporary permit to put this plant in operation temporarily or under the trial period. The Pneumatic Signal Company or the General Railway Signal Company never to my knowledge requested an inspection after the request in the letter of October 22nd which Mr. Matson has just read, and all those things passed through my hands, as far as I ever heard of. After that date, after March 1, 1905, I never heard that either company ever rendered a bill for the interlocking system, not for the extra work. It did not come to me.

928

Q. When the Railroad Commission condemned the plant in 1907, what did you do?

Mr. Tompkins objected as incompetent and immaterial.

Overruled. Exception.

A. In July of that year, I got out circulars asking bids for a new plant, and as soon as I got the responses and got the plans submitted to the Commission and went through all the proceedings that were necessary under the agreement,

*B. S. Wathen, for Deft., Cross.*

929

got the plans approved, I let the contract for a new plant.

Q. What was done then?

A. And the contractors went ahead and put the plant in in about as reasonable a time as they could assemble the material and put it in.

There was no delay in installing the new plant that I know of except what was absolutely required and necessary. We made no effort to, because I sent out the circulars before the condemnation had been made by the Commission. We took out the old plant when the new was ready for service and there has never been anything done with it, scarcely at all. It has never been of much value except some little pieces around the tower, but largely that was our own work. We had built the tower. That is the part that is now in use, and the rest of the old plant is not used. It was an entirely new plant as to the Signal Company's part of it.

930

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CROSS EXAMINATION by Mr. Tompkins:

This letter of July 8, 1905, is a letter written by me to Mr. Salmon, I suppose. I don't know.

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Offered in evidence. Exhibit 64.

This looks like a copy of a letter received by me from Mr. Salmon, dated July 17, 1905; without reading it, I couldn't tell.

Offered in evidence. Exhibit 65.

This letter, dated August 4, 1905, addressed to Mr. Salmon, was written by me.

Offered in evidence. Exhibit 66.

This letter, dated October 9, 1905, was written by me to Mr. Wuerpel.

933

*B. S. Wathen, for Deft., Cross.*

Offered in evidence. Exhibit 67.

Q. You testified on the last trial of this case, did you not?

A. I guess I did.

Q. You know whether you did?

The Court: Yes, assume he did.

934

Q. On that trial, on that examination, did you testify to anything whatsoever relative to conversation had with Mr. Ellis concerning this trunking, which you have just now testified to?

A. There was nothing said about it because it was never a question asked.

Q. I asked whether you testified to it?

A. I didn't because there was no question asked, and I can give you the reason for it.

935

Mr. Lang prepared one diagram for the changes that were to take place on the Cotton Belt, and I don't know what particular one you mean now. I say he made some diagram of the proposed changes there which were contemplated by the railroad people to the Cotton Belt tracks, prior to making those changes in 1905 and 1906; just what it would be now without the diagram, I couldn't tell you. It was largely the purpose of those changes to facilitate the traffic of this plant. The Cotton Belt people were certainly anxious to have those changes made. They were not made originally because the Commissioner's engineer didn't sanction it. What was done in making those changes was to be treated as an entirely separate matter from the original contract, so far as the work was concerned.

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Q. An entirely separate and independent matter?

*B. S. Wathen, for Deft., Cross.*

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A. As a change in the yard that the engineer of the commission would permit to be done, and we bought the material of the General Railway Signal Co.

Q. The changes were to be treated by you, were they not, as an entirely separate and independent matter?

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A. They were not a part of the original contract.

Q. And they had nothing to do with the original contract.

A. I said they were not a part of it.

Q. Did the railway company ever attempt to renew the wiring or trunking, after a year had expired after its installation, in those places where it might need renewing?

939

A. They didn't; it wasn't their plant.

Q. Section three of the contract did not require the Signal Company to renew any parts after a year after the plant had been installed, did it?

A. I think it was after it was accepted. Better read it.

Q. You don't recall what that provision was? 940

A. I say you better read the contract. That will tell you more than I can tell you.

I never sent a telegram to any member of the Signal Company, approving the track circuits or consenting to their use. I sent a telegram relative to it. That was not the telegram which has already been offered in evidence. I sent another one after that. I sent a telegram after Mr. Thompson had consented that they try their track circuits, after they had made the second ap-

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*B. S. Wathen, for Deft., Cross.*

942 plication. I didn't consent. I said Mr. Thompson consented. I wouldn't consent to a change in the specifications of that kind without consulting him. He was the boss. I expect I saw the telegram that was offered in evidence a day or two ago when Mr. Lang was on the witness stand, sometime; whether I saw it at that time, I don't know, but after Mr. Thompson, to make it short, authorized those people to put in the track circuits, there was some correspondence about it from my office. That telegram, Exhibit 23, was sent by me. That is the one I say; that was the one I say followed after they got Thompson to agree to let them put in the track circuits. Mr. Thompson finally gave them their option of putting in the track circuits if they wanted to, and they did. I never notified the Signal Company, while the plant was being erected, that I condemned any of the material or apparatus which was put in, and directed them to take it out, replace it with something else.

943 Q. Did Mr. Lang inspect the plant while it was being erected, under your orders?

944 A. Mr. Lang was there quite a number of times, I don't know how many times, and I was there quite a number of times.

Q. Prior to the inspection of this plant in June, 1904, by Mr. Thompson, did you notify the Signal Company that the plant didn't work satisfactorily?

A. I couldn't remember right now, whether in and between the first of March and June that I sent them any direct communication or not, I can't remember.

*B. S. Wathen, for Deft., Cross.*

945

Q. It is a fact, isn't it, that this plant was used in connection with the railroad there at Texarkana for more than a year after the order of the Commission in August, 1907, directing the same to be removed?

A. Yes, sir, they continued to use it.

Prior to this order of the Commission, the second order which is in evidence here, made in August, 1907, I sent out some circulars, in the spring and also some in July, 1907. I didn't send any to the General Railway Signal Company. I guess I testified in regard to that matter on the previous trial.

946

Q. Was this question asked you: "Prior to that condemnation, did you ask for bids for a new plant?" and did you answer, "No, sir?"

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A. I didn't say I asked for bids, I said I sent out circulars. I sent out circulars preparatory to asking for bids, but I didn't ask for bids. Prior to the condemnation, I sent out the circulars prior to it, but I didn't ask for bids at that particular time.

Q. You didn't ask for bids at the time you sent out the circulars?

948

The Court: He said so.

A. I couldn't ask for bids until I got the Commission's approval of the plans, if it had been ten years.

I wrote the letter, dated July 14, 1904. Ex. 8, the order of the Commission, I presume is what I referred to in that letter, but I wouldn't be sure. There is nothing for me to identify it. I say I don't know but I sent that same thing and that might be a copy of what I sent or it might be the

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*B. S. Wathen, for Deft., Cross.*

very copy itself, I couldn't tell you, nothing to identify it. I sent a copy of just what the letter said there, whatever the letter says. I had a copy of the order of the Railway Commission. I received a copy of it a short time after it was made. I couldn't say how long after. It might  
 950 have been a week or it might have been two weeks, I couldn't say. I used to see Mr. Thompson, the engineer, pretty often, sometimes three or four times a month, sometimes not in two months. I never heard that he at one time was in the employ of one of these railroads at this crossing. I didn't know he was in the employ of the Kansas City Southern, prior to his becoming  
 951 engineer of State Railroad Commission. The K. C. S. operated the Texarkana and Ft. Smith, or the Texarkana and Ft. Smith was the line there in Texas.

Q. The reason why you refused to pay for this plant was that the Signal Company refused to rewire the same after it had been installed for a year, wasn't it?

952 A. Because they never got the consent of the Commission.

Q. Will you say that was not the reason why you refused to pay for it, because they wouldn't rewire it?

A. I said they never got the approval of the Commission. That was the principal.

Q. What was the reason?

A. We couldn't pay for it until they got the approval of the Commission, not under our contract.

*B. S. Wathen, for Deft., Cross.*

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Q. Didn't you write them that you would not accept this plant until they rewired it?

A. I did.

Q. You claim, I understand, that there is an agreement made to rewire this entire plant free of all expense to the railway company?

A. That was the condition that was agreed to with Mr. Cade and myself when I discussed the matter with him, in my office in Dallas, at the conference I testified to yesterday. Mr. Lang was present a part of the time. Mr. Wuerpel was not there at that time. He wasn't in my office when Mr. Cade was there at all, if so, it was just a little while. My conference with Mr. Cade was chiefly when Mr. Cade and I were alone. Mr. Lang was with us in the forenoon, probably three-quarters of an hour; I wouldn't say just how long. Mr. Lang then was right there in the building. I had my separate room. I don't say Mr. Wuerpel wasn't in the building, but he wasn't there when I was discussing this matter with Mr. Cade in the afternoon, or a very little time, if any. He wasn't there when Mr. Lang and Mr. Cade and I were together for half or three-quarters of an hour or over. 954

Mr. Lang was with us in the forenoon, probably three-quarters of an hour; I wouldn't say just how long. Mr. Lang then was right there in the building. I had my separate room. I don't say Mr. Wuerpel wasn't in the building, but he wasn't there when I was discussing this matter with Mr. Cade in the afternoon, or a very little time, if any. He wasn't there when Mr. Lang and Mr. Cade and I were together for half or three-quarters of an hour or over. 955

Q. I call your attention to that part of the contract which says that the plant shall be accepted by the Railway Commission; wasn't the sole purpose of this provision that you might have the plant, such plant there, that the Commission would let you operate the plant? 956

Mr. Cooper objected.

The Court: Sustained. Exception.

That is not for one man to say.

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*B. S. Wathen, for Deft., Cross.*

Q. If this plant couldn't have been operated, I don't suppose it would have been of any value to you?

The Court: Don't spend any time over that; they did not put it there for ornament.

958 Q. I ask you whether the original answer did not contain this provision, that the plant—

The Court: Did he verify the answer, if not, don't ask him any question about the pleadings.

Q. This contract contained a clause that the Signal Company should give a bond, did it not?

A. Read the contract.

959 Q. Don't you know that it contained that?

The Court: The contract speaks for itself.

It is my understanding a bond was made by the Signal Company.

Q. And you have attached a copy of that bond in the deposition that was issued to you, have you not?

960 Mr. Cooper: I object. The deposition is not in evidence.

Objection sustained.

Q. The Railway Law in evidence, Ex. 1, provides a penalty of \$500 a week in case the orders and rules of the commission are not carried out; was any such penalty ever exacted while this plant was in operation?

The Court: It is immaterial whether there was or not. If you have got a contract fulfilled, you are entitled to pay; if

*B. S. Wathen, for Deft., Cross.*

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you haven't, you are not, regardless of any outside consideration.

Mr. Tompkins excepted.

Mr. Tompkins offered in evidence a special order of the Railway Commission, dated May 24, 1904, page 502 of the 14th annual report of the Railroad Commission of the State of Texas. Exhibit 68. 962

I couldn't tell you that I ever made reports pursuant to the directions in that order, Ex. 68. I couldn't swear to it, whether there was any made by any members of your company on that particular form of blank.

Q. I call your attention to this clause in the specifications: The Pneumatic Signal Company agrees to erect and complete said apparatus, using good material etc.; wasn't the Railroad Company notified by representatives of the Signal Company, sometime in the month of March, 1905, that the work was finally complete and that the men would be withdrawn? 963

A. They didn't say the work was complete.

Q. Were they notified that what was agreed to have been done was done? 964

A. What they had considered to be done may have been done, but they had no acceptance of the work by the railroad people or by the engineer, regardless of what they might think.

Mr. Cooper objected, that the letter speaks for itself.

The Court: I think so. The written notification is the very best evidence and ought to be the only evidence.

965 *E. N. Cullums, re-called for Deft., Direct.*

Q. About that time Mr. Walshe left Texarkana, or soon after?

Mr. Cooper: It is in evidence Walshe left in April, his own evidence.

966 Q. Didn't the report which was made, after this notification had been received and after Walshe had left, state that the general condition of the interlocking was good?

Mr. Cooper: The report is in evidence.

The Court: That is the best thing. It may be considered in evidence anyway from now on, if it is not in.

967 EDWARD N. CULLUMS, re-called by Mr. Matson:

968 When Walshe came back to Texarkana in 1906, no change whatever had taken place in the interlocking machine. Walshe changed it after he arrived. He rearranged the locking to meet the requirements of the changes made in the Cotton Belt yards, and after the same were made, one conflicting route could be set up.

Q. That was done by Walshe himself?

A. Yes, sir.

Mr. Tompkins: Is it stipulated that an action was brought by the General Railway Signal Co., against the Texas and Pacific Railway Co., to recover for the work, labor and material used in making the changes in the Cotton Belt?

Mr. Cooper: We will stipulate that we paid about half that was charged. 969

The Court: Offer the pleadings in evidence then, if you have them.

Mr. Cooper objected to the pleadings.

Mr. Tompkins: I don't care to put them in; I simply want the fact. There was a compromise finally, but the action was brought and settled. 970

The Court: I do not see any materiality to it.

Mr. Tompkins: If a claim is made that these changes were a part of the original contract and the payment of the original contract depended on those changes, it is pertinent on that question.

The Court: That you brought an action is not pertinent on what they claim; it simply shows what you claim, that is all. 971

The defendant here rested.

Mr. Tompkins offered in evidence a copy of the original answer filed in the case, verified by the Secretary and Treasurer of the defendant, which shows this provision: For the reason that unless said plant should be so accepted, under the provision of said statute, it could not be used by this defendant and it would be utterly valueless to it. 972

Mr. Matson: The pleadings are always in evidence.

The Court: Yes, and it is proper to call attention to any special part of it.

973 Mr. Tompkins offered in evidence Ex. 19 for identification, the letter of Mr. Wuerpel to Mr. Lang, dated February 14, 1905.

Also offered Exhibits 20 and 21 for identification.

974 Also offered in evidence a letter dated April 21, 1905, to Mr. Lang from Mr. Wuerpel. Exhibit 69.

Also offered in evidence Exhibits 64, 65, 66 and 67 for identification.

Also offered in evidence a telegram from J. H. Walshe to R. B. Ayres, dated 5/16/06. Exhibit 70.

Also offered in evidence a telegram to F. W. Kane, from J. M. Walshe, dated the same day. Exhibit 71.

975 Also a telegram from Kane to Walshe, dated May 21, 1906. Exhibit 72.

Mr. Tompkins: I want to show from Mr. McLean's deposition, that no other orders were made in reference to the interlocking plant, except those now in evidence.

976 The Court: You are entitled to that presumption in any event.

Mr. Tompkins: That shows they were the only orders that were ever made.

Mr. Matson: You mean up to 1907?

Mr. Tompkins: Yes.

*F. L. Dodgson, re-called for Pltf., Direct.*

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FRANK L. DODGSON, re-called by Mr. Tompkins:

I am acquainted with Mr. Cade. He is not now in the employ either of the General Railway Signal Co., or of the Pneumatic Company. He was in the employ of the Pneumatic, but is now employed as sales manager of the General Railway Signal Co. The Mr. Young who has been spoken of as having been engaged in installing the work at Texarkana, I do not know who he is. There is a Mr. Young in the employ of the General Railway Signal Co. now, but I don't think he had anything to do with this plant. I don't know whether Mr. Carruthers is in the employ of the General Railway Signal Company or not. He was a foreman in the employ of the Pneumatic Company. He is not in Rochester and I don't know where he is. The Mr. Ellis who has been mentioned is in Kansas City. He is not in the employ either of the Pneumatic or General. The second report of Mr. Thompson which is in evidence states that, under the sixth paragraph, "The worst feature of this is that the manufacture of this kind of machinery has been suspended, and it is now practically impossible for the railroad company to secure parts to replace those that were broken"; so long as that plant remained in operation at Texarkana, it was possible to secure parts from the General Railway Signal Co. It is also stated in the same report that several other devices that were built on this plan in other states, have been out of service, etc. I testified on my direct examination as to other plants

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981 *F. L. Dodgson, re-called for Pltf., Direct.*

of this same design at Indiana Harbor and Park Junction in Philadelphia and explained why they went out of service.

982 Q. It is further stated in this report that the manufacture of this device has been suspended by the company on account of the superiority of other systems and because the same is generally disapproved by most signal engineers; was the manufacture of this system which was installed at Texarkana, suspended because of the superiority of other designs?

Mr. Cooper objected as calling for a conclusion.

Sustained and exception.

983 Q. Will you state, if the manufacture was suspended, for what reason it was suspended?

984 A. When the General Railway Signal Company was formed from the Taylor Signal Co., and the Pneumatic Signal Co., both the Taylor and Pneumatic had systems of all-electric interlocking. The system which had been perfected by the Taylor Signal Co., was a system which had been in use for several years and also was one which cost less to install. It would not have been policy for the General Company to build two kinds of the same system; they therefore selected the one on which they could make the most money.

This system which has been installed at Texarkana has not been generally disapproved by signal engineers, to my knowledge.

Q. Mr. Cullums, in his examination, said that induced currents of electricity sometimes resulted and was found in the apparatus at Texarkana:

*F. L. Dodgson, re-called for Pltf., Direct.*

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will you explain what induced currents are and under what circumstances they are possible?

A. Induced currents, in electrical art, are currents of electricity which are induced in one wire by current flowing in another wire in proximity to it. Such induced currents can only take place when the character of the electricity is what is known as the alternating current; where direct current is used, there can be no such thing as induced currents. The character of the electricity was direct current in Texarkana, and I don't know what he meant by induced currents in that particular system.

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Induced currents, as I understand it absolutely could not have happened at Texarkana.

Q. Mr. Cullums also testified it was possible to force indications upon this machine, by various means, and that it was not possible to force indications by some of those means upon the controlling machine at the time it was installed; was it possible to force them as it was originally installed?

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A. It was possible to force the indications by the method Mr. Cullums described, that is, by disconnecting and connecting other wires, when the machine was installed, just as it was after the time he testified to.

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That was not peculiar to this machine. I know the machine that was in operation at Ft. Worth. It was possible to force indications on that machine, in the methods, described by Mr. Cullums. I saw the wire that was used at Texarkana. It was the Simplex brand. That was a standard brand of wire. That wire has been used at other

989 *F. L. Dodgson, re-called for Pltf., Direct.*

plants. I don't know, I think it was used at Ft. Worth. It had been used on other plants. There was nothing peculiar or unusual about the wire that was used there. I saw the trunking that was used there. I have seen trunking used at other plants. There was nothing peculiar or unusual  
990 about this trunking, except that it was laid in the ground, which was peculiar only to the State of Texas.

If the apparatus failed to work properly, for example, if a switch failed to close and move and lock properly, it would be indicated to him on the indicating apparatus, on the controlling machine. It would be indicated to him by the fact that he would be unable to complete the stroke  
991 of the lever. The stroke of the lever had four positions. First is the normal position, or the position it stands in the normal. That is usually with the lever shoved all the way in. The second is the normal indicating position, about one-third of the stroke, and that is the position where the lever stands when it operates the function to the normal position. Third, the reverse operating  
992 or reverse indication position, which is about at the third of the stroke, and the fourth the reverse position, full reverse position. It would be indicated to him that a switch had failed to complete the movement and lock, by the fact that the lever would stay in the reverse operating position, not complete its stroke. Gear teeth and gear wheels sometimes break in the operation of these plants under normal conditions, where the plants are well built and properly installed. As to the breakage of the gear wheels here that have

*F. L. Dodgson, re-called for Pltf., Direct.*

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been testified to, in the first instance, when the wheels were cast iron, they were too weak; after they were changed to cast steel, there was nothing peculiar in the fact that now and then a tooth broke out. They were changed to cast steel very soon after the plant was put in service. They were put in of cast iron on the start because we were unable to get cast steel parts in time. The principal distinguishing characteristic of the plant was in the way in which the safety features were obtained; the way in which the circuits were guarded so as to guard against false operations or false indications. There was nothing especially novel in the construction of the various machines which operated the signals, derails and switches, only in the arrangement. The switches were operated by motors through a chain of gears, and the signals were operated by a motor, also through a chain of gears. The machine was very similar to a machine which the Pneumatic Signal Co., had been building for operation switches by compressed air; that is, the controlling machine, shown on this Ex. 7. It had contact devices on it to make contacts instead of ports to convey compressed air, like the compressed air machine.

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Paper marked Exhibit 73.

I examined reports, Ex. 73, made by the tower-men beginning with August 1, 1904, and ending October 31, 1904, which was attached to the deposition of the witness Thompson, soon after they were made and examined them again this morning.

997 *F. L. Dodgson, re-called for Pltf., Direct.*

Q. What do you say those reports show in regard to the maintenance of this plant and also in regard to its operation?

Mr. Matson objected as calling for a conclusion, and the reports show for themselves.

998 Overruled and exception.

A. The reports show that as far as the mechanism of the interlocking plant was concerned, that it must have been doing very good work. These reports, if I may refer to this memorandum, cover 99 days. On 72 of those days, no reports of any failures are reported. There are 32 recorded failures; of those 32, the cause is given of 24 as unknown, therefore showing that those 24 failures at least were not caused by any defective mechanism because that could have been found. Of the other eight failures, four of those occurred on one derail, derail 13. There was one failure on track circuit in 99 days, and the other three failures were on two different functions. Such a showing as this on an interlocking plant would be considered not only good, but very good.

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Mr. Tompkins: I would like to have the monthly reports in the deposition of Mr. Ayres, of which copies were filed with the Railroad Commission, marked.

Mr. Matson: All the reports are in evidence attached to that deposition. They are all offered, every report there.

Marked Exhibit 74.

Ex. 74, consisting of monthly reports attached to the deposition of Mr. Ayres, which were filed

*F. L. Dodgson; re-called for Pltf., Direct.*

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with the Railroad Commission, I examined a portion of them covering the period from October 1, 1904 to October 1, 1905. The reports indicate a very poor class of maintenance. I say poor class of maintenance because they show a great many failures which should have been caught by the maintainer before a failure occurred. In the way of dirty brushes, poor contacts and things that would be shown before the failure actually occurred. The reports during that period show 192 delays to trains, that were caused by various things, such as train in the block, train standing on the crossing and switch engine doing work, things of that kind. Of those 192 delays to trains, twelve of them were caused by the failure of the interlocking apparatus. That is an average of one per month. Now, of the other notations, there were 419 failures noted in this narrative of reports. Omitting the failures which were due to such causes as derailments and failure to keep contacts clean, failures due to the track circuits, due to the insulated joints of the track circuits and the failures due to such things as a lump of coal or stone in the switch point were the apparatus failed to indicate as it should do, there were left 33 failures which were due to broken parts or imperfect apparatus. 33 in twelve months, which is not a bad record. On the other hand, these same reports show that during that same twelve months, there were twenty derailments within the limits of the interlocking plant, each one of those derailments doing more or less damage to the mechanism and to the trunking and wiring.

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*M. Wuerpel, for Pltf., Direct.*

MORRIS WUERPEL, being sworn, testified to Mr. Tompkins:

I reside in Rochester. Am Assistant General Manager of the General Railway Signal Company. Have been connected with this concern since 1904.

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Q. Prior to that time, what was your business?

The Court: We will assume he is respectable until somebody shows the contrary.

Mr. Tompkins: I think perhaps if Mr. Wuerpel is going to qualify as an expert, I ought to show his experience.

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I have been engaged in the signal business and am a signal engineer. I had fifteen years' experience on the Terminal Railroad properties of St. Louis. That ended in 1902. I was at one time connected with the Taylor Signal Company for two years. From 1902 until 1904, at the time it was absorbed or turned its properties over to the General.

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I was at Texarkana in the month of June, 1904, at the time Mr. Thompson was there inspecting the plant, and saw Mr. Thompson there at the time. I was connected with the Taylor Signal Co., at that time. I was present at a time when there was some conversation between Mr. Thompson, Mr. Lang, Mr. Ellis and myself.

Q. Mr. Lang testified that Mr. Thompson said that he was ready to condemn the plant right then, and he would put in the Taylor plant, if they said so; did you hear Mr. Thompson say that?

*M. Wuerpel, for Pltf., Direct.*

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A. I don't recall that I heard him make those remarks. If they were made they were not made in my presence.

Q. Did you say anything in regard to installing a Taylor Signal plant at that time?

A. Yes, sir.

Q. Do you remember what you said?

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A. Why, as a representative of the Taylor Company at that time, I offered, naturally suggested that they put a Taylor plant in there. The exact words I couldn't recall. In substance I, in a joking way, said "You fellows ought to have a Taylor plant in here instead of the Pneumatic plant".

At that time I was in the employ of the Taylor Company.

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Q. Mr. Lang testified that, as he recalled it, at a time at Texarkana in November, 1904, when Mr. Thompson was making the second inspection, you suggested on that occasion that a Taylor plant be put in; did you make any such suggestion?

A. No, sir.

Q. What did you say?

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A. Why the exact words I can't recall. I was unauthorized, as a representative of the General Company whom I was representing in November, 1904, to make any statement as to what we would do. I remember meeting Major Wathen at Ft. Worth sometime, in September, 1904. The Taylor Company installed the Ft. Worth plant. I heard Major Wathen testified in words or effect, that I told him that the only thing to be done, or the only way

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*M. Wuerpel, for Pltf., Direct.*

I could do, would be to take this plant out and put in a Taylor plant. I did not make any such statement to him at that time. I never made such a statement to Major Wathen. I again visited Texarkana in December, 1904, with John T. Cade, F. L. Dodgson, at the first meeting in December in Texarkana. It was sometime prior to the 15th; just the exact date I couldn't recall. That was about the time that Mr. Cade wrote a letter to Major Wathen. I was present at Dallas about that time, I had a conference with Mr. Cade and Mr. Dodgson. I personally had no conference with Major Wathen, but I was present at a meeting in which Mr. Cade was spokesman. Mr. Dodgson, Mr. Lang and Major Wathen were there. The principal topic discussed was the question of getting the plant toned up generally, due to the lack of proper maintenance, and correcting such defects as were properly chargeable against the Signal Company, and an endeavor to get the Railroad Company to do such things as we found were necessary on our inspection previous. Those things were discussed, such things as that.

1014.

Nothing was said about rewiring the entire plant free of cost to the Railroad Company, nor was anything said about a further inspection of the plant by the Railway Commission that I recall, at that meeting. The changes on the Cotton Belt were discussed, but no agreement reached as to what changes should be made.

I attended a conference at Texarkana at which were present Mr. Neff, Mr. Dodgson, Mr. Cade and representatives of the other railroads. The

*M. Wuerpel, for Pltf., Direct.*

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conference was held at Texarkana, on the site of the interlocking plant. The subject of discussion there was changes in the track lay-out on the Cotton Belt tracks.

Q. What was said, if anything, in regard to that, by all persons interested?

A. After sizing up the situation, it was the consensus of opinion, after thoroughly discussing each point, that changes in the Cotton Belt tracks whereby the limits of the interlocking would be reduced, would be a mighty good thing. The Cotton Belt people agreed to it. I have examined the trunking and wiring at the plant at Texarkana. The brand of wires used is known as Simplex S. B. C.; the same was used at Ft. Worth. I observed the way the trunking was made there.

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Q. Was it different in any respect from the way the trunking was made at Ft. Worth?

A. Not materially, no.

Mr. Matson objected and asked to strike out.

Stricken out. Exception.

Q. When you were at Texarkana at the time you testified with Mr. Cade and Mr. Dodgson, did you make an examination of this interlocking plant there?

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A. Yes, sir.

Q. Will you state how carefully and thoroughly you examined it?

A. Made a detailed examination of each function. One end of the plant to the other; each switch and mechanism and each signal mechanism. I made accurate memoranda at the time. This is the memoranda I made at the time.

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*M. Wuerpel, for Pltf., Direct.*

Q. Could you describe, without referring to that memoranda, the condition in which you found each particular machine?

A. The general condition of each machine was dirty and required oiling, principal condition.

1022 Q. Could you describe fully the conditions without referring to that, that you found there?

A. I don't think I could repeat the detail of those things, every detail report.

Mr. Tompkins offered it in evidence.

Mr. Matson objected.

The Court: I cannot receive it; he can use it to testify from.

Mr. Matson objected to his reading it.

1023 The Court: If he cannot recollect, he can refer to the memorandum and state what he found.

Q. Refer to the memorandum?

A. Generally, each function was inspected very carefully.

Q. Refer to each particular machine there?

1024 A. Signal 27, to be cleaned and oiled. Derail 30, clean and oil, tighten switch in indication box, tighten springs and adjust bar. Dwarf 28, needs new blade grip. Derail 31, indication box, loose contacts, clutch sticking, clean and oil. Switch 31, clean and oil, switch points to be fixed and bars to be adjusted. Switch 32, clean and oil. Dwarf 40, O. K. Signal 28, cut-out contacts to be renewed, new motor contacts on all signals. Switch 33, clean and oil, renew motor spring bridge, change adjustment of indication box contact. Derail 34, clean and oil, otherwise O. K. Signal 40, clean and oil, cable to be fastened clear.

*M. Wuerpel, for Pltf., Direct.*

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Dwarf 28, not working good, clean and oil. Signal 28, cut-out relay out of order. Derail 35, oil and clean, renew switch box bridge, adjust lock rod notch, adjust detector bar. Switch 35, oil and clean, motor coupling taper pin to be fixed, switch to be put in shape, ties tamped. Switch 37, clean and oil. Derail 37, clean and oil, adjust lock rod. Dwarf 40, to be removed to clearance and lowered on account of drainage. Derail 38, oil and clean. Signal 41, O. K. Derail 54, switch box cover broken, oil and clean, indication contact post loose, tighten. Signal 52, renew motor contact springs, adjust motor contact springs, and tie cable clear, oil and clean. Derail 54, oil and clean, adjust motor switches. Signal 56, oil and clean, otherwise O. K. Derail 46, oil and clean, adjust detector bar, studs to be cotter-pinned and bar cleaned, adjust motor switches. Signal 50, oil and clean. Switch 15, oil and clean, renew motor contact springs, switch and lock movement to be securely bolted, detector bar drive rod to be guided. Switch 15, oil and clean, renew detector bars, both sides. Switch 16, oil and clean, renew bar, switch points to be driven back, detector bar drive guided, rail braces to be fixed up. Switch 17, oil and clean, movement loose, tighten. Derail 17, oil and clean, adjust bar. Derail 16, oil and clean, otherwise O. K. Derail 19, oil and clean, renew motor cut-out springs, coupling to motor and clip on bar. Derail 18, indication box bridge broken, repair. Dwarf 23, blade to be adjusted to horizontal, to be replaced by signal 5. Dwarf 23, bolts in blade. Signal 25, oil and clean, dash-pot to be cleaned, renew block at end of

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*M. Wuerpel, for Pltf., Direct.*

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ladder. Switch 47, oil and clean, renew motor contact springs, provide detector bar, drive guide. Derail 46, oil and clean. Signal 43, oil and clean, T. P. Main. Derail 13, oil and clean, motor out of line. Dwarf 22, O. K. Switch 12, oil and clean, rebounds too much. Signal 2, renew motor contact springs. Switch 13, oil and clean, indication springs to be renewed, adjust motor contact springs, adjust detector bar. Signal 3, oil and clean. Derail 12, oil and clean, renew and adjust contact spring motor. Switch 9, adjust contacts for rebound. Dwarf 6, O. K. Derail 8, oil and clean. Scotch block 12, oil and clean. Dwarf 5, new lamp, red glass and back light. Derail 10, oil and clean, renew contact springs on motor.

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Q. So in general the plant needed oiling and cleaning?

Mr. Matson objected. Sustained. Exception.

Q. You referred to springs needed renewing; what springs were those?

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A. Contact springs that had been burned out on account of improper adjustment.

Q. And what was needed in doing it?

A. Simply replace the springs.

Q. You also referred to some detector bars needed replacing; what did you discover in that respect?

A. On two switches on the Cotton Belt, on account of derailments, the detector bars had been badly damaged and they were to be renewed.

Q. Does a plant of this type, similar to the

*M. Wuerpel, for Pltf., Direct.*

1033

one in size at Texarkana, that was used as that plant was being used, require maintenance?

A. Yes, sir.

Q. Constant maintenance, does it?

A. Yes, sir.

By Mr. Matson:

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This report which I have now read, was made by me in December, 1904, made after a report that was made in November sometime. I don't know whether Mr. Thompson made any subsequent to that time or not. I went to Texarkana and met with these various people on the ground at that time, after that second inspection. That is the time that I went over the plant then and made out that list. At that time our man Walshe had not been there for nearly a year. He went there in April, 1904, and was there at the time you made this inspection.

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Q. Those things there are the things you told your man Walshe to do towards taking care of this plant, were they not?

A. No, sir; those are the things that had to be done. They didn't all devolve upon the Signal Company. 1036

Q. Didn't you make that memorandum and give it to Walshe to do to this plant?

A. Gave it to him to see it was done.

Q. You gave it to him to do, didn't you?

A. No, sir.

He was our representative there looking after the plant as it was working at that time. I gave that memorandum to Walshe, and Walshe didn't leave there until the April, until the first of the

1037 *M. Wuerpel, for Pltf., Direct.*

following year, April, 1905, to the best of my recollection.

Q. And your plant at that time had not been accepted by the Railroad Commission?

Mr. Tompkins objected.

The Court: It never has been.

1038

By Mr. Tompkins:

Q. Do you recall when you gave that memorandum to Walshe, was it before or after you met Major Wathen and had agreed to tone up the plant generally, put it in good shape?

A. It was after.

Q. Was it given as the result of your conference with Major Wathen?

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A. Yes, sir.

Mr. Matson objected. Sustained and stricken out.

The interest upon the amount claimed was conceded to be \$6,512, subject to correction if it shall be necessary, being interest from April 1, 1905, to date.

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The testimony here closed.

Mr. Cooper: I move that the court direct a verdict for the defendant, upon the ground that the plaintiff has not established a cause of action.

Upon the further ground that the plaintiff, in order to recover in this case, must show that the plant was accepted by the Railroad Commission of Texas, must be acceptable to the engineer of the defendant

company, and the engineer of the Railroad Commission of Texas, and that the plaintiff cannot recover unless it does show those things, or show that the defendant prevented the obtaining of the assent or acceptance of the Railroad Commission of Texas, or that we waived the condition in the contract that it must be so accepted, and that there is no evidence of the plaintiff which proves that we either so prevented that acceptance, or waived such acceptance and accepted the plant ourselves.

Denied and exception.

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CHARGE OF THE COURT.

Gentlemen:

If the plaintiff is entitled to recover anything, it is entitled to a verdict of \$22,512.

Corporations, like individuals, can make just such contracts as they please; we cannot make them for them, nor can we here reform those that were made, therefore, it does not concern us whether the contract was wise or foolish, harsh or easy. We have only to determine first, what was the contract; second, was it fulfilled? The contract is in writing. You can take it to your room. It is plain English, no ambiguity about it that requires judicial construction, but the wayfarer who runs may read and understand it.

The plaintiff undertook to construct an interlocking system to control and operate the derails,

1045 switches and signals which the defendant contracted for, and in so contracting, represented the other railroad companies interested at the crossings at Texarkana where the plant was to be maintained, to do it with first class material and workmanship and so as to properly perform its functions, to be acceptable to the engineer of the defendant and the engineer of the Railroad Commission of the State of Texas, and all in accordance with the plans and specifications which were a part of the contract. And so doing, after certain trial tests, if it should work properly and perfectly, because they have used very strong language there, and after acceptance by the Railroad Commission of the State of Texas, the defendant agreed to pay \$16,650 for it.

1047 Performance must also precede payment, and though conditions seem hard and forfeitures severe, the time for reflection is before signature, because once signed, the parties are bound by the provisions of the contract, in the absence of fraud, and there is no claim of that sort here. Both parties stand on that contract and plaintiff says it has no word of fault to find with it.

1048 Performance did not precede payment here, because there is no acceptance by the Railroad Commission of Texas. It is incumbent on the plaintiff, on such proof, to show that that failure was through no act or default of it, and that it has been waived by the defendant, because defendant has a right to insist on that provision of the contract, if it chooses, and it may waive it if it sees fit. So it is left open to you to say whether it was waived. If the defendant accepted this

plant, took it over to itself as its own, regardless of the provisions of the contract in regard to the acceptance by the Railroad Commission, held it and controlled it with the intent that it be its own, to use it and control it as if the contract were fulfilled, then defendant must pay for it. Acceptance is largely a question of intent. To prove what a man intends, we should take what he says and what he does and the circumstances under which he acts and talks. That is the only way you could find out what a person intends to do, because you cannot look in and read his mind, but you can see what circumstances he was in and what compulsion he was under, and user under compulsion, without intent to accept, is not acceptance. What would be applicable to a case of parties otherwise situated is not applicable to a case like this for example, and for this reason, that it was under orders of a higher power, so far as the use and the method and the construction of this safety device was concerned; also that it was a public service corporation and amenable to the general public for the way in which it operated its railroad; it could not run it at its pleasure and will, but must run it in all reasonable compliance with the needs of the public who seek transportation at its hands, and with the use of all reasonable means for their safety. This defendant could not summarily discard this device provided, as both parties say, it was for the safety of the public, and say we won't use it and have no more to do with it. It was provided in the contract itself, that in case there was not this acceptance or fulfillment, that the structure as it stood should belong to the defendant, as liquidated damages for non-fulfillment by the plaintiff of

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1053 its contract. All this mass of evidence is simply to give you such light as it may as to whether or not this defendant did accept it or did not.

Each of these parties is entitled to the same fair treatment at your hands, and I do not doubt they will receive the same just consideration of the evidence and the same honest weighing of the probabilities of the situation. A man may do such a thing as he probably would not do, and if it is proved that he did it, you have a right to say so and should say so; nevertheless, when you come to a question of intent, you have a right to give such force to the argument of probabilities as your good sense and sound judgment says it ought to have. You have no right in this case to award compensation for rental; either this contract has been fulfilled or it has not. It has not been fulfilled, and therefore, it follows that unless the provisions of non-fulfillment have been waived, there can be no recovery, regardless of use and regardless of consequences. It is a question of fact for you to say, under all the evidence in this case, what the truth is in that regard, the honest truth.

1055  
1056 If you find this defendant did waive it, it was waiving all these provisions because if it accepted, it also waived any claim of improper workmanship or poor materials. If it took it to itself to be used and waived it it is liable to pay for everything and has precluded itself from every other defense. This question of waiver is now for you to say, as a question of fact, whether or not it is established, because plaintiff alleging that, to overcome the non-fulfillment, must prove

it by a fair preponderance of the evidence. If so, it is entitled to the full price; if it is not entitled to that, it is not entitled to anything, and use and advantage and all those considerations have no weight in determining the truth of the fact whether or not there was a waiver. 1057

Gentlemen, take the case.

Mr. Matson asked the court to charge the jury that the reports of the good condition made by Mr. Ayres of the apparatus is no evidence of acceptance and waiver of the conditions of the contract. 1058

The Court: I charge that.  
Plaintiff excepted.

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**EXHIBIT 1.**

**RAILWAY CROSSINGS AND INTERLOCKING.**

Authorizing Railroad Commission to Regulate.

(S. B. No. 166) Chapter LXXXIX. 1060

(General Laws of the Twenty-seventh Legislature.)

Sec. 2. That in any case where the tracks of two or more railways cross each other at a common grade in this State, it shall be the duty of

1061 such railroad company to protect such crossings by interlocking or other safety devices, under regulations to be designated by the Railroad Commission of Texas, to prevent trains colliding at such crossings; provided, that all railway companies in this State shall have one year after the passage of this bill in which to comply with the provisions hereof.

1062       Sec. 4. Whenever interlocking or other safety devices are constructed and maintained in good order to the satisfaction of the Railroad Commission in compliance with sections 2 and 3 of this act, then and in that case it shall be lawful for the engines and trains of such railroad or railroads to pass over such crossings without stopping.

1063       Sec. 5. Any company, corporation, receiver or person operating any railroad who shall refuse or neglect to comply with any order made by the said Railroad Commission in pursuance with the terms of this act shall forfeit and pay to the State of Texas a penal sum of five hundred dollars per week for each week of such refusal and neglect, which said sum may be recovered in suit or suits to be brought by the Attorney-General of the State of Texas in the name of the State of Texas upon duly verified information of such refusal and neglect by any such railway company being lodged with said Attorney-General by the said Railroad Commission.

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**EXHIBIT 2.****1065**

Office of  
**RAILROAD COMMISSION OF TEXAS.**  
 Special Order.  
 (General Hearing, May 21, 1902)

Austin, Texas, June 5, 1902.

**1066**

In pursuance of an Act, passed by the Twenty-seventh Legislature of the State of Texas, published as Chapter LXXXIX of its General Laws, and entitled, "An Act to authorize, require and empower the Railroad Commission of Texas to regulate railways crossing each other, to provide for interlocking or other safety appliances, &c." which Act became effective July 9, 1901, it is hereby ordered by the Railroad Commission of Texas that there be established, at the following grade crossings of railroads in this State, standard interlocking devices, which shall be constructed, maintained and operated in accordance with the rules and regulations of this Commission, Circular, No. 1597, issued May 31, 1902:

**1067**

St. Louis Southwestern Railway of Texas;

**1068**

1. Crossing with T. & F. S. Ry. at Texarkana.  
 Texarkana & Fort Smith Railway;

1. Crossing with T. & P. Ry. at Texarkana.

2. " " St. L. S. W. Ry. of Texas  
 at Texarkana.

Texas & Pacific Railway;

1. Crossing with T. & F. S. Ry. at Texarkana.

(A long list of other crossings enumerated in this order is omitted.)

1069 It is further ordered that the interlocking devices at said crossings shall be constructed, inspected by this Commission and put in operation under its permit, on or before June 30, 1903.

1070 It is further ordered that the cost of each interlocking device, together with the expense of putting it in, shall be borne equally by the railroad companies party to each crossing, and that the expense of operation and maintenance shall be borne by each company in proportion to the number of levers necessary to operate the tracks of each. Provided, however, that nothing in this order shall have the effect of abrogating any existing contracts or agreements that may have been entered into between railroad companies affecting the division of the expense of installing, operating and maintaining an interlocking device at any railroad crossing.

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This order shall take effect July 1, 1902.

L. J. STOREY,  
ALLISON MAYFIELD,  
*Commissioners.*

1072 Attest:  
E. R. McLEAN,  
*Secretary.*

**EXHIBIT 3.****1073****INTERLOCKING DEVICES AT RAILROAD  
CROSSINGS.**

**Rules and Regulations Covering the Installation,  
Maintenance and Operation of Interlocking  
Devices at Grade Crossings of Railroads.**

**1074**

Dated, Austin, Texas, May 31, 1902.

**GENERAL RULES.****2. Petition for Inspection.**

When the plan submitted for an interlocking device at any railroad crossing has been duly approved by the Commission, and same has been constructed and is ready for operation, a petition shall be made to the Commission for an inspection of said device, accompanied by a plan similar to the one specified in Section 1, showing in all things the device as actually constructed. In addition there shall accompany said petition a complete diagram of the locking of said device, together with a manipulation sheet showing the combinations necessary to set up for each of the several routes governed by the signals. A copy of the rules and regulations of each company governing and affecting the operation of its interlocking plants must accompany said petition.

**1075****1076****3. Application and petitions must be signed.**

The application for the approval of any plan for an interlocking device at any railroad cross-

1077 ing, also the petition for the inspection of same, must be signed by the general manager or general superintendent of each line of railroad party to such crossing.

4. Inspection will be made.

1078 When the petition for inspection of any interlocking device at any railroad crossing has been received, a time will be set for its inspection by the Commission or its duly authorized employee, and due notice will be given to each railroad company that it may be represented at such inspection.

5. Order authorizing trains to not stop.

1079 When it has been determined by actual inspection that an interlocking device at any railroad crossing has been constructed in accordance with the plan submitted to and approved by the Commission, and that such device is operated in a thoroughly reliable and safe manner by competent employees, then a permit will be issued authorizing trains to run over said crossing  
1080 without stopping.

6. Interlocking devices must be maintained and safely operated.

Every interlocking device must be properly maintained and efficiently operated under strict rules and regulations by the railroad companies. If at any time it should be determined by the Commission that any interlocking device is not properly maintained and efficiently operated then

it shall be the duty of the Commission to cancel its permit approving the operation of such interlocking device, and all trains will be required to stop at such crossing the same as if no interlocking device existed.

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7. Monthly reports required.

The general manager or general superintendent of each railroad company operating interlocking devices approved by the Commission must make monthly reports on blanks furnished by the Commission with regard to the general condition of said devices, and the conditions under which they are operated and maintained. Detailed reports of accidents which may occur at crossings which are protected by approved interlocking devices must be made at once, stating generally the conditions surrounding such accidents.

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EXHIBIT 4.

THE CONTRACT.

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THIS AGREEMENT, made and entered into this       th day of                   1903, by and between the Pneumatic Signal Company, a corporation chartered and existing under the laws of the State of New York, hereinafter referred to as the party of the first part, and the Texas and Pacific Railway Company, a railway corporation chartered and existing under the laws of the United States, hereinafter referred to as the party of the second part,

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## WITNESSETH:

The said party of the first part does hereby for itself and for its successors and assigns, covenant and agree to and with said party of the second part, its successors and assigns, that it, the party of the first part shall and will for the consideration hereinafter named, perform all the labor and furnish all the material, except as hereinafter specified, necessary to install the Pneumatic Signal Company's interlocking system on the railroad of the party of the second part, at  
**TEXARKANA, TEXAS,**  
 for the control and operation of numbered derails, switches and signals, as shown on the attached blue print marked X which said blue print is made a part of this agreement.

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The party of the first part further agrees to construct the said interlocking system in a first-class and workmanlike manner, in all its parts, and to provide all necessary fixtures and appliances, except as hereinafter specified, to enable the said system properly to perform its functions, whether hereinafter specifically described or not, and that the materials and apparatus to be furnished and labor to be performed by the said party of the first part, shall be in conformity with the attached specifications and satisfactory and acceptable to the Chief Engineer or other authorized officer of the party of the second part, and to the Engineer of the Railroad Commission of Texas, and subject to the following terms and conditions:

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Section I. The party of the first part shall furnish to the party of the second part three

copies of plans showing locations of the signals, derails and switches to be operated and controlled by the said interlocking system; with three copies of dog sheets showing mechanical interlocking of the interlocking machine; with three copies of plans showing switch box wiring; with three copies of standard wiring plans; with three copies of plans of power circuits; with one framed copy of the manipulation chart and track diagram, and with one copy of locking sheet. 1089

Section II. The party of the first part agrees to complete the installation of said interlocking plant on or before the first day of January, 1904. 1090

Section III. The party of the first part agrees that it will replace promptly and at its own expense any part or parts of the apparatus and material furnished under this contract, which shall within one year from date of its installation fail to perform its proper function, because of any defect or defects in the construction or erection of such apparatus or material. 1091

Section IV. The party of the first part agrees to save the party of the second part harmless, and to relieve it from any responsibility for any damage, injury or loss suffered by any person or persons in the employ of the party of the first part while such person or persons are immediately engaged in installing the said apparatus. 1092

Section V. The party of the first part agrees that it will, at its own costs, from time to time and at all times, defend any and all suits that may be brought against the party of the second part, because of its purchase or use of the said

1093 interlocking apparatus and system, or any portion thereof, and will save, defend, keep harmless and indemnify said party of the second part from and against all suits or action that may be brought, and all claims or demands that may be preferred, and all costs and charges that may be incurred, and all damages and losses that may be suffered or sustained by it, because of any alleged infringement of any letters patent in the purchase or use of anything that shall be furnished under this contract.

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Section VI. The party of the second part agrees that it will, at its own expense and on two weeks' written notice from the party of the first part, furnish and put in place all necessary derails, switches and long derail and switch ties required, for the support of the switch operating mechanism, of the party of the first part.

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Section VII. The party of the second part agrees that it will, at its own expense, blast and remove all rocks that may interfere with the setting of any part of the apparatus of the party of the first part; that it will furnish free of cost, transportation over its own lines for the men and materials of the party of the first part.

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Section VIII. The party of the first part further agrees with the party of the second part that it will complete said plant within the time specified herein, to-wit: By January 1, 1904, and that said plant shall conform, in every particular, to the plans and specifications hereto attached, and to the plans filed with the Railroad Commission of Texas, and in the event that the

said plant shall not be completed and ready for operation by January 1, 1904, and completed under the plans and specifications hereto attached, and those filed with the Railroad Commission of Texas, and completed as to be accepted by the Railroad Commission of Texas, then and in that event, should any fines, penalties, or any damages be assessed against the party of the second part under any order or rule of the Railroad Commission of Texas, or any law of the State of Texas, the party of the first part agrees to pay any and all such fines, penalties or damages so assessed against the said party of the second part on account of the failure to have said plant completed and accepted by the Railroad Commission of Texas; and the party of the first part agrees to make and enter into a bond with the party of the second part to fully indemnify it against any and all claims, demands, loss or damage growing out of the failure of the party of the first part to fully carry out and perform this contract as herein specified, said bond to be in the sum of ten thousand dollars.

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Section IX. The party of the second part agrees to pay to the party of the first part the gross sum of sixteen thousand, six hundred and fifty dollars (\$16,650.00) for all that the party of the first part shall have furnished or done under this contract, and the payment shall be made as follows: said party of the first part shall operate said plant for sixty (60) days, at its own expense, and if same shall work perfectly and satisfactory in every particular during that period of time, and after being accepted by the Railroad Commission of Texas, then said sixteen thou-

1100

- 1101 sand, six hundred and fifty dollars (\$16,650.00) shall be paid in full to the party of the first part. In the event, however, that said plant shall not work satisfactory, or be accepted by the Railroad Commission of Texas, then and in that event, the party of the first part shall not be entitled to any part of said sum, but same shall be forfeited in full, and the work done or material furnished by
- 1102 the party of the first part shall also be forfeited to the party of the second part as liquidated damages for its failure to carry out the terms of this contract. It is understood and agreed that the Railway Company will build the tower.

This contract is executed in triplicate.

- 1103 IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed by their respective authorized officers, the day and year first above written.

PNEUMATIC SIGNAL COMPANY,

By.....,  
President.

- 1104 THE TEXAS & PACIFIC RAILWAY CO.,  
By L. S. THORNE,  
Vice President.

Seal of Pneumatic  
Signal Company.

PROPOSAL AND SPECIFICATIONS  
 FOR  
 PROPOSED INTERLOCKING AND SIG-  
 NALING  
 AT  
 TEXARKANA  
 ON THE TEXAS & PACIFIC RAILROAD.

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THE PNEUMATIC SIGNAL COMPANY  
 AGREES to supply all the labor and material,  
 except as hereinafter noted, necessary to erect  
 complete an interlocking plant in accordance  
 with attached plan, Nos. 1032-2, and the following  
 specifications, leaving the work to the satisfac-  
 tion of the officers of the Texas & Pacific Rail-  
 road. Material to be of the PNEUMATIC SIG-  
 NAL COMPANY'S design and manufacture, ex-  
 cept as may be hereinafter provided.

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SPECIFICATIONS.

INTERLOCKING PLANT.

The interlocking plant shall comprise the  
 tower, controlling machine, charging plant, bat-  
 teries, signals, signal machines, switch machines  
 and all other apparatus and material required  
 for the proper control and movement of number-  
 ed signals, derails, switches, movable point frogs  
 and crossing bars shown on attached plan num-  
 bered 1032-2.

1108

TOWER AND POWER HOUSE.

The combined interlocking tower and power  
 house to be of suitable sizes for housing and con-

- 1109 troling machines, charging plant and batteries and to be built in conformity with the standard plans of the Railroad Company, and at the cost of the Signal Company. Tower to be 12 x 20 feet in plan with operating floor 13 feet above rail.

#### CONTROLLING MACHINE.

- 1110 The controlling machine to be of Pneumatic Signal Company's All-Electric design provided with preliminary mechanical locking, having 46 active levers and 2 spare spaces for the proper control of 13 switches, 18 derails, 3 scotch blocks, 18 crossing bars and 35 signals. The controlling machine to be further provided with electro-magnetic devices designed to insure correspondence between the position of each lever of such machine and that of the signal switch or derail controlled by such lever before release of its mechanical locking can be effected; to have a neat, well finished slate connection board, having brass binding posts, each of which is to be provided with two knurled brass nuts for establishing and maintaining proper electrical connection between the wires to signals, switches and derails and the circuit closing device of the controlling machine. The machine to be inclosed in a case of thoroughly seasoned, well polished oak.
- 1111
- 1112

#### CHARGING PLANT.

The charging plant to consist of a 3-H. P. Fairbanks-Morse Gasoline Engine, mounted on a suitable foundation provided by the Signal Company in lower story of interlocking tower and of a two K. W. generator, together with a suitable switchboard, switches, Weston voltmeter and ammeter.

**MAIN BATTERY.****1113**

The main battery to consist of 55 standard 80 ampere hour Chloride Storage Cells to be placed in a suitable cupboard, each cell of battery to be provided with a sand tray and four glass insulators.

**SWITCH MACHINES.****1114**

The switch machines to consist of 1-H. P. 4 pole slow speed motor with gear wheels, alligator jaw attachment or switch and lock movement and pole charging switch released by the last  $\frac{1}{8}$ " of the stroke of locking bolt.

Switch machines to be secured with bolts to long ties with  $\frac{3}{8}$ " tie plate, 6" wide passing under rails, and switch movements bolted securely thereto, as in ordinary locking. The style 9 switch and lock movement of the M. S. & S. Co. to be used.

**1115****DETECTOR BARS.**

Each switch movement to be provided with and operate a detector bar. Detector bars to be of steel  $\frac{7}{16}$ " x  $2\frac{1}{4}$ " x 50' long, made in three parts and to be so applied that when the bar is normal, its top will be no more than  $\frac{3}{16}$ " below the top of rail and when in central position it will have a rise of 1" above top of rail. Where switches are so close together as not to admit of placing one 50' bar for protection of each switch a 50' bar will be applied on each side of switch,

**1116**

- 1117 extending 5' in advance of the switch point. A separate lever is provided for the fouling bars at each crossing.

#### HIGH SIGNALS AND SIGNAL FITTINGS.

- 1118 High signal arm, lamps and spectacle castings to conform with the standards of the Railroad Company. Signal posts to be of iron. High signal machines to consist of 1-6 H. P. motor with necessary gear wheels, and electric circuit controlling machine and to be placed in a suitable iron case. Signal to be pulled to the safety position by the motor and to be held in this position electrically, and when released the signal will return to danger by gravity. All ground pole signals to be locked in their normal position to prevent their being thrown by hand.
- 1119

#### DWARF SIGNALS AND MECHANISM.

- 1120 Dwarf signals are to be self-locking and to be mounted on suitable iron posts. The dwarf signal to be pulled to the safety position by a solenoid placed in the bottom of the iron posts and to be returned to its normal position by a suitable arrangement contained in the signal post, around the rod connecting the light casting shaft with the solenoid.

Back indication to be given between signal and tower by means of storage battery current when the signal arm shall have reached its horizontal position.

**WIRING, STAKES AND TRUNKING. 1121**

All wires to be of sufficient size to carry, without overheating, the current necessary for the work to be done. All wire to be used underground or in trunking to be of soft drawn copper, of a gauge suitable for its intended purpose, and to be insulated as follows:

No. 14 B. & S. to have 5-32" rubber insulation and 1 braid. **1122**

No. 12 B. & S. to have 6-32" rubber insulation and 1 braid.

No. 10 B. & S. to have 7-32" rubber insulation and 1 braid.

No. 8 B. & S. to have 8-32" rubber insulation and 1 braid. **1123**

Trunking used above ground to measure not less than 4" x 4" and to be supported on stakes 4"-3' 0" long, spaced not more than four feet apart.

Minimum size of underground trunking to be not less than 3" x 3" with groove not larger than 1" x 1". **1124**

Where trunking crosses the track, it is to be placed not less than 12" below top of the rail.

All trunking to be painted inside and outside.

Junction boxes to be placed as shown on plans.

**SPECIAL CIRCUIT REQUIREMENTS.**

The circuit of each home signal motor to be controlled by a normally open circuit breaker in

- 1125 switch box connected with the facing point derail in route of such signal.

The circuit of each facing point derail motor to be controlled by a normally closing circuit breaker connected with the correspondence home signal arm.

- 1126 The control and return wires of each distant signal to be aerial wires running from tower to such distant signal and to be provided with choke coil lighting arresters.

- 1127 All aerial wires used to be of hard drawn copper of a gauge not less than 12 B. & S. and to be provided with double braid weather-proof insulation. These wires to be fixed on insulators furnished in place by the Railroad Company, and to be strung by the Railroad Company, which will make all joints, with McIntyre sleeves well twisted and tapped. All wires to be furnished by Signal Company.

- 1128 All wire joints to be soldered and made with Okonite tape, covered with cotton tape. No wire joints to be made in trunking.

THE RAILROAD COMPANY AGREES to do all track work and have all switches, derails, movable point frogs, etc., ready to be connected; to do all preliminary grading and to prepare surface of ground where connections are to run; to do all blasting; to provide proper drainage; to furnish long ties in place; to furnish suitable rail braces; to provide permits for digging across the streets (when necessary in cities); to furnish

free transportation over its own lines for men, tools and material, both going and returning. Should the Railroad Company not be ready to put the plant into service when the contractor is ready, and in consequence the Contractor's men are withdrawn, then the expense of men returning and putting the plant into service shall be borne by the Railroad Company. 1120

All changes in location of tracks, signals, tower, etc., from the plans submitted herewith, requiring labor and material and included in these specifications, must be authorized in writing and may be charged for as an extra to this contract. 1130

THE PNEUMATIC SIGNAL COMPANY AGREES under these conditions to erect complete said apparatus, using good material, applying good workmanship and leave the apparatus in first-class working order for the sum of 1131

INTERLOCKING COMPLETE---	\$16,000.	
TOWER COMPLETE-----	650.	
	<hr/>	
	\$16,650.	1132

The Railroad Company to pay the contract price within thirty days after the completion and acceptance of the work.

PNEUMATIC SIGNAL COMPANY,

G. E. Ellis, Western Agent.

Dated, June 25th, 1903.

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## EXHIBIT 8.

## ORDER OF RAILROAD COMMISSION.

Office of the Railroad Commission of Texas,  
Austin, Texas, July 7th, 1904.

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Special Order approving, until October 1904, the operation of interlocking device No. 42, at the crossing of the T. & P. Ry., T. & Ft. S. Ry., and St. L. S. W. Ry., of Texas, at Texarkana, Texas.

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In the matter of the interlocking device ordered to be constructed by the Railroad Commission of Texas, in its special order of June 5th, 1902, at the crossings of the Texas & Pacific Railway, the Texarkana & Fort Smith Railway and the St. Louis Southwestern Railway of Texas, in Texarkana, Texas.

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And it appearing to this commission that plans for said device were submitted by the Railway Companies party to said crossings to it for approval and were by it approved on May 29th, 1903, and amended plans were approved on Nov. 2, 1903.

And it further appearing to this commission that the date for completing and putting into operation of said device was by it extended from June 30th, 1903, to such time thereafter as the said companies could reasonably complete said device.

And it further appearing, from the report of the engineer of this commission of date of July

5th, 1904, who was duly authorized to inspect and report upon the character and condition of said device, that same has not been entirely completed in accordance with the regulations of this commission governing in such matters, and that the operation of said device should only be authorized temporarily and conditionally and that further construction and additions to the present apparatus, and machinery should be required to be made and daily reports filed with said commission showing the operation of said device, the failures, if any, of its parts, &c., &c., &c.,

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It is therefore ordered by the Railroad Commission of Texas that the said interlocking device at Texarkana, Texas, be and the same is hereby approved temporarily and its operation is hereby authorized conditionally until not after October 1904, and the said Companies party to this (*said*) device are hereby ordered to complete the following construction and improvements by or before October 1904, and to obey the following requirements, in accordance with the rules, regulations and orders of this commission, governing in such matters, to-wit:

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1. All switches and derails must be provided with switch boxes.
2. All distant signals must have the wires carrying the current operating them, loop through their home signals, the latter to be provided with proper circuit breakers.
3. All facing point switches between the home and distant signals must be provided with switch

1141 boxes, through which the wires charged with the currents which operate the distant signals must be carried.

1142 4. Electric indicators must be provided, placed not less than 3000 feet from the distant signal, which will warn the towerman of the approach of trains on West approaches of the T. C. Branch of the T. & P. Ry. and St. L. S. W. Ry. of T., and the South approaches of the T. & P. Ry. and T. & Ft. S. Ry., provided, however, that in case telephone connection is established between said towerman and the towerman at the T. & P. and T. & Ft. S. interlocker near Sulpher, the two last mentioned indicators, will not be required.

1143 5. Telephone connection must be established between the towerman and all depots and yard offices in Texarkana, of the Railways party to the crossing.

6. Guard rails must be provided not less than 100 feet in length for all main line derails and 300 feet in length on all high embankments.

1144 7. All railroad crossings must be maintained in first-class condition and placed on suitable foundations of permanent character.

8. The Company in charge of the operation of said device must file with this commission from time to time copies of the daily reports of the towerman which shall set forth in detail the daily condition of the apparatus and machinery of said device, the failure in the working of its parts, &c., duly certified to by the proper official of the Company.

And it is further ordered that upon the completion of said construction, additions and improvements noted above and upon the safe and successful operation, to the satisfaction of this commission, of the said device, as may be shown by the said daily reports filed, then this commission will after further inspection on or before October, 1904, issue its order approving finally and authorizing permanently the operation of said device; otherwise said companies party to said crossing will be required to construct another device of character and design to be approved by this commission, which shall be first-class in every respect.

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And it is further ordered, that until a further order by this commission, all trains shall be required to pass through the limits of said device under full control and at speed not greater than 10 miles per hour.

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(Signed) L. J. STOREY, Chairman.

(Signed) ALLISON MAYFIELD,  
Commissioner.

Attest:

(Signed) E. R. McLean,  
Secretary.

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## EXHIBIT 3.

IN DEPOSITION OF R. A. THOMPSON.

Austin, Texas, July 5th, 1904.

To the Honorable,  
The Railroad Commission of Texas,  
Austin, Texas.

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Dear Sirs:—

In your special order of June 5th, 1902, you directed the construction of an interlocking device at the crossings of the Texas & Pacific Railway, Texarkana & Ft. Smith Railway and St. Louis South-western Railway of Texas in Texarkana, Texas, to be completed and put into operation under your permit on or before June 30th, 1903. In your letter to T. J. Freeman, Gen'l Att'y T. & P. Ry. Co., of June 2, 1903, the said date for completion was extended to January 1st, 1904. Plans for said device were approved by you May 29, 1903, and amended plans approved November 2, 1903.

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On June 23, 1904, you were advised by wire from Mr. J. W. Everman, Ass't. Gen'l. Sup't. T. & P. Ry. Co., that said device was completed and ready for your inspection, and your approval of the same was requested. In accordance with your instructions, I was in Texarkana on June 27-28, 1904, for the purpose of making the said inspection requested, and to determine whether or not said device was ready for the safe operation of trains.

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I found the said device in operation by trains, and was advised that same had been in operation

for several months, conditionally. The device was constructed by the Pneumatic Signal Co., of Rochester, N. Y., and is an all electric machine of late invention. This was the first plant that had been constructed by the said company of its kind and the system was in a more or less experimental stage. I am advised that the provisions of the contract between the Railroad Companies and the Signal Company for the construction, specified that the plant was to remain in successful operation for some months, and in addition, be fully approved by the Commission before its final acceptance by the Companies. This fact explains the reason for its being operated by the Signal Company for some time before an inspection by the Commission was requested, in order that its successful working might be demonstrated.

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The functions of the device are as follows: divided between the several Companies party to the crossings protected:

Railroad	Switches	Derrails	Scotch Blocks	Signals Home	Distant	Dwarf	Total Functions
T. & P. Ry..	1	5	0	6	2	0	14
T. & Ft.----							
Smith Ry. --	4	7	2	8	1	4	26
St. L. S. W..							
Ry. of T.----	8	7	1	6	1	6	29
<b>Total</b>	<b>13</b>	<b>19</b>	<b>3</b>	<b>20</b>	<b>4</b>	<b>10</b>	<b>69</b>

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In addition to the levers operating the above functions there are four (4) levers in the machine

1157 used to operate track circuits, which were installed in lieu of crossing bars ordered by you at the crossing. These track circuits through the locking of the levers in the machine which control them, prevent the setting up of opposing routes while engines or cars are on the crossings, or within the limits of the circuits. While they are not so satisfactory as some that have been installed on other interlockers in this state, in that

1158 they do not give as extended protection, they are more serviceable than crossing bars and should be approved.

As was stated above, the system of interlocking installed at the crossings in question is new and practically untried; while in my opinion some of its features of working are admirable and satisfactory, others appear yet to be in an embryonic stage, subject to considerable improvement in the future.

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I will not attempt a technical discussion of the merits and demerits of the system which in my opinion in several points might be greatly improved, but conclude with some recommendations and suggestions for your consideration, before

1160 finally approving the device and permanently authorizing its operation.

1st. Switch boxes, or some device with similar functions should be provided in connection with all derails and switches, to take the place of bolt locks specified in your circular No. 1597, rule 20. in order that there should be no possibility of clearing the signals governing same by the tower man before the points have moved to final posi-

tion, which may at present be done by plugging the lever operating the signals in the machine. By the use of the switch box it is absolutely necessary that the points be in safe position before the electric circuit operating the signals can be completed. There are thirty-two switches and derails which require switch boxes. 1161

2nd. Circuit breakers should be placed on all home signals through which the wires carry the electric current to the distant signals should be looped. This makes it physically impossible for the operator to clear the distant signals until the home signals affecting them have been cleared, by manipulation of the levers operating them in the machine. 1162

3rd. All facing point switches between the home and distant signals should be provided with switch boxes in order that their safe position may be assumed before the signal can be cleared. 1163

4th. Electric indicators should be required on the west approaches of the T. C. Branch, T. & P. Ry., and St. L. S. W. Ry. of T. and on the south approaches of the T. & P. Ry. and T. & Ft. S. Ry., placed not less than three thousand feet from the distant signal. 1164

If a telephone connection is established with the interlocking tower at the T. & P. Ry., T. & Ft. S. Ry. crossing near Sulphur, a couple of miles south of Texarkana, the two last noted indicators will not be necessary. Telephone connection should be established with the several yard offices and the depots of the railways in order that

1165 the towerman may be advised of the movement of trains and thereby increase the efficiency of the interlocking.

5th. Guard rails should be required for all main line derails not less than one hundred feet in length, which should be increased to three hundred feet on high embankments.

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6th. All railroad crossings within the interlocking should be required to be placed upon suitable foundations of a permanent character in order that trains may run through interlocking at high speed with safety. These crossings, particularly those on the T. & Ft. S. Ry., are at present not properly maintained and are unsafe.

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I would respectfully recommend that you incorporate the above suggestions in your order authorizing the operation of the device, and I would further respectfully recommend that your order authorizing said operation be conditional on the successful working of the plant for at least three (3) months hereafter. To this end you should require that copies of the daily reports of the tower man be filed with you beginning July 1st, 1904, upon which should be noted in detail any failures in the working of the machinery and parts and causes of such failure, said reports to be certified to you by the proper officers of the company in charge of the operation of the device. In said order it should be clearly stated that only the temporary operation of the device is by you approved and that if after three months from date, the orders of the Commission have been complied with in the matters outlined above in

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recommendations 1-5, and the reports filed indicate that the device can be permanently operated in a safe manner and that it is first class in every respect, then after thorough inspection of the device by you, to ascertain whether or not your orders have been complied with and the device placed in first class working order and condition, you will then issue your order permanently approving said device and authorizing its operation hereafter, provided your rules, orders and regulations governing such matters are complied with.

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I would further respectfully recommend that your order require that said Companies operate all trains through the limits of said device under full control and at a speed of not more than ten miles per hour.

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Respectfully submitted,

(Signed) R. A. THOMPSON,  
Engineer.

“EXHIBIT 4.”

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R. A. THOMPSON'S DEPOSITION.

Office of the Railroad Commission of Texas.  
Austin, Texas, Aug. 9, 1907.

Honorable Railroad Commission of Texas,  
Austin, Texas.

Dear Sirs:—

In your Special Order of June 5, 1902, you directed the Texas & Pacific Ry., the Texarkana &

1173 Ft. Smith Ry., and the St. Louis Southwestern Ry., of Texas to construct and put in operation under your permit, on or before June 30, 1903, an interlocking device at the crossing of said rail-ways in Texarkana, Texas. The date for the completion of said device was, subsequently, extended by order of the commission. Plans of same were approved by you on May 29, 1903.

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On June 23, 1904, upon application of the Texas & Pacific Ry. Co., which company had the construction of said device in its charge, you directed me to make an inspection of said device, which had been reported to you as being complete and ready for operation. Said device was inspected by me on June 27 and 28, 1904, and on July 5th, 1904, I made a report to you recom-

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mending that you conditionally approve the placing of the service and operation of said device. Certain recommendations were made in my said report of July 5, 1904, as to additional features and construction that were to be added in order to render same safe for the operation of the trains.

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In your order of July 7th, 1904, you approved my said report and authorizing the placing of the said device in operation temporarily and conditionally and directed the providing for certain additional features and safe guards, looking to the protection of trains passing over said crossings.

This interlocking device has been in continuous operation since July 7, 1904, as shown by the monthly reports filed by the Texas & Pacific Ry.

Co., which has its operation and maintenance in charge. On July 20th, 1907, Mr. T. J. Freeman, Solicitor of the T. & P. Ry., made application for another inspection of this interlocking device in order to determine whether or not it would be finally approved by you and its further operation authorized. 1177

It appears in the contract for the construction of this device, made by the Railroad Companies parties thereto, with Pneumatic Signal Company, that the final payment of same shall be made only after it had been approved by the Railroad Commission of Texas and its operation permanently authorized. 1178

Acting in accordance with your instructions, on July 31, 1907, I made a complete and detailed inspection of this device for the purpose of advising you whether or not, in my opinion, same had been finally completed in accordance with your rules and regulations governing in such matters, and whether or not same was safe for the operation of trains and should be approved by you finally. I respectfully beg to advise you as follows: 1179

1st: The conditions imposed by your order of July 7, 1904, have only been partially carried out, but the features of your order which have not been completed would not now be considered material to the questions of final approval or rejection of this plant. 1180

2nd. An inspection of the monthly reports filed by the Texas & Pacific Ry. with the commis-

1181 sion shows that during the year ending July 30, 1907, there have been 545 failures of the parts and functions of the device to properly operate an average of 1.5 failure per day. While a great many of these failures have not been serious, such as would endanger the operation of trains, they have had the effect of impressing the operators with the opinion that the plant was unsafe and insecure and it is my opinion that the safety with which the plant has been operated on the part of the employees has been due to the exercise of great vigilance and attention.

1182 3rd. It has been necessary that the company maintain on the ground continuously a repairer and helper for outside work in addition to the usual operators in the tower. The repair man is continuously engaged in the repair of broken parts and examination and repair of the functions that are continually failing.

1183 4th. The electric circuits ordered by the commission for the protection of the crossings failed to perform their functions from the beginning of the operation of the plant and I am advised have virtually been out of service since July 1, 1905.

1184 5th. The wiring in the entire plant, which was defective at the beginning is in very bad condition at the present time, some being torn up and exposed above ground over practically the entire plant; the insulation is decayed and the wires corroded to the extent that the exposed wires often fuse together, thus short circuiting the functions and giving false indications. These

also, conduce to create induced currents on the wires, causing certain functions to fail to operate properly. These induced currents affect particularly the signals, which are the vital features of the interlocking device. It becomes necessary for the operator to often force indications in order to annul the effect of these induced currents, which is a dangerous practice and may result in serious accident, particularly at night when the signal cannot be seen by the tower man. I am advised by the tower men that this condition obtains to a greater extent in wet weather when the insulation on the wires become effected, permitting great leakage of the current, sometimes putting the device out of service.

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6th. The machinery operating the switches and derails often fails to work and parts break frequently. The worse feature of this is that the manufacture of this kind of machinery has been suspended and it is now practically impossible for the railroad company to secure parts to replace those that are broken. Up to this time the repair men have been able to secure parts from certain machines that were taken out of the original layout when same was revised in accordance with your approval, but these are now exhausted and any parts hereafter broken can only be replaced by the railway company having them made under special order.

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7th. The motors operating the signals are a weak feature. They appear to be too light. Some 12 or 15 of their fields having been burned out; the signals operate in some cases very slowly. The clutches holding the signals clearing often do not

1189 release when the levers are put normal, indicating probable magnetization by the induced currents on the wires. Considerable trouble in the operation of the signal has been had from this source.

1190 8th. The detector bars throughout the plant are in very bad adjustment and some of the railroad crossings are in bad repair.

1191 9th. The plant is, in general, in a bad condition, and needs thorough overhauling and renewal of many of the parts. The foundations of the machines operating derails and switches should be renewed and more rigid attachments between the timbers effected. The wiring throughout the entire plant should be overhauled and renewed and placed in pipe conduits or otherwise secured from the corroding action of the cinders and ballast. The electric circuits should be overhauled and placed in service in accordance with the original plans.

1192 In conclusion: The commission would not, in my opinion, be justified in approving this device at Texarkana under the present conditions of the plant. As stated above failure of the functions to properly operate are numerous and liable, at any time, to promote serious accident. While accidents in the past have been comparatively few on account of the failure on the part of some of the functions to operate properly, in my opinion that is due to the extreme care and vigilance exercised by the operator and repair men in charge of the device. The probability is that in the future this plant will continue to deteriorate

more rapidly and the failures become more numerous and more dangerous. The fact that the railroad company is unable to secure parts from the manufacturers to replace broken machinery is very serious and will result in spiking up of the derails and switches and the putting of signals out of service until parts can be secured by special order.

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This device was constructed by the Pneumatic Signal Company in accordance with a system at that time entirely new. It was in the nature of an experiment and I am advised that this is the largest and most important machine of its kind built. Several other devices that were built on this plan, in other states, I am advised have been put out of service and it is the fact that the manufacture of this device has been suspended by the company on account of the superiority of other systems and because same is generally disapproved by most of the signal engineers.

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The Pneumatic Signal Company has recently been absorbed by the former Taylor Signal Co., now the General Railway Signal Co., which company has in successful operation a number of electric interlocking devices in this state. I have heretofore advised and it is my opinion that the present company which has succeeded to the property and rights of the former Pneumatic Signal Company should take in charge the thorough overhauling and rebuilding of the Texarkana interlocking device and reconstruct same, using the system employed by the former Taylor Signal Company. A great many of the parts and machinery of the device now on the ground

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1197 could be used in this reconstruction and would not prove a total loss to the Signal Company. It is my opinion that this is the only way that a first class interlocking device can be secured at this point. One that would be safe for the operations of trains and one that the Railroad Commission would be warranted in approving.

1198 In the adjustment of and reconstruction contract, the railway companies should be liberal with the Signal Company. I am advised that the railway companies have, up to this date, made no payments to the Signal Company for the constructions of this plant and the fact that the former have been using the plant for several years should make them generous with the Signal Company in making a new contract.

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So far as the present layout of the plant is concerned, it is first class and gives good service and protection to trains of the railway companies when operated correctly. This is a very important station, covering a number of crossings, which in my opinion, should be protected by an interlocking device in order to facilitate the safe and economic moving of trains over them. I do not believe that it is practicable to reconstruct the present device upon the system now used in its operation so as to secure what might be considered a first class plant, entirely safe for the operation of trains.

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I, therefore, respectfully recommend that the Railroad Commission finally disapprove this device and direct the railroad companies, parties thereto to immediately proceed with the con-

struction and installation of a device that will be first class in every respect, same to be completed and in operation within one year after this date. In the meanwhile, to approve the operation of the present device until a new one can be installed and put into service. 1201

Respectfully submitted,

R. A. THOMPSON, 1202  
*Engineer.*

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EXHIBIT 4.

IN DEPOSITION OF E. R. McLEAN.

Office of Railroad Commission of Texas. 1203

Austin, Texas, Aug. 12, 1907.

Special Order:

Disapproving interlocking device at the crossings of the Texarkana & Ft. Smith Ry., the Texas & Pacific Ry., and the St. Louis & Southwestern Ry. of Texas, at Texarkana. 1204

In the matter of the interlocking device ordered to be constructed by the Railroad Commission of Texas in the Special Order of June 5, 1902, at the crossings of the Texarkana and Ft. Smith Ry., the Texas & Pacific Ry., and the St. Louis & Southwestern Ry. of Texas, at Texarkana.

And it appearing to this Commission that said device was constructed and its operation author-

1205 ized temporarily and said device was approved conditionally in the order of this Commission of date July 7, 1904; it being understood that the order of final approval should depend upon whether or not said interlocking device operated safely and successfully thereafter to the satisfaction of this Commission.

1206 And it appearing from the Report of the Engineer of this Commission of date Aug. 9, 1907, that said device has never since its completion operated safely and satisfactorily, that the system upon which the same was constructed was in the nature of an experiment; that the construction of a device in accordance with this system has since been suspended by the Signal Company; and that new machines and parts of machines operating the functions of the interlocking device cannot be now secured for repair, renewal, etc.; that the device at this time is, in general, in a very bad state of repair; the wiring of the electric circuits being practically out of service and the entire plant in need of a thorough overhauling.

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1208 And it further appearing from said Report that said device is not in first class condition at this time; that it has not heretofore, and therefore, will not hereafter, operate in a manner that will be first class in every respect and entirely safe for the operation of trains of said railroad companies;

It is, therefore, ordered by the Railroad Commission of Texas that said interlocking device at Texarkana, Texas, be and the same is hereby finally disapproved;

And it is further ordered that the said railroad companies party to the said crossings, shall at once proceed with the construction, of an interlocking device which shall be operated by electricity or compressed air, which shall be first class in every respect; same to be completed and ready for operation under order of this commission one year after the date of this order;

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And it is further ordered that pending the completion and putting into operation of said new interlocking device to be constructed, said railway companies are hereby authorized to operate the said device now at said crossings in so far as same can be safely operated for the movement of their trains; it being understood that the said railway companies have the approval of this Commission to use whatever parts and machinery of the present device that can be used in the construction of said new device.

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ALLISON MAYFIELD,  
Chairman.

L. J. STORY,  
O. B. COLQUITT,  
Commissioners.

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Attest:

E. R. McLEAN, Secretary.

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**EXHIBIT 10.**10  
T. R. S.

Railroad Commission of Texas.

Austin, November 14, 1904.

1214 Maj. B. S. Wathen,  
Chief Engineer, Tex. & Pac. Ry.,  
Dallas, Texas.

Dear sir:—

1215 On November 12th, I was in Texarkana, Texas, in company of Mr. O. H. Lang, your Assistant Engineer, and Mr. Wuerpel, the agent of the Pneumatic Signal Co., I made an inspection of the interlocking plant constructed by the Pneumatic Signal Co., at the crossing of the T. & P. Ry., St. S. W. Ry. of Texas, and T. & Ft. S. Ry., which had been temporarily and conditionally approved by the Railroad Commission in its order of July 7, 1904.

1216 I had made a previous inspection of this plant on June 28, 1904, and recommended that the Commission approve the plant conditionally; that it require certain improvements to be made; and that it require the daily reports of the tower men to be filed with it for some three months before the question of final approval should be taken up. Said order stated that if it should appear to the Commission from the daily reports and upon further inspection after October, 1904, that the plant was not satisfactory and could not be safely operated the "said companies party to the crossings would be required to construct another device of character and design to be approved by the

Commission, which shall be first class in every respect." 1217

At the date of my first inspection I found the plant being operated and the daily reports of the tower men show that it has been in continual operation ever since. The reports show that there have been numerous and increasing failures of parts of the machinery operating the several functions of the plant, which although it might be held that they are on the side of safety, demonstrate that the present design of the general features of the system and workmanship and materials of which it is composed as shown in the plant under consideration, are not first class in every respect and up to the modern standards of interlocking. I am free to admit that some of the features of the system appear to me to be excellent, and I think that perhaps some of the apparent failures in the adaptation of same are due largely to defective workmanship and materials and crude application of principles. It is likely possible to ultimately perfect a machine and apparatus along the lines laid out for the present one that will perform successfully the functions of a first class interlocking device, but the apparatus now installed is but one of the many stages of experiment that must be gone through. 1218  
1219  
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In a number of points the plant, I consider, fails to come up to the requirements of the Commission as I interpret them, and should I at this time be required to make a formal report to the Commission upon the condition of same I would recommend that it be not approved and the above quoted clause in the order of July 7th, be enforced.

- 1221 The principal points of objection that I would set forth in opposition to its approval would be chiefly the general bad character of the workmanship and materials, particularly outside of the tower and the machinery therein; the fact that all dwarf signals can be cleared from danger position by hand, after which some remain cleared; the practical failure and worthlessness of all track circuits; the failure of selectors and other machinery of high signals to work properly; the failure of functions on account of wearing out of the underground cables and the shortcircuiting of same; burning out of contacts and arcing of current in indication boxes, etc. The rapid deterioration of all machinery and materials without the tower is evident.
- 1222
- 1223 I would therefore suggest that at this stage your company make some compromise agreement with the Signal Co. looking to the installation of a system that has been approved and is beyond the experimental stage; from Mr. Lang's and my own observations as to the practical workings of the plant, it appears that the layout can be revised and several functions eliminated to the advantage of operation and decreased cost of maintenance.
- 1224

It is thought best at this time, unless you so desire, that I make no formal report to the Commission signifying my disapproval of the Texarkana interlocking, considering that it might perhaps be advantageous to both the railroad company and the signal company. Extension of time in which to install a plant that will be approved in every respect can be secured from the Commission and

I shall be glad to make whatever recommendations along this line that you may consider necessary.

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Very truly yours,

(Signed)

R. A. THOMPSON,  
Engr.

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**EXHIBIT 11.**

C. H. Chamberlin,  
Assistant Chief Engineer,

Dallas, Tex. Oct. 8, '03.

Mr. G. E. Ellis,  
Western Agent, Pneumatic Signal Co.,  
Chicago.

1227

Dear sir:—

I have gone over the numbered plans and locking sheet for Texarkana Plant. You should have sent a manipulation sheet also to enable us to check more intelligently. As far as I can see, the numbering and locking seems to be all right; but your Company must not take this O. K. in a sense of relieving them of all future liability, should the machine fail to lock the proper routes.

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Please send me a manipulation sheet.

Yours truly,

S'd OTTO H. LANG.

11  
T. R. S.

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## EXHIBIT 12.

## THE TEXAS &amp; PACIFIC RAILWAY CO.

Office of Chief Engineer.

B. S. Wathen,  
Chief Engineer,C. H. Chamberlin,  
Assistant Chief Engineer.

1230

Dallas, Tex. Oct. 29, 1903.

Mr. R. A. Thompson,  
State Engineer, Texas R. R. Commission.  
Austin, Texas.

Dear sir:—

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I am sending herewith two prints of Texarkana interlocker, showing a change marked in red that I intend to make, provided you approve of it. The second track of the St. L. & S. W. is a side-track, and think dwarf signals alright. The additional de-rail would help traffic a great deal. Thanking you in advance, I remain

Yours truly,

S'd O. H. LANG.

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T. R. S.

## EXHIBIT 13.

1233

## THE TEXAS &amp; PACIFIC RAILWAY CO.

Office of Chief Engineer.

B. S. Wathen,  
Chief Engineer.

C. H. Chamberlin,  
Assistant Chief Engineer.

1234

Dallas, Tex., Nov. 3, '03.

Mr. G. E. Ellis,  
Signal Engineer, Pneumatic Signal Co.,  
Chicago, Ill.,

Dear sir:—

I have permission from the Railroad Commission for the following changes: 1st. The arm poles 9 & 10 of our original plans to be replaced by dwarf signals. 2d. Signal 13 on one arm pole between Cotton Belt Main Line and siding to be replaced by bracket pole. (Doll arm on straight pole.) 3d. Additional derail on Cotton Belt Siding, (middle track) protecting St. L. & S. W. and Sulphur Cutoff crossing placed 350 feet west of crossing. 4th. About 49 & 50 the Commission suggested to place the post two arm signal north of siding in case there should not be room enough between siding and main line.

1235

1236

This for your information and authority to make changes.

The signal numbers refer to the plan that we sent you inviting you to bid.

Yours truly,

S'd O. H. LANG.

B  
T. R. G.

1237

## EXHIBIT 14.

## THE TEXAS &amp; PACIFIC RAILWAY CO.

Office of Chief Engineer.

B. S. Wathen,  
Chief Engineer.

1238

C. H. Chamberlin,  
Assistant Chief Engineer.

Dallas, Tex., Nov. 14, '03.

Mr. G. E. Ellis,  
Western Agent, Pneumatic Signal Co.,  
Chicago, Ill.,

Dear sir:—

1239

It is necessary for us to know when you will start work at Texarkana. The three weeks are pretty well over that you had set as a limit when here. If you are going to have a delay, it will be better to both of us to come out candidly and acknowledge the corn. I will try all I can to help you out, and get an extension, but please be open about the matter, and let me know just how things are standing. This is friendly advice to you.

1240

Hope you will act accordingly.

Yours truly,

S'd O. H. LANG.

14

T. R. S.

## EXHIBIT 15.

1241

## THE TEXAS &amp; PACIFIC RAILWAY CO.

Office of Chief Engineer.

B. S. Wathen,

Chief Engineer.

C. H. Chamberlin,

Assistant Chief Engineer.

1242

Dallas, Texas, Dec. 17, 1903.

Mr. G. E. Ellis,

Western Agent, Pneumatic Signal Co.,

Chicago, Ill.,

Dear sir:—

Answering yours of the 15th will say that we will use distant signals on Cotton Belt, but work home signals on left hand side at proper distance.

1243

Mr. Carothers advises that he has enough single poles to make the change and hope he is correct.

I will ask to have an extension of time granted today. Everything is moving nicely. Thanks for the pedometer.

Yours truly,

1244

S'd O. H. LANG.

15

T. R. G.

1245

## EXHIBIT 16.

## THE TEXAS &amp; PACIFIC RAILWAY CO.

Office of Chief Engineer.

B. S. Wathen,  
Chief Engineer.

1246

C. H. Chamberlin,  
Assistant Chief Engineer.

Dallas, Texas, January 9, 1904.

Mr. G. E. Ellis,  
Western Mgr., Pneumatic Signal Co.,  
Chicago, Ill.,

Dear sir:—

1247

In looking over plan of Texarkana I find that Switch for crossing 15" x 16" x 17' are going to give some trouble for engines. There is a good deal of switching done there and those switches without signals might cause trouble. Will you please look into the matter with a view of supplying this switch with dwarfs which would indicate the danger and route to engineer.

Yours truly,

1248

S'd O. H. LANG.

All is going on nicely so far.

16

T. R. G.

## EXHIBIT 17

1240

Dec. 24, 1904.

Mr. O. T. Lang,  
Asst. Ch. Engr., T. & P.,  
Dallas, Tex.

Dear sir:—

Referring to the writer's recent visit to Dallas and Texarkana, and so that you may have my understanding of the result of that visit, I beg to advise you on arriving at the plant at Texarkana, our representatives found that the plant at that place was not working in a satisfactory manner, and that a great many of the failures were due to the lack of maintenance, and as I assured you verbally on the ground, it is the intention of this Company to put this plant in good, first-class shape so that it will give to you as good service as any interlocking plant could give at that particular point.

1250

1251

In connection with this matter, we ask the attention of yourself and the representatives of the other Roads to the fact that the tracks and switches on the Cotton Belt Road are in a very unsatisfactory condition, and it is our understanding that these will be put in good shape at once and sufficient heavy rail put down to carry the engines over them in the proper manner and without injury to the interlocking plant.

1252

We also understand that the R. R. Companies interested will put in such additional rail as may be necessary to take away from the crossing frogs the compromise joints where the insulations are to go for the track circuit. Unless this is done it

1253 will be absolutely impossible for us to agree that the track circuit will continue to give good satisfaction.

If the above is done, then, so soon as this Company has got the plant in good working shape, the failures at this point should practically cease, and you should immediately begin to get good results from the operation of same.

1254

Even if the above is done, however, you will not get as much satisfaction from the interlocking at this crossing as might be done if the tracks were rearranged as you suggest. I also feel that considerable advantage might be gained if the annunciators spoken of on the ground were put in for the information of the tower man.

1255

We have, as you know sent down a new generator which has been installed, and I believe will result in giving satisfactory service.

I would also ask your further consideration of the suggestion that you made while on the ground of having the power required for the operation of this plant purchased from the State Electric Light Plant and also as to the advisability of having the signals lighted by electric light.

1256

I think it would be very wise to make the above changes, not that they may be absolutely necessary for the proper working of the plant but if they are made you will get better results and by having the signals lighted by electricity you will do away with one of the causes of so much of the

repairman's time being expended outside of actual repair work. 1257

There is one other matter that I would like to bring to your attention and that is, the fact that the wires at this place were put underground. As you know these wires were put underground by the request of the R. R. Co., and we do not feel that failures on account of this should be charged against the plant. The large number of cinders at this place will make it that the life of these wires will be very much shorter than if laid on top of the ground. I do not know in view of the peculiarity of the state laws of Texas that the arrangement of these wires can be avoided at the same time feel it only fair to the plant that we should call your attention to this matter. 1258

In conclusion, I would respectfully ask if there is anything you know of that should be done in addition to the above to make the plant satisfactory, and if, after these are done and the plant is giving good service there is anything you *now* know of that will prevent the acceptance of the interlocking by yourselves and the R. R. Commissioner of the State. 1259

Thanking you sincerely for your kindness in this matter. 1260

Yours truly,

GENERAL RAILWAY SIGNAL COMPANY,

(Signed.) J. T. Cade,  
Mgr. Sales & Installations.

1261

## EXHIBIT 18.

Dallas, Texas, March 15th, 1905.

Mr. M. Wuerpel,  
Engineer Sales & Inst. G. R. S. Co.  
Chicago.

Dear sir:—

1262 Yours of the 11th inst. at hand. We took up the matter of changes with the Cotton Belt several times and received assurance that they will make the changes. The trouble is with the failure to get track material.

1263 The Rail Road Commission asked us about the plant and wanted an explanation in regard the plant. They asserted that unless the plant would give better service in the near future something would have to be done. I wrote Thompson that the R. Rs. would make improvements as soon as they are in possession of the track materials. In regard to gasoline engine will say that we do not consider that matter settled at all in regard of responsibility of the R. R. Co. Our Superintendent says some changes were made by your man to which the accident can be directly attributed.

1264

Yours truly,

OTTO H. LANG.

## EXHIBIT 19.

1265

February 14, 1905.

T. & P. R'y.,  
 Texarkana, Texas.  
 Mr. O. H. Lang,  
 Ass't. Engineer, T. & P. R'y.,  
 Dallas, Texas.

1266

Dear sir:—

In regard to the work at Texarkana, we wish to advise that we have about completed all of the work which it was agreed we should do on the occasion of visit of Mr. Cade, Mr. Dodgson and the writer to Texarkana, in December, and we have further had two men at work since January 1st, overhauling the work generally. You will recall that considerable work was to be done by the railroad companies towards putting the tracks in good shape. Nothing, however, has been done in this direction. It will be impossible for us to do much more at this point until some steps are taken by the railroad companies to put their work in good shape, and we will be compelled to withdraw our men from this plant at an early date.

1267

1268

From the daily reports which we have received during the past month, it appears that the plant is giving considerably better service. The service, however, will never be what it should unless the tracks on all roads are put in good shape.

We have heard nothing further from you in regard to the proposed changes at this point, and would be pleased to know if anything will be done in the near future relative to this matter. Some-

- 1269 time since we asked you for plans showing these proposed changes, but have as yet not received them. If it is the intention to make the alterations, we should have plans in order to make estimate of cost. We understand that the matter is being held up by the Cotton Belt people in the hope that the plant will be thrown out of service and that they therefore do not wish to incur any additional expense.
- 1270

We will state that something must be definitely decided upon in regard to settling the whole question very shortly, and would like to have a statement from you advising what it is proposed to do in the matter. We feel that we cannot go to any further expense at this point unless we have the co-operation of the railroads interested.

1271

Kindly address your reply to our Buffalo office.

Yours truly,

M. WUERPEL,  
Engineer Sales & Inst.

FAD #2 MW

1272

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EXHIBIT 20

March 11, 1905.

T. & P. R'y.,  
Texarkana, Tex.  
Mr. O. H. Lang,  
Assistant Engineer, T. & P. R'y.,  
Dallas, Tex.

Dear sir:—

You will kindly refer to our letter of February 14th, in regard to the work at Texarkana, to

which we have received no reply from you. As stated in letter referred to, we have completed all the work which we were to do on our part towards putting the plant in shape, and you will note from towerman's report that the plant is in very good working condition. We are, therefore, desirous of taking our men away, unless you are figuring on going ahead with the changes which have been suggested. We have information that the K. C. S. R'y are installing 75# rail on their line and have reached a point within 20 miles of Texarkana and expect to be at that point soon and change all rails and points within limits of the interlocking. We also have advice that the Cotton Belt engineers have been surveying and laying out tracks within limits of the plant preparatory to making the changes which it was proposed to make when Mr. Cade, Mr. Dodgson and the writer were in Texarkana last. If this is the case, will you not kindly send us the copies of the plan showing the proposed changes so that we may be prepared, if called upon, to make same and thus be enabled to get out the material promptly.

1273

1274

1275

On the 14th of February we also wrote you relative to bursting of the cylinder on the gasoline engine. We have heard nothing from you in regard to this, but our investigation shows that the cylinder was damaged account of water freezing in the jacket. The explanation given by our man Walshe being that while the water was supposedly drawn off, on account of not having proper vent, a certain amount of water remained in the cylinder and during the exceptionally cold snap, of course, froze. Walshe advises that Mr.

1276

- 1277 Ayres has been seriously considering the advisability of installing a motor generator, the current for the motor to be supplied by the City Lighting Co., but he states that nothing has been definitely decided. This matter is, of course, purely up to the Railroad Company, as this company will not stand any expense for installing motor generator set. Would thank you to advise us immediately upon receipt of this letter what it is your further intention to do at this plant. Unless we hear from you, we shall be put to the necessity of taking our men away from Texarkana.
- 1278

Yours truly,

M. WUERPEL,  
Engineer Sales & Inst.

1279 MW FAD #2

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EXHIBIT 21.

Dallas, Texas, April 4th, 1905.

1280 General Railway Signal Co.,  
Chicago.

Gentlemen:

I send you herewith plan of proposed changes in Texarkana plant. My understanding is that the changes are not quite made. Please let me know what you propose to do, regards cost.

Yours truly,

OTTO H. LANG.

## EXHIBIT 22.

1281

Buffalo, N. Y., Feb. 7, 1906.

T. & P. R'y.,  
 Texarkana, Tex.  
 Mr. O. H. Lang,  
 Ass't. Chief Engineer,  
 T. & P. R'y.,  
 Dallas, Texas.

1282

Dear Sir:

Referring to the matter of changes in the Texarkana plant, which matter we had up with Mr. Wathen some time ago.

We have shipped quite a lot of material to Texarkana for these changes, and we are sending you herewith copy of plan #1032-4, on which is shown, in red and yellow, changes which we believe meet the latest requirements. We are sending you a copy of plan #23507, which shows the plan of the tracks and signals, as they will appear after the changes have been made.

1283

We are figuring on sending Mr. Walshe down to Texarkana, to make these changes, but we will be pleased to have advice from you, to the effect that you are ready to proceed with the changes as shown. Will you please so advise?

1284

Yours truly,

GENERAL RAILWAY SIGNAL CO.,

MW—K  
 Enc. 1097.  
 No. 2.

Per M. WUERPEL,  
 Engineer Sales & Int.

1285

EXHIBIT 24.3

Dallas, Texas, Nov. 13, 1903.

Mr. G. E. Ellis,  
c/o Pneumatic Signal Co.,  
Monadnock Block, Chicago, Ill.

1286 If you furnish track circuits, they must have  
Weber insulated joints. Wooden joint not at all  
satisfactory.

S'd.—B. S. WATHEN.

*This is not same as  
Ex. 26*

EXHIBIT 23.

1287

Dallas, Texas, July 14th, 1904.

Mr. G. E. Ellis,  
Agent, Pneumatic Signal Co.,  
Monadnock Block, Chicago, Ill.

Dear sir:

I enclose herewith a copy of the report of the  
Commission Engineer's inspection of the inter-  
locking plant at Texarkana, for your information.

1288

I must advise that these matters must be given  
proper attention, and all matters requiring cor-  
rection, etc., must be done promptly, or the plant  
will be condemned.

Yours truly,

B. S. WATHEN,  
Chief Eng'r.

## EXHIBIT 24.

1289

Pneumatic Signal Co.,  
owners of  
Standard Signal Co.,  
Cable Address,  
Lopressure, New York.

24

T. R. G.

1290

Chicago, Sept. 16/03.

Office of Western Agent,  
Texas & Pacific Ry.  
Texarkana.

Mr. B. S. Wathen, Chief Engineer,  
Texas & Pacific Ry.,  
Dallas, Texas.

Dear sir:

1291

We enclose herewith two copies of contract for Texarkana, which we have just received today from our New York office, having been signed by our Vice President, Mr. Hansel, in the absence of Mr. Beckley, who is in Europe. We trust that you will find these satisfactory. As we wrote you yesterday the bond that will be sent direct from New York, and we expect you will receive it before this reaches you.

1292

The writer expects to go to Texarkana sometime this month to look over the ground and arrange for work, and at the same time would like to come on to Dallas and go over the details with you. Could you consistently furnish transportation for him from Texarkana to Dallas and return.

1293 Thanking you in advance for your kindness,  
we remain,

Yours truly,

PNEUMATIC SIGNAL COMPANY,

C. E. Ellis,  
Western Agent.

1294 GEE/GAC  
Send pass to Ellis at Chicago  
Texarkana to Dallas and return, STN.

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EXHIBIT 25.

1295 Dallas, Texas, Nov. 10, '03.  
25  
T. R. G.  
Mr. G. E. Ellis,  
Signal Engineer,  
Monadnock Block, Chicago.  
Discard track circuits. Use original detector  
bars. Letter follows.

1296 B. S. WATHEN.

## EXHIBIT 26.

1297

The Texas & Pacific Railway Company.  
Office of Chief Engineer.

B. S. Wathen,  
Chief Engineer,

C. H. Chamberlin,  
Assistant Engineer.

Dallas, Texas, July 14, 04.

1298

Mr. G. E. Ellis,  
Agent, Pneumatic Signal Co.,  
Monadnock Block, Chicago, Ill.

Dear sir:

I enclose herewith a copy of the report of the  
Commission Engineer's inspection of the inter-  
locking plant at Texarkana, for your information.

I must advise that these matters must be given  
proper attention, and all matters requiring cor-  
rection, etc., must be done promptly, or the plant  
will be condemned.

1299

Yours truly,

S'd—B. S. WATHEN,  
Chief Engineer.

26  
T. R. G.

1300

1301

## EXHIBIT 27.

(Copy)

General Railway Signal Company.

St. Louis Office, October 22nd, 1904.

T. &amp; P. R. R.

Texarkana, Texas, Inspection.

Mr. B. S. Wathen,

1302

Chief Engineer, T. &amp; P. R. R.

Dallas, Texas.

Dear sir:

1303

Referring to the subject of the interlocking plant at Texarkana erected by the Pneumatic Signal Co., the question of putting this plant into acceptable shape was taken up at a meeting of the officials of the General Railway Signal Company in St. Louis last week, at which meeting I presented a report as to the condition of the plant, and made a recommendation as to what should be done. It was decided however, that in as much as the work which was to be by this company ordered by the Commission July 7th, 1904, to complete the plant, has been done, another inspection should be made of the plant by Mr. Thompson. The result of this inspection would determine the best course to be pursued. I would like therefore to have a conference with you, to go over this matter in detail.

1304

Will you kindly arrange such meeting with Mr. Thompson and advise date. Would suggest that we meet at Texarkana.

Yours truly,

GENERAL RAILWAY SIGNAL CO.

(Signed) M. Wuerpel, Jr.,

Resident Manager.

27

T. R. G.

## EXHIBIT 28.

1305

Dec. 15th, 1904.

Mr. B. S. Wathen,  
 Chief Eng'r., T. & P. Ry.,  
 Dallas, Texas.

Dear sir:

Understanding from our Mr. Wuerpel that the plant, installed by the Pneumatic Signal Co., (of which Signal Company we are the successors), at Texarkana, has not been giving satisfactory results, our Mr. Wuerpel, Mr. Dodgson and the writer have come here for the purpose of learning what can be done to put this plant in proper shape to give entire satisfaction to yourselves and the R. R. Commission. 1306

We stopped yesterday at Texarkana and made an examination of the plant and now respectfully submit the following, as in our opinion, the reasons why the plant is giving such poor results. 1307

The reports received from our man at Texarkana show that, between July 13th and December 1st, 1904, about sixty failures occurred that can be properly charged against the interlocking plant; some due to defective construction and installation, some to damages to connections caused by derailments and some to existing track conditions. While these failures have not in any way impaired the safety of the interlocking, we agree they have been exceedingly annoying and the larger part of them should have been avoided. 1308

The troubles that have arisen from defective construction is properly chargeable to us and will be remedied. Those that have arisen from

**1309** improper maintenance, we feel that we are at least equally responsible with yourselves. We do not feel, however, that we are in any way responsible for the damage done by derailments or for the existing condition of the tracks.

**1310** Recognizing that the interests and desires of the railroad company and ourselves are identical in this matter, we reiterate what we above stated that we will do everything necessary on our part and we respectfully request and insist that you do whatever is necessary on your part to put the plant in proper working order.

**1311** In this connection we are reluctantly compelled to call your attention to the condition of the tracks at this point, particularly to those of the St. L. & S. W. R. R., and to advise that no matter what this company may do, or how much may be expended to put the interlocking proper, in good condition, you will not get (and in the opinion of the writer you could not get from any system of interlocking), satisfactory results with the tracks of this road in their present condition.

**1312** As you are already aware, a number of improvements can be made, such as changes in tracks and signals on the St. L. & S. W. R. Ry., putting in the annunciators, etc., recommended by the R. R. Commission which would greatly assist in handling the traffic at this point.

So that the plant, tracks, etc., at this point may be put in proper condition as speedily as possible and an agreement reached as to what is necessary to be done to make this plant acceptable to the

R. R. Commission and yourselves, we shall be glad to meet at your convenience, the representatives of the roads interested at Texarkana. **1313**

Awaiting your advice in this matter, we are,

Yours respectfully,

GENERAL RAILWAY SIGNAL COMPANY, **1314**  
 J. S. Cade,  
 Mg'r. Sales & Inst.

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EXHIBIT 29.

Dallas, Texas, 4/24/05. **1315**  
 Standard Signal Company,  
 Monadnock Building, Chicago, Ill.  
 Gentlemen:

Your letter to Mr. Lang, giving prices for the proposed changes in the plant at Texarkana and your remarks relative to the old plant. In this connection I beg to say that this plant has been condemned twice by the Engineer of the Commission, and he has withheld from further inspection and reports for the past three months (by our request) that you might be able to correct the defects of this old plant, which are many, it being the first plant installed under this system. Therefore we have no promises to make, and if satisfactory to you, we will let the Engineer's report as made on the two previous inspections stand, and you may consider the plant as yours, and we will proceed to ask for bids for a new plant at Texarkana. **1316**

- 1317 The material which was needed to change the plant, of course, was something entirely new, but after its installment and a proper period for trial had been given the plant, the plant must stand or fall on the report of the Engineer for the Railway Commission of Texas; and if this is not satisfactory to you please advise, and we will ask for bids on a new plant at Texarkana, basing action on the two reports condemning this plant, which are on file.

We are not in the habit of paying 15% for installing work, nor will we do so in this case. If we purchase the material, we will pay the usual 10%, or we will have the changes made ourselves.

Yours truly,

1319

B. S. WATHEN,  
C. E.

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EXHIBIT 30.

1320

July 5th, 1905.

Mr. B. S. Wathen,  
Chief Engineer, T. & P. Ry.,  
Dallas, Texas.

Dear sir:

Your letter of April 24th, 1905, addressed to the Standard Signal Company and relative to the interlocking plant at Texarkana was recently submitted to me. Before replying to it permit me to make the following statement:

In July of last year the General Railway Signal Company purchased the American properties and assets of the Pneumatic Signal Company amongst which assets appeared an item of \$16,000 covering amount claimed to be due that company by the Texas & Pacific Railway Company for an interlocking plant installed at Texarkana. This, as well as all the other "accounts receivable" acquired by the General Company was guaranteed by the Pneumatic Co. Some weeks following this purchase, the General Company ascertained that a claim was made by the T. & P. Company that the Texarkana interlocking had not been properly installed and I accordingly had our Southwestern Manager, Mr. Wuerpel, visit the plant and report upon its condition. Mr. Wuerpel's report indicated that in certain respects improvements could be made and he recommended that authorization be given him to do such work there as seemed necessary to put the plant in thoroughly good operating condition. In the same report Mr. Wuerpel stated that the maintenance of the plant was not so good as it ought to be and that certain of the tracks were in such condition as would make it impossible to keep any interlocking, whether power or mechanical, in satisfactory working order.

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Upon receipt of Mr. Wuerpel's report I asked the Pneumatic Signal Company for authority to make the repairs recommended by him and received authority to make such repairs subject to the condition that Mr. J. T. Cade, formerly Manager of Sales & Installations of the Pneumatic Company, and that Mr. Dodgson, formerly Chief Engineer of the

1325 same company, after visiting the plant would support Mr. Wuerpel's recommendations. I accordingly had Messrs. Cade, Dodgson and Wuerpel go to Texarkana and upon receiving from them a joint report to the effect that they deemed certain repairs necessary and that the Railway Company had agreed to put its tracks in proper condition, I had the necessary repairs made.

1326 With this preliminary statement as to the connection of my company with this matter, you will, I believe, readily understand my surprise upon reading your letter in which you suggest that we take over the plant and that you will proceed to ask for bids for a new plant at Texarkana.

1327 Immediately following the receipt of your letter I acquainted the Pneumatic Signal Company with its contents and that company, after full consideration has made a long statement of its views and wishes from which I beg to submit the following extract:

1328 "In view of the above statements we feel that  
 "the proposition of the T. & P. Ry. Co. is unjust  
 "and we must positively decline to accept it and  
 "should any attempt be made to give it effect we  
 "shall take such steps as may seem to us best  
 "suited to protect our legitimate interests. We  
 "understand perfectly your desire to avoid any  
 "controversy with the Texas & Pacific Railway  
 "Co. with respect to a contract executed by the  
 "Pneumatic Company but we beg to call your at-  
 "tention to the fact that you are required under  
 "the terms of your purchase of this Company's  
 "American assets to exhaust every reasonable

"effort to make collection of its accounts receiv- 1329  
 "able and in the event of your failure so to do, to  
 "submit the matter to us for such action as we  
 "may deem proper. As above stated in detail  
 "we have evidence which we believe would prove  
 "conclusively in any court that a certain Road  
 "jointly interested with the T. & P. Ry. in this  
 "Texarkana interlocking plant has from the first  
 "been opposed to the installation of any inter- 1330  
 "locking plant at Texarkana; that since the State  
 "Commission rescinded its order to install inter-  
 "lockings this year at a number of places in  
 "Texas, this Road believes that if the present  
 "plant at Texarkana is removed, they may avoid  
 "the necessity of putting in another plant that in  
 "consequence this Road has purposely refrained  
 "from putting its tracks in good condition and 1331  
 "that as a result a good many failures are prop-  
 "erly charged against the interlocking and that  
 "the opposition of this Road is due not to the in-  
 "efficiency of our plant but to their determination  
 "to avoid having to pay any part of the cost of  
 "installing, maintaining and operating any plant.  
 "We shall further be able to prove that the  
 "Railways at interest in this plant recognize that  
 "the plan of signaling laid out by them and in 1332  
 "use at Texarkana is not as well adapted for the  
 "handling of trains as it should be and that even  
 "those lines that are not opposed to an interlock-  
 "ing plant believe that it would be to their inter-  
 "est to have Texarkana thrown out, if they can  
 "do so at our cost and get another plant installed  
 "under a plan of signaling better suited for the  
 "work to be done. We do not, however, believe  
 "that we should be called upon to give up \$16,000  
 "in order to help the Railway Companies to cor-

1333 “rect their errors in making up the plan of si  
 “naling for this place.

“We shall further be able to prove that certain  
 “Officers of the Railways at interest have stated  
 “that they understand that the General Railway  
 “Signal Company did not propose to install  
 “similar all-electric plants in the future and that  
 1334 “they would prefer not to have a single plant of  
 “this type on their line, when all other power  
 “plants would be of a different type, they would  
 “like to avoid taking over this plant, notwith-  
 “standing the fact that its operation compares  
 “favorably with that of other power interlocking  
 “plants better maintained and installed under  
 “more favorable track conditions than this one.

1335 “We shall further be able to prove that the  
 “Railway Commissioners on July 7th, 1904, is-  
 “sued a special order defining the conditions un-  
 “der which the interlocking plant as then instal-  
 “led might be operated and further defining cer-  
 “tain things which it would be required should  
 “be done before such commission would give  
 “final and absolute approval of the plant and  
 1336 “would accept the same. There were seven items  
 “enumerated as follows:

“1st. That all switches with derails must be  
 “provided with switch boxes.

“2nd. That all distant signals should be con-  
 “trolled through circuit breakers placed on home  
 “signal arms.

“3rd. That all facing point switches between  
 “home and distant signals must be provided with  
 “switch boxes.

“4th. That electric indicators must be pro- 1337  
 “vided to announce to the towermen the ap-  
 “proach of trains on certain of the lines.

“5th. That telephone connection must be es-  
 “tablished between certain points.

“6th. That guard rails must be provided for  
 “all main line derails.

“7th. That all R. R. crossings must be main- 1338  
 “tained in first-class condition and placed on  
 “suitable foundations of suitable character.

“The first, second and third conditions above  
 “enumerated have been exactly complied with by  
 “the Signal Company. The remaining conditions  
 “the Signal Company had nothing whatever to  
 “do with it being the duty of the R. R. Company  
 “to furnish the required electric indicators, tele- 1339  
 “phone connection, guard rails, and to furnish  
 “the R. R. crossings. It is therefore evident that  
 “the failure of the Commission to accept the  
 “plant cannot be due to our failure to give atten-  
 “tion to the three items first enumerated since  
 “we have done all in this respect required of us  
 “and their failure to accept the plant must there-  
 “fore be due to the fact that the R. R. has not 1340  
 “given proper attention to the other four items  
 “enumerated.

“We shall further be able to prove that each  
 “and every change which the Railway Company  
 “indicated its desire to have made in order to im-  
 “prove the operation of the plant has been made  
 “in exact conformity with such requirements as  
 “well as certain other changes which we deemed  
 “desirable to make in order to improve such  
 “operation.

1341 "These and many other facts in our possession  
 "make it clear to us that we shall not find it nec-  
 "essary to accept the unjust proposal of the Rail-  
 "way Company as set forth in its letter of April  
 "24th and we hereby give you formal notice that  
 "if you accept such proposal you will do so at  
 "your risk and loss as we shall refuse to make up  
 "to you the \$16,000 or any part thereof that you  
 1342 "may deduct from the bill against the Texas and  
 "Pacific Railway on account of this Texarkana  
 "plant."

You will understand that in quoting the above  
 statements I do not vouch in any respect for  
 their correctness and I have given them to you  
 simply to enable you to understand our situation.  
 1343 As the relations existing between your Company  
 and the General Railway Signal Company have  
 been, and are, of the most pleasant character, you  
 will readily appreciate my embarrassment in  
 dealing with this matter since we desire most  
 earnestly to maintain these relations without in-  
 justice to the Pneumatic Signal Company or loss  
 to ourselves. Permit me, however, to say that I  
 have carefully interrogated our Mr. Wuerpel in  
 1344 whose honesty and technical ability as a signal-  
 man I have great confidence and he has reluctant-  
 ly admitted that he fears there is some justifica-  
 tion for the claims of the Pneumatic Signal Com-  
 pany, since he believes that with the poor condi-  
 tion of the tracks of certain of the interested  
 lines, the operation of the plant since the General  
 Company put it in repair, has been as good as  
 could have been expected from the very best Tay-  
 lor all-electric devices, installed on such poor  
 tracks and with no better maintenance than Tex-

arkana has had. I have personally made a careful study of the detailed "failure reports" at Texarkana covering the period from March 1st to April 11th (at which time our Buffalo office record of these failures ceases) and there is certainly nothing in these reports to indicate that the plant is unsafe or that the percentage of failures is greater than you would have on any other power plant similarly maintained on similar tracks and, frankly, I am of the opinion that if the Pneumatic Signal Company sees fit to do so it can compel the acceptance of the plant and payment by the Railway Company. Certainly, if the plant has been unsafe the State Commission has been grossly derelict in the performance of its duty, in permitting its continued operation and no facts yet brought to my attention indicate that the plant is unsafe or that with the tracks in proper shape and that with reasonably good maintenance any excessive number of failures would occur.

Such being my honest opinion, I feel obliged to request that you give this matter further consideration and advise me as early as you conveniently can, in exact detail, what if anything remains to be done before you will voucher bill for \$16,000.

In this connection I will state that the report that the General Railway Signal Company will not make installations of the same type of all-electric plants as that at Texarkana is incorrect. It is true that we prefer to install the Taylor type of plant since, owing to the large amount of work of this kind installed by us, we can furnish

- 1349 it at less cost and with less trouble than the Pneumatic type of all-electric. On the other hand we are prepared to furnish the other type and, as a matter of fact have installed within two weeks, one of these machines having 120 levers and are now building another of the same type having 24 levers. We further carry a full line of repair parts and are prepared to furnish them promptly
- 1350 so that your company need have no fear on this account, as to accepting Texarkana.

I have the utmost confidence in your fairness but I request that, in justice to the Pneumatic Company, you should give this matter your early attention.

Yours truly,

- 1351 GENERAL RAILWAY SIGNAL COMPANY.  
By W. W. SALMON,  
President.

WWS/AJB.  
#2.

- 
- 1352 EXHIBIT 31.

Dallas, Texas, July 20, 1905.

Mr. W. W. Salmon,  
c/o General Railway Signal Co.,  
Buffalo, New York.

Dear Sir:

In looking over your letter of July 5th, we find that you state that the Railway Commission issued on July 7, 1904, a special order defining the conditions under which the interlocker as then

established might be operated. No such ruling by the Commission has ever reached this office. The Railway Commission issued but one general order relative to this interlocker which ever came to us. 1353

Telephone connections do not belong to interlockers.

When the plans for the Texarkana interlocker were being gotten up the Railway Companies for their own convenience, decided that Annunciators would be proper and would be used, but no order for same was ever made by the commission. Therefore we have never given this matter any more serious thought than if it was a matter strictly under the control of the Railroad Company, nor are such rules found among the rules promulgated by the Texas Railway Commission. 1354

Having made the agreement with Mr. Cade, I know exactly what I agreed with him,—that instead of allowing this plant to stand condemned—that if they would correct the defects which were so apparent in the plant, that we would carry out the new arrangement of the tracks on the St. L & S. W. line, and when the new plant was in working order, if it worked satisfactorily, that a re-inspection would be asked for, and if found satisfactory, would be paid for. 1355

My agreement with Mr. Cade was, that whatever material was required to make the changes in the plant would be paid for regardless of what the decision of the Commission of Texas would be on final inspection of plant. Also the cost of in- 1356

- 1357 stallation in the event of the changes being made by the Pneumatic Signal Co., or its assigns—but we would not ask for any inspection until these changes were made—then should the plant pass inspection, the full settlement should be made for the work as set forth in the contract. Our Mr. Lang was doing some corresponding with your people about the material and came to me with the letter in which it was demanded that there must be some understanding about the old plant before you would do anything towards the new. This he knew was not the agreement, when the new work was decided on in December last. He was present when I made the agreement with Mr. Cade and knew that the agreement was; that the new inspection was not to be asked for until the new work was installed.
- 1358
- 1359 The delay on the part of the S. L. & S. W. Ry., was beyond their control, we think. They advised us that they had no rails in stock of the weight desired, but had orders placed with the mills, their order was then past due, but that did not help them so long as the order was not filled.
- 1360 We will not ask for inspection before the new work is installed and the plant stands condemned to-day.

Yours truly,

B. S. WATHEN,  
Chief Engineer.

## EXHIBIT 32.

1361

July 27th, 1905.

Mr. B. S. Wathen,  
 Chief Engineer, T. & P. Ry.,  
 Dallas, Texas.

Dear sir:

I beg to acknowledge receipt of your esteemed favor of July 20th and while this letter refers to my letter to you of July 5th and not to my letter to you under date of July 17th you have made reply to certain points brought out in my later letter, notably in respect to the payment for materials to be furnished in connection with changes in the locking and signaling at Texarkana. 1362

In our letter of April 21st to Mr. Lang we gave the following list of material which we figured would be required to make changes shown on your plan forwarded with Mr. Lang's letter of April 4th to our Chicago office. 1363

I two-arm dwarf signal  
 New material for detector bars  
 2000' #14 Simplex wire  
 600' 2 x 3 trunking  
 400' 1 x 1 trunking  
 New locking material, dogs, screws etc. 1364

I have to-day issued an order for the assembly of this material and the getting out of the necessary locking which we should be able to assemble within a week or ten days. In the meantime will you have the kindness to advise me as to the following points viz:

- 1365 1st. Whether the changes as shown on plan submitted by Mr. Lang on April 4th, are identical with those actually made as otherwise the bill of material above referred to will have to be changed.
- 2d. In case the changes actually made are not in conformity with the changes as indicated on plan referred to will you have the kindness to furnish us with correct plan whereupon we will immediately change our orders and submit corrected bill of material.
- 1366
- 3d. Is it your wish that we should furnish labor and tools and that we should bill against you on the basis of actual cost of labor plus 15% together with such necessary expenditures as may be made for transport of men and of tools, or is it your wish to yourself furnish the labor and tools for making these changes?
- 1367

Upon receipt of reply to the above inquiries we will be prepared to make very prompt shipments of material and immediately upon its arrival on the ground to do whatever you may require of us with respect to its installation.

1368

Yours truly,

W. W. SALMON,  
President.

WWS/AJB.  
#2.

## EXHIBIT 33.

1369

Dallas, Texas, 7-28, 1905.

W. W. Salmon,  
Pres't. Buffalo, N. Y.

Dear sir:

We have recent inquiry from the Engineer of the Railway Commission of Texas of what we proposed with the plant at Texarkana—he is not satisfied with the daily reports—the failures are too many—if we ask for inspection now he will condemn. Recent inspections by ourselves indicates the machine working fairly well, the failures are due to the wiring, which is a sorry fraud. 1370

When the "Cotton Belt" people made the track changes they were authorized by the Engineer for the Railway Commission of Texas to make they ballasted their line with gravel—the Texas & Pacific Railway ballasted with gravel when the tracks were laid, the line being a new one—therefore for five months there has been no cause for the failures due to bad track or ballast, even if there was some cause for complaint of imperfect track on our line originally, but the site was examined before bids were given or plant put in. We cannot spend any more money on this plant under the present outlook. We give you a chance to say what you care to do. Shall we get rid of this thing by asking for an inspection now, or do you wish to make the plant a good one, and would you undertake this in the near future, if we ask for further time of the Engineer. A failure to hear from you promptly will cause action by our legal Department—and—an inspection asked for. 1371

Yours truly,

B. S. WATHEN. 1372

1373

## EXHIBIT 34.

August 1st, 1905.

Mr. B. S. Wathen,  
 Chief Engineer, T. & P. Ry.,  
 Dallas, Tex.

Dear sir:

1374 Your esteemed favor of July 28th, has just been received and its contents most carefully noted.

1375 I note particularly your statement with respect to failures occurring on the insulated wires furnished in connection with the Texarkana interlocking plant and that as you cannot spend any more money on this plant you desire to know whether, in order to have the plant accepted, we will be willing to promptly replace all this wire at our own cost.

1376 In reply to your inquiry I will say that if the wire failures complained of are wholly or chiefly due to the poor character of material furnished or to poor workmanship in its installation I shall be perfectly willing to replace without cost to your Company all of this wire. On the other hand I regret to have to state that I do not understand that the above is the real cause for the troubles which you are experiencing with this wire as I am advised that the insulated wires furnished are exactly the same grade as had been furnished by the Taylor and General Railway Signal Companies on electric interlocking work done by them in Texas and as this wire is of the highest grade there is extremely small likelihood of those troubles being chargeable to the character of wire supplied. I am further advised that on the require-

ments of the Ry. Company the wires were laid in trunking, the top of which was placed in ballast about level with the base of rail and that the ballast on certain of the tracks was of cinder. Under these conditions, and particularly, as at Texarkana, where the drainage is poor, no rubber compound ever made will have long life; therefore troubles occasioned by deterioration in the insulation due to the placing of the wire in cinder ballast in conformity with the Railway requirements should, in my judgment, not be charged to the fault of the Signal Company. **1377**

I am further advised that a great many derailments have occurred at this interlocking plant due chiefly to poor character of the track on certain of the lines and that in such derailments a great many of the wires have been cut or otherwise injured and that many of the wire troubles now experienced are in all probability due to this fact. It would certainly seem to me that the Railway Company should not seek to hold the Signal Company responsible for failures arising in consequence of such derailments. **1378**

As above stated I am perfectly willing to authorize expenditures to correct troubles due to the fault of the Pneumatic Signal Co. I am not, however, willing to authorize any expenditures to remedy defects due to the fault of the Railway Company and I do not believe that when you have given this matter proper consideration you will ask or expect us to do so. **1379**

From your letter I assume that it is your wish that all the insulated wire on the plant shall be **1380**

- 1381 replaced. The necessity for doing this is not apparent unless it has been found that the wire throughout is in bad condition. If such is the case it would, in the absence of other evidence, be proof to me that all the wire has been injured through being placed underground and in this event there is no question in my mind that the Railway Co. should itself, and at its own cost
- 1382 make the renewal of wire. If, on the other hand, only a portion of the wire needs renewal, the Signal Company should only be asked to renew that portion of the wire which was originally defective in quality or which was badly installed by it. I will therefore be very much obliged if you will give this matter further investigation and will advise me after so doing as to what in your judgment the Signal Co. should be asked to do.
- 1383 The matter will then have very prompt attention.

- In numerous cases the Taylor Signal Company and the General Railway Signal Co. have been required to place wires underground where work has been done in Texas. In each instance representations have been made to the proper Railway officers to the effect that wire so placed cannot be expected to give long continued satisfactory results, notwithstanding which fact we have been invariably required to so place the wires. I believe you will agree with me that if under these circumstances your wiring, for example; on the Fort Worth interlocking plant installed by the Taylor Signal Co., should give you unsatisfactory results you would not be justified in asking this Company to replace such wiring. I do not see any reason why the Pneumatic Signal Co. should
- 1384

be held accountable for poor results obtained from wiring at Texarkana when the Taylor Signal Co. would not be held similarly responsible for similar bad results should they occur on any plant installed by it under similar conditions.

1385

The fact of the matter is that the specification is entirely wrong and that the Railway Company should amend it on all work which they do in the future and should not seek to hold the Signal Companies responsible for failures which develop through the putting in of work in conformity with the existing bad specifications.

1386

Hoping that you will further investigate this matter, and after careful consideration will advise me as your later views, I am,

1387

Sincerely yours,

W. W. SOLMON,  
President.

WWS/AJB.  
#2.

1388

1389

## EXHIBIT 35.

The Texas &amp; Pacific Railway Co.

Office of Chief Engineer.

B. S. Wathen,  
Chief Engineer.

1390

C. H. Chamberlin,  
Assistant Chief Engineer.

Dallas, Tex., Sept. 7, 03.

Mr. G. E. Ellis,  
Western Mgr. Pneumatic Signal Co.,  
Chicago, Ill.

Dear sir:

1391

I enclose you rail section of the Cotton Belt and Texas & Pacific lines. We have not the cross section of the Kansas City Southern line, but I have requested them to send you a print of their rail sections, also to send me a copy of same.

Your understanding of the manner in which the plant is to be operated for 60 days after same is accepted by the Commission is correct.

1392

I have no section of "Cotton Belt" siding rails, but think it is 56 pound. Will send this later in a very short time.

Yours truly,

S'd. B. S. WATHEN,  
Chief Engineer.

35

T. R. G.

## EXHIBIT 36.

1393

Dallas, Texas, September 8, 1905.

Mr. W. W. Salmon,  
% General Railway Signal Co.,  
Buffalo, New York.

Dear sir:—

By reason of the rigid quarantine nothing has been done at the plant at Texarkana, and nothing can be done there until after the quarantine restrictions are removed, which may not be until the 1st of November, or later.

1394

If you will forward the bill of material for making changes in this plant and arrange to remodel the wiring there in a satisfactory manner as soon as the quarantine conditions will permit workmen to be sent there, we will have the changes in our part of the work done at the same time, to comply with the agreement which has heretofore been made.

1395

Please advise if satisfactory.

Yours truly,

B. S. WATHEN,  
Chief Engineer.

1396



iod of 60 days, and accepted by the Engineer of the Texas and Pacific Railway Company, and also be accepted by the Engineer of the Railway Commission of Texas, before anything would be due on this plant. Furthermore, that if this plant is rejected by the Railway Commission of Texas, that this plant will be removed without cost to the Texas and Pacific Railway Co. And as additional security for the faithful performance of these obligations by the Pneumatic Signal Co., a bond by a Surety Co., was filed with the contract. **1401**

Before a great while the engineer for the Texas Railway Commission will inspect this plant again. If it is rejected, it devolves on the Pneumatic Signal Co., or its successors to make it good, or remove it. **1402**

I think your Mr. Wuerpel will advise you relative to this, in the very near future. I had some talk with him on the 26th inst. I met him on that date at Ft. Worth, when the plant erected by the Taylor Signal Company was being put under trial.

Yours truly, **1403**

(Signed) B. S. WATHEN,  
Chief Engineer.

**1404**

1405

## EXHIBIT 38.

T. & P. Railway  
Texarkana.

October 6, 1905.

Mr. B. S. Wathen,  
Chief Engineer, T. & P. Railway Co.,  
Dallas, Texas.

1406 Dear sir:—

Referring to your favor of September 8th in reference to work at Texarkana, we take pleasure in advising that orders have been entered in our factory for the material as enumerated in your letter of August 4th and we will be pleased to have you advise if the quarantine restrictions have been removed in the district around Texarkana so that we may proceed with this work.

1407

A prompt reply will oblige.

Yours truly,

M. WUERPEL,  
Engineer S. & I.

ECW/IGH # 2.

1408

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 EXHIBIT 39.

Dallas, Texas, February 20, 1906.

Mr. M. Wuerpel,  
% General Railway Signal Co., St. Louis, Mo.

Dear sir:

Your letter of February 7th to O. H. Lang received: Mr. Lang has not been with the company since the first of August, 1905. I wrote to Mr.

Salmon under date of September 8, 1905, advising what would be satisfactory to us, stating that we would comply with the orders of the engineer for the Railway of Texas, and I suppose that this material has been shipped accordingly. We have no knowledge that material of any sort has been received at Texarkana, never having any notice of the shipment of any, until I find this letter of the 7th of February. 1409

Mr. Lang advises that he received the letter some days ago, but was confined to his bed with sickness. I would like to know what has been done, and what you propose to do.

Yours truly,

B. S. WATHEN, 1411  
Chief Engineer.

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EXHIBIT 40.

Buffalo, N. Y., February 23, 1906.

T. & P. R'y., 1412  
Texarkana.  
Mr. B. S. Wathen,  
Chief Engineer T. & P. R'y.,  
Dallas, Tex.

Dear sir:—

We beg to acknowledge receipt of your letter of the 20th inst., in which you acknowledge receipt of our letter of the 7th inst., addressed to Mr. O. H. Lang. We were, of course, not aware that Mr. Lang was no longer with your company.

- 1413** On going over this matter, we find that the last communication we received from you was dated October 9th. This was in response to ours of October 6th, 1905, and you advised us in this that the quarantine restrictions of Texarkana were as rigid as ever, but that material sent forward at that time, would not likely reach Texarkana until the quarantine restrictions were removed.
- 1414** We accordingly had the proper material assembled and were ready to make shipment about the first of November, and it was our intention to send a man to Texarkana with this material, so that he might proceed with making the changes. We found however, that we would not have a man, who was familiar with the interlocking as installed at Texarkana, available to send, and it was thought at the time that we would have our
- 1415** Mr. Walshe, who was engaged in similar work in the North, released by the middle of December. We consequently did not ship the material until the first part of December. We were unable to release Mr. Walshe until about the first of February, and on the 7th of February, we accordingly wrote Mr. Lang, whom we assumed still had charge of the work at Texarkana, for your Company, and sent him plans showing the proposed changes as we assumed them to be. Not having received a reply to this letter from Mr. Lang, we wired you on February 19th, referring to ours of the 7th, to Mr. Lang, asking if you were ready to proceed with the changes. We received your message of the 20th and wired you again on the 21st, asking if you were ready to proceed with the changes, to which you received your telegraphic reply of the 21st, stating that you were ready to have the plant remodeled. We accord-
- 1416**

ingly arranged to send Mr. Walshe to Texarkana, 1417  
 he having left here last night, with instructions to  
 report at Texarkana and go over the situation  
 there, advising us just what shape the changes  
 were in.

As soon as we have received a report from our  
 Mr. Walshe, we will advise you more fully.

Yours truly, 1418

GENERAL RAILWAY SIGNAL CO.,  
 (Per) M. WUERPEL,  
 Engineer Sales & Inst.  
 MW-K, No. 2.,

1419

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EXHIBIT 41.

Buffalo, N. Y., Mar. 6, 1906.

T. & P. R'y.,  
 Texarkana, Tex.  
 Mr. B. S. Wathen,  
 Chief Engineer T. & P. R'y.,  
 Dallas, Tex. 1420

Dear sir:—

Referring again to the subject of changes at  
 Texarkana, we are in receipt of a report from  
 our Mr. Walshe whom we sent to this plant, to the  
 effect that the track changes made on the Cotton  
 Belt track do not correspond with our plan No.  
 23507, which was sent to Mr. Lang; with our let-  
 ter of February 7th. Mr. Walshe states that in  
 addition to other changes which the Cotton Belt  
 people have made on their track, they have added

1421 a switch and derail for the siding which connects with their main track south of the K. C. S. Crossing. The locking on the machine has not been changed to conform, but has merely been disconnected to allow the operation of the levers, leaving the interlocking in an unsafe condition.

1422 We have asked our man Walshe to send us a marked print, showing the exact location of all switches and signals, as they now stand, but we would be pleased to have from you, a plan showing the changed conditions, and have you authorize us to proceed to change the plant to conform to the present layout.

1423 Mr. Walshe also advises that the track circuit work has been taken out, and we would like to have you advise us if it is your intention to leave the track circuit features out of the plant entirely.

Will you please have this matter investigated and advise us just what you wish done?

Yours truly,

1424

GENERAL RAILWAY SIGNAL CO.

Per. M. Wuerpel,  
Engineer Sales & Inst.

MW-K JMW, No. 2.

## EXHIBIT 42.

1425

Dallas, Texas, March 12, 1906.

Mr. M. Wuerpel,  
% General Railway Signal Company,  
Buffalo, N. Y.

Dear sir:—

Your letter of March 6th just to hand.

1426

What the "Cotton Belt" has done at the plant at Texarkana has nothing to do with any agreement made between ourselves and your company, and I attach herewith my letter relative to this matter to the "Cotton Belt" people.

The changes which were contemplated at the Texarkana plant, were on the east side of the Texas & Pacific Crossing, and what the "Cotton Belt" have undertaken has been done without the sanction of the engineer for the Railway Commission of Texas, or with the Texas & Pacific Railway Company; as we were not effected by what they proposed; they went ahead with their plans, but if they have not permit from the Railway Commission's Engineer, they may have to take it out. At any rate we refused to have anything to do with it, and they wished to get a turn out of an industry which had recently been located in that vicinity..

1427

1428

Yours truly,

B. S. WATHEN,  
Chief Engineer.

1429

## EXHIBIT 43.

Buffalo, N. Y., March 15, 1906.

T. & P. R'y.,  
 Texarkana, Tex.  
 Mr. B. S. Wathen,  
 Chief Engineer,  
 T. & P. R'y.,

1430

Dallas, Tex.

Dear sir:—

We beg to acknowledge receipt of your favor of the 12th inst., which was in reply to ours of the 6th, relative to changes in the interlocking plant at Texarkana, and with which letter you enclosed a copy of your letter to Mr. M. L. Lynch, Chief Engineer, Cotton Belt, relative to changes which they have made in their tracks.

1431

We note that you state that what the Cotton Belt has done at the plant at Texarkana, has nothing to do with any agreement made between your Company and our Company; and we wish to state that we do not at all agree with you, as it is our understanding that our latest agreement with you referred particularly to the changes to be made in the Cotton Belt tracks.

1432

If you will refer to Mr. Salmon's letter, addressed to you under date of July 27th, 1905, you will note that he gave a list of the materials which we had estimated would be required to make the changes to conform with the plan sent to us by Mr. Lang, with his letter of April 4th, 1905,—these changes all being on the Cotton Belt tracks. In Mr. Salmon's letter of July 27th, there were three questions raised, which were as follows:

FIRST: Whether the changes as shown on plan submitted by Mr. Lang on April 4th, are identical with those actually made, as otherwise the bill of material above referred to will have to be changed. **1433**

SECOND: In case the changes actually made are not in conformity with the changes as indicated on plan referred to, will you have the kindness to furnish us with correct plan, whereupon we will immediately change our orders and submit corrected bill of material? **1434**

THIRD: Is it your wish that we should furnish labor and tools and that we should bill against you on the basis of actual cost of labor plus 15 per cent, together with such necessary expenditures, as may be made for transport of men and of tools, or is it your wish to yourself furnish the labor and tools for making these changes? **1435**

While we did not receive a direct reply to this letter of July 27th, we did receive from you the following letter, dated August 4th, 1905, addressed to Mr. Salmon: **1436**

“The material which will be required to change the plant at Texarkana, would be:

1 2-arm dwarf signal,  
2000 ft. #14 Simplex Wire,  
600 ft. 2 x 3 trunking,  
400 ft. 1 x 1 trunking.

“and the new interlocking material, dogs, screws, etc., which would accompany same.

“I will advise whether or not to ship this material.”

**1437** We heard nothing further from you until we received your letter to Mr. Salmon, dated September 8th, 1905, as follows:

“By reason of the rigid quarantine, nothing has been done at the plant at Texarkana, and nothing can be done there until after the quarantine restrictions are removed, which may not be until the 1st of November, or later.

**1438**

“If you will forward the bill of material for making changes in this plant and arrange to remodel the wiring there in a satisfactory manner as soon as the quarantine conditions will permit workmen to be sent there, we will have the changes in our part of the work done at the same time, to comply with the agreement which

**1439** “has heretofore been made. Please advise if satisfactory.”

From these two letters, it was assumed that you desired to have us furnish the material and the labor, as outlined in Mr. Salmon's letter of July 27th. On October 6th, we again wrote you, referring to your letter of September 8th, and asked you if the quarantine restrictions had yet been removed in the Texarkana District, so that we might proceed with the work. You replied on October 9th, to the effect that while the quarantine restrictions had not yet been removed, material sent forward would not be likely to reach Texarkana before the quarantine restrictions has been removed.

**1440**

At about that time we were unable to send a man to Texarkana who was familiar with the work and we therefore delayed sending the ma-

terial until December, as it was expected that we would have a man by that time whom we could send to complete the work. It transpired, however, that Mr. Walshe, whom we desired to send, would not be free until sometime in February, and, on February 7th we wrote to your Mr. Lang, not knowing that he had left your employ, which letter was turned over to you, by Mr. Lang about February 20th, on which date you acknowledged receipt of same. We also received your message of February 20th, in response to which we wired you, asking if you were ready to proceed with the changes at Texarkana, and if we should send man. You replied that you were ready to remodel the plant at Texarkana. We therefore arranged to send Mr. Walshe, at once, to Texarkana, as we assumed from all of this that the track changes had been made to conform with the plans sent with Mr. Lang's letter of April 4th, 1905, all of which changes were on the Cotton Belt tracks.

We trust that you will see from the above that what the Cotton Belt has done has all to do with our latest agreement with you, for changes at this plant; and if the Cotton Belt has made changes not in conformity with the plans which were aproved by the Railway and Warehouse Commissions, and have made such changes without notifying you and have disarranged the interlocking machine in such a manner as to make it unsafe; we do not see how we can do anything further with this plant until we receive definite instructions from you as to what we are to do.

We are sending you herewith a plan of the tracks and signals at this point, on which we have

- 1445 shown, in red and yellow, the changes which have been made in the arrangement of the Cotton Belt tracks; the red indicating what has been put in and the yellow what has been taken out. By comparing this marked plan with our plan No. 23507, a copy of which we are also enclosing, you will note that that layout as it now exists is somewhat different from that for which we sent materials to make changes.
- 1446

As we view it, this is a matter between your Railroad Company and the Cotton Belt Co., and is one which it will, be to your interests to settle as promptly as possible.

- We wish to advise that our man, Mr. Walshe, arrived in Texarkana on the 27th of February, prepared to do the work of making changes, and that therefore his time and expenses will be charged against the T. & P. Railway Company, in accordance with our understanding of the agreement with you. Will you please, therefore, advise us, upon receipt of this letter, whether we shall have Mr. Walshe remain until the matter is settled, or whether we shall recall him until such time as you are prepared to proceed with the work?
- 1447
- 1448

We desire also to call your attention to this fact,—that the plant, as it now stands, is unsafe, having been rendered so by changes made by the Cotton Belt people, the locking on the machine having been so disarranged as to make it possible to set up conflicting signals. Such being the case, this Company will not be responsible for any accident that might occur at this point, not-

withstanding your contention that the plant has not been accepted. 1449

We hope to have some definite reply from you promptly.

Yours truly,

GENERAL RAILWAY SIGNAL CO.,  
Per M. Wuerpel, 1450  
Engineer Sales & Inst.  
MW-K Enc. 1109, No. 2.

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EXHIBIT 44.

Dallas, Texas, March 19th, 1906. 1451  
Mr. M. Wuerpel, Jr.,  
% General Railway Signal Company,  
Buffalo, N. Y.

Dear sir:—

The changes proposed by the "Cotton Belt" at Texarkana, in the Interlocker, is west of the K. C. S., to accommodate a switch which they are preparing to put in to a new plant in that vicinity, and has nothing to do with the proposed changes in the "Cotton Belt" yard, which was agreed upon between myself and Mr. Salmon. 1452  
Whatever work may be necessary to carry into effect the wishes of the "Cotton Belt" people to put in their switch, will be attended to by them, and paid for by them strictly. The attached copy of letter from Chief Engineer Lynch, shows that they have in no way interfered with the plant, and whatever they do, they will pay for inde-

1453 pendent of any agreement made between ourselves and your people. Therefore please arrange to carry out the original plans and if the "Cotton Belt" plans in any way conflict with the ideas of the engineers for the Commission or with your work, they will have settle with you direct. I thought I had explained this fully in my previous letter.

1454 Yours truly,

Enc.

B. S. WATHEN,  
Chief Engineer,

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EXHIBIT 45.

1455

Dallas, Texas, March 19, 1906.

Mr. M. Wuerpel, Jr.,  
% General Railway Signal Co.,  
Buffalo, N. Y.

Dear sir:—

1456

We have had no knowledge of your Mr. Walshe being at Texarkana until now. If he has made his presence known to anyone connected with the Texas & Pacific Railway Company, it has not come to my knowledge. What he came there for, or what he is doing, we know nothing about, and we wish to say that we are not going to pay Mr. Walshe's time. This office is in charge of that work, and until we have had Mr. Walshe's report to this office, to know if he was ready to undertake the work which was agreed upon, we will have nothing to do with it. The absurdity of our having to be advised by the way of Buffalo that some employee of the General Railway Signal Company

has reached Texarkana a good many days ago, is peculiar to us, and we don't understand why you wish to do business this way. 1457

We have been waiting for a long time to be notified by some representative of your people that he was at Texarkana prepared to do the work, but so far we have no knowledge of it, except through you. 1458

The "Cotton Belt" has never made any changes in their plans excepting the spur which we spoke about, and which is an affair strictly their own, and has nothing to do with the work which we agreed to with you, and they have been notified—if they do anything to impair the efficiency and safety of the interlocking plant that they would be held responsible for it, as under the circumstances we could not agree to do anything until the other work was completed. If you have now, or have had, any representative at Texarkana, we want to warn you—until we have some knowledge of his being there, other than through your office, we can't send anybody there to hunt him up, and we have been ready all these months to send our man there to go over the plant with him, and to cooperate in carrying out the work as agreed upon. 1459  
1460

Yours truly,

B. S. WATHEN,  
Chief Engineer.



with work, and have been reporting to Mr. R. B. Ayers office every day since then ready to make the changes as per instructions. Awaiting your instructions, I am, 1405

Yours respectfully,

(Signed) J. M. WALSHE,  
Signal Foreman,  
Gen. Ry. Sig. Co. 1406

47  
trg

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EXHIBIT 48.

Buffalo, N. Y., March 24, 1906.

T. & P. R. R. Copy. 1467  
Texarkana, Texas.  
Mr. B. S. Wathen,  
Chief Engineer, Texas & Pacific Ry.  
Dallas, Texas.

Dear sir: —

We have your letters of the 19th instant, with reference to the work at Texarkana, and we note in one of them you state that you had no knowledge of Mr. Walshe being in Texarkana. We beg to state that when we sent Mr. Walshe to Texarkana after receipt of your message of February 21st, which stated that you were ready to proceed with the work at Texarkana, we assumed that you were ready, and that Mr. Ayres, your superintendent at Texarkana, who has charge of the maintenance of this plant, would of course be familiar with any changes you contemplated. We accordingly instructed Mr. Walshe to report first to Mr. Ayres. It transpired however, that 1468

**1469** Mr. Ayres knew nothing about the changes and Mr. Walshe so reported to us.

**1470** In view of the stand taken in your letter of the 19th inst., it is to be regretted that we did not specifically notify you the exact date of Mr. Walshe's arrival at the work. However, in our letter to you of March 6th we practically advised you that Mr. Walshe was on the ground, and you must have received this letter before yours of the 19th was written, inasmuch as you replied to our letter of the 6th on March 12th.

**1471** Immediately upon receipt of your letter of the 19th we wired Mr. Walshe to formally notify you that he was on the ground, which we trust he has done by this time. We, therefore wish to state that unless Mr. Walshe is informed by you that he may proceed with the work in accordance with the agreement with you, as outlined in our Mr. Salmon's letter to you dated July 27th, 1905, before April 1st, we will recall Mr. Walshe; instructing him to return the materials which we have sent to this plant to make the changes, to our factory.

**1472** We also wish to state that unless the Cotton Belt tracks are changed in accordance with the plans submitted by Mr. Lang on April 4th, 1905, we will have nothing further to do with the changes and will recall our Mr. Walshe. You state that the Cotton Belt has never made any changes in their plans. From the information that we have received, the switches and signals as they now exist on the Cotton Belt tracks do not conform with the arrangement as shown on the plans submitted, by Mr. Lang on April 4, 1905,

for which we have sent the material to make the changes. We will expect you to see that the Cotton Belt tracks are changed in accordance with our agreement, as we do not recognize the Cotton Belt in this matter and will not take up anything in this connection with them direct. 1473

In general we wish to inform you that what the General Railway Signal Company has done in this matter has been done in your interest, and that it is under no obligation to your company to do anything more than that agreed upon between you and Mr. Salmon in making changes in Cotton Belt tracks, and that we will look to you to see that the Cotton Belt tracks are changed in accordance with this agreement. 1474

As stated before, unless we are advised through Mr. Walshe that you are ready to proceed with the changes by April 1st, we will drop the whole matter and do nothing further. 1475

Yours truly,

GENERAL RAILWAY SIGNAL COMPANY,  
Per (Signed) M. Wuerpel, Jr.,  
Eng. Sales & Inst. 1476

1477

## EXHIBIT 49.

Dallas, Texas, March 28, 1906.

Mr. M. Wuerpel, Jr.,  
Buffalo, N. Y.

Dear sir:—

To-day I am in receipt of yours of March 24th.

1478

Your assumption that Mr. Ayres was advised about the changes to be made in the plant at Texarkana is in keeping with the assumptions you have been making all along. It would be entirely satisfactory to us for you to refuse to do anything more at the plant at Texarkana, as the plant now stands condemned by the State Engineer, and if this plant is removed, we can have a good plant put in that will pass the inspection, by somebody else. The plant was

1479

patched up, and by the tolerance of the Engineer for the Commission, it has been operated, with the idea that it would be remodded in accordance with his latest decision relative to the "Cotton Belt" tracks, and the "Cotton Belt" people advised us a long time ago that they were changing the west end of their yard to conform to the Commission's Engineer decision in the matter.

1480

I see nothing left for me to do except to ask for new bids for the plant at Texarkana, to conform to the ruling of the Commission's Engineer.

Kindly advise how soon you can take all your stuff away from Texarkana, as it will be very much in our way getting the new plant installed.

Yours truly,

B. S. WATHEN, C. E.

## EXHIBIT 50.

1481

Box #323, Texarkana, Tex. March 30th/06.  
Major B. S. Wathen, Chief Engr.  
T. & P. R. R. Dallas, Tex.

Dear sir:—

Kindly send me confirmation of your verbal order, while I was in Dallas, to put in new main trunking and tile cross trunking throughout this plant. 1482

—————  
We will require a portable forge, a medium sized anvil and a few blacksmith's tools to do the work here. I have requested Mr. Ayers to furnish these and he referred me to you for them. Kindly arrange that I may get these as soon as possible so that they will not delay me in the work. 1483

—————  
Kindly arrange for transportation as requested of Mr. Kane.

Yours respectfully,

50  
TRG

J. M. WALSHE,  
Foreman, General Ry  
Signal Co.

1484

—————  
EXHIBIT 51.

Dallas, Texas, April 3, 1906.

Mr. G. M. Walsh,  
Texarkana, Ark.

Dear sir:—

On receipt of the enclosed (Letter Signal Co. 3/28/06) I notified Mr. Wuerpel that it

- 1485 would be entirely satisfactory to us if he would remove all of his material from the right-of-way, as the plant stood condemned. Very likely he will want to do this. As the plant stands condemned by the State's Engineer, and as the contract required that the plant be such as would be accepted by the State's Engineer, we are perfectly satisfied to let it remain condemned, and the
- 1486 sooner the stuff is removed from the right-of-way the better, so that we can get some *decent* people to put in a plant for us. Unless I hear something from my last letter to Mr. Wuerpel I shall pay no further attention to the Texarkana Interlocker, but will get ready to ask for bids for a new plant.

Yours truly,

1487

Enc.

B. S. WATHEN,  
Chief Engineer.

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EXHIBIT 52.

Buffalo, N. Y., April 7th, 1906.

- 1488 T. & P. Ry.,  
Texarkana.  
Mr. B. S. Wathen,  
Chief Engineer, T. & P. Ry.  
Dallas, Texas.

Dear sir:

We beg to acknowledge receipt of your letter of March 28th. which was in reply to our letter of March 24th. and in which you advise that it would be entirely satisfactory to you for us to

refuse to have anything more to do with the plant at Texarkana and that you see nothing left for you to do except to ask for new bids. 1489

On the day we received your letter of March 28th. we received a letter from our Mr. Walshe reporting an interview with you on Wednesday, March 28, evidently before you have received our letter of March 24th. If this is the case, we take it that your letter of March 28th is to stand and we have accordingly written our Mr. Walshe, copy of which letter is herewith enclosed. You will note that we have instructed Mr. Walshe that unless he has since received written instructions to proceed with the work, he is to return the material shipped to make changes and report at Buffalo. 1490

For your information we wish to state that this whole matter was laid before the Officers of the Pneumatic Signal Company, who advise that they in turn will place the matter in the hands of their attorney for further action. Therefore, the General Railway Signal Company will have nothing further to do with the case. 1491

We regret very much that the efforts of this Company in your interest have not met with the appreciation which we feel they deserve, for we have no doubt that the Pneumatic Signal Company through its attorneys will be able to collect 1492

1493 the entire amount of the original contract together with such interest as may be settled upon.

Yours truly,

GENERAL RAILWAY SIGNAL COMPANY,

MW—TWS

per M. Wuerpel

#2

Eng. Sales & Inst.

Enc. 1485

1494

J.M.W.

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EXHIBIT 53.

Buffalo, N. Y., April 7th, 1906.

T. & P. Ry.

53

1495

Texarkana.

TRG

Mr. J. M. Walshe,

P. O. Box 323,

Texarkana, Texas.

Dear sir:

1496

Referring to your letter of March 29th, in which you give us a full report of your interview with Major Wathen on Wednesday, 28th, we wish to state that we received a letter from Major Wathen dated March 28th which was in reply to our letter of March 24th in which we informed Major Wathen that unless you had been given written instructions to proceed with the changes at Texarkana as per our agreement by April 1st we would recall you and have material returned to our works.

From the tone of Major Wathen's letter of March 28th it is evidence that he wrote this letter

after his interview with you, and it is also evident that he had not received our letter of March 24th before his interview with you. 1497

In Major Wathen's letter of March 28th he states that it will be satisfactory to him for us to refuse to do anything more at present at Texarkana and he says that there is nothing else for him to do except to ask for new bids. He asks us how soon we can take away our stuff from the plant. 1498

We enclose herewith a copy of our reply to Major Wathen, from which you will note that we have advised him that unless you have since been given instructions to proceed with the changes at this point, you are to return the materials which were shipped to make the changes and instruct the mechanical man who was sent out to assist you to return to Chicago and you yourself to return to Buffalo. 1499

Yours truly,

GENERAL RAILWAY SIGNAL CO.

MW—TWS

#2

Enc. 1484

B.S.W.

per/ M. Wuerpel

Eng. Sales & Inst.

1500

1501

## EXHIBIT 54.

Dallas, Texas, April 10, 1906.

Mr. M. Wuerpel,  
 General Sales Agent, G. R. S. Co.,  
 Buffalo, N. Y.

Dear sir:

1502 Yours of the 7th. of April received and contents noted.

We are asking for bids for a new plant at Texarkana, the plant that was installed there some time ago, having been condemned.

1503 You had notice from me, not to remove the new material at Texarkana, but to remove all of the material that had ever been sent there, if you felt disposed to do so.

Yours truly,

B. S. WATHEN,  
 Chief Engineer.

1504

## EXHIBIT 55.

Dallas, Texas, April 17, 1906.

Mr. J. M. Walshe,  
 Texarkana, Texas.

Dear sir:

We know that the work of revision of the plant at Texarkana has not been done, and we are very sure that the work as it now stands will not pass inspection by the State Engineer. Your verbal report and that of Mr. Kane that the failures on

this plant were due almost entirely to the wiring  
—showing that the wiring is still defective and  
has never been completed in accordance with the  
agreements made between myself and Mr. Cade. 1505

Yours truly,

B. S. WATHEN,  
Chief Engineer.

1506

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EXHIBIT 56.

Dallas, Texas, April 17, 1906.

Mr. M. Wuerpel, Jr.,  
General Sales Agent, G. Ry. & S.Co.,  
Buffalo, New York. 1507

Dear sir:

Relative to your man Walshe who was sent to  
Texarkana: I was sure there was some “cussed-  
ness” involved in this matter as the statement  
herewith from Mr. Ayres would indicate. That a  
man should be sent to do a piece of work, and noti-  
fied to report to somebody that you knew was not  
the proper man and then after the man had laid  
around nearly a month without our having any  
knowledge that he was in Texarkana, and it now  
being certain that this was done by your express  
order when you knew Mr. Ayres did not have any-  
thing to do with the erection of the plant;—rest  
assured that this plant will never be accepted un-  
til it is re-wired in accordance with the agree-  
ment that I made with Mr. Cade, and I am sure  
the Commission’s Engineer will never accept it  
until this is done. 1508

1509 It is not often that one must come in contact with one of your kind, but every now and then, they turn up.

Yours truly,

B. S. WATHEN,  
Chief Engineer.

Enc.

1510

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EXHIBIT 57.

Buffalo, N. Y., Apr. 21, 1906.

Mr. B. S. Wathen,  
Chief Engineer, T. & P. Ry.,  
Dallas, Texas.

Dear sir:

1511

Your letter of the 17th inst., addressed to our Mr. Wuerpel, has been submitted to me and, having carefully read it, together with the previous correspondence relating to our method of reporting Mr. Walshe's arrival at Texarkana, I am surprised that a man in your position should address another as you have done. In the first place you have, in a number of your letters, misstated the facts and, in the second place, even had the facts been as you allege, they would not have warranted you in writing your insulting letter of the 17th inst.

1512

This company does not expect and will not require any of its officers or employees to conduct its business with any man whose treatment is abusive as yours has been and we expect that in the future you will address the representatives of this

company with ordinary business courtesy. In the event of your failure so to do, we shall, I believe, have no difficulty in arranging to conduct our correspondence with some officer of your company who will. 1513

Yours truly,

WWS.N.  
#2

W. W. SALMON,  
President. 1514

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EXHIBIT 58.

Dallas, Texas, April 23, 1906.

The General Railway Signal Co.,  
Buffalo, N. Y. 1515

Gentlemen:—

The copy of the letter herewith from Division Supt. Ayres explains itself. We have never had any notification that any improvements had been done by the Signal Co., to improve the plant. The agreement was—that the entire plant should be re-wired before we would ask for another inspection by the Engineer for the Railway Commission of Texas, and we certainly expected to have some notification that the work was being done and that the quality of material to be used would be submitted to us for approval. The plant having been condemned twice, it was wrong for this office to have considered any further tinkering with it. It should have been condemned and removed from the right-of-way of the Texas & Pacific and other lines, and a new plant ordered, but not wishing to make any unnecessary hard conditions with the Signal Company we were perfectly willing if they 1516

1517 would make the plant acceptable for the Engineer of the Railway Commission of Texas, to accept and pay for same.

This letter but amplifies the methods used by the General Railway Signal Co. since they came responsible for this plant. We have no knowledge of there being any re-wiring done; we know it  
1518 wasn't done in accordance with the agreement.

Yours truly,

B. S. WATHEN,  
Chief Engineer.

Enc.

1519

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EXHIBIT 59.

Buffalo, N. Y., Apr. 23rd, 1906.

Mr. B. S. Wathen,  
Chief Engineer, T. & P. Ry.,  
Dallas, Texas.

Dear sir:

1520 Referring to your letter of April 17th, in which you state that the Texarkana plant will never be accepted until it is re-wired in accordance with the agreement that you made with Mr. Cade.

I have gone personally over the files with reference to this wiring matter and find that on December 24th, 1904, immediately following his visit to Texarkana, Mr. Cade wrote Mr. O. H. Lang, Asst. Chief Engineer, in confirmation of the verbal understanding between Messrs. Lang and Cade, as follows: "There is one other matter that I would

like to bring to your attention and that is the fact that the wires at this place (Texarkana) were put underground. As you know, these wires were put underground at the request of the railroad company and we do not feel that the failures on account of this should be charged against the plant. The large amount of cinders at this place will make it that the life of these wires will be very much shorter than if laid on top of the grounds. I do not know, in view of the peculiarity of the State laws of Texas, that the arrangement of these wires can be avoided, but at the same time feel it only fair to the plant that we should call your attention to this matter."

Following his return from Texarkana and his interview with you, Mr. Cade made a report to me in which he stated that he fully set forth everything which it had been agreed to do at Texarkana and requested that we at once proceed with the work which he had promised on our part to have done. This was immediately done and after its completion our foreman remained on the ground for about one month waiting for the doing of the work which Mr. Cade understood was to be performed by the railroad company. The foreman finally left as there seemed to be no intention on the part of the railroad company to do their part of the work.

Therefore, so far as I understand the matter, everything which Mr. Cade agreed to do with respect to putting the old Texarkana installation in proper operating condition, was actually done early in 1905, and the work which Mr. Walshe is now engaged in doing is in connection with certain

1525 changes in track and signal arrangements having no bearing whatever upon the old contract. If I am in error as to this, I shall be pleased to receive from you a copy of agreement made with you by Mr. Cade as referred to in your letter of the 17th inst.

1526 In case such agreement was made, we shall certainly live up to it even though in making such agreement Mr. Cade exceeded his authority.

1527 My understanding of the matter is that the Texas & Pacific as well as the other lines or railway for which this company has done work in Texas, required that wherever possible, wiring shall be run in trunking underground. I know in the case of this company we have always objected to this method of construction and have pointed out to our customers that particularly where cinder ballast is used the life of insulated wires will be very materially less, owing to the fact that the acid in the cinders, oil, grease, etc., will finally find their way into the conduit, attacking the rubber, destroying it and in a relatively short period corrode the wires. Notwithstanding our objections, the roads have felt it necessary or desirable to place the wires underground, and in view of Mr. Cade's statement quoted from his letter of Dec. 24th. to Mr. Lang, I have no doubt that the Pneumatic Signal Co., were similarly required by your company to run the wires at Texarkana and such being the case, I see no reason whatever for your expectation that this company will assume the cost of re-wiring this plant. We, of course, stand ready to make this change at your cost if you so desire and will immediately, upon receipt

1528

of instructions from you to do this work at your cost, furnish the necessary materials and have the work done promptly.

1529

It may, of course, be possible that the Engineer for the State Commission will refuse to accept the plant until the wiring is renewed, but we do not understand that this will have any bearing whatever upon the question of whether this plant shall or shall not be paid for by your company, unless, as above stated, you can furnish copy of an agreement with some representative of this company or of the Pneumatic Co., showing that agreement was made with you to make the change without cost to your company.

1530

Yours truly,

1531

WWS.N  
#2.

W. W. SALMON,  
President.

P. S. In case you decide to authorize the re-wiring of the plant, in connection with other work now being done for you by Mr. Walshe, will you please wire us to that effect?

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EXHIBIT 60.

Dallas, Texas, April 27, 1906.  
The General Railway Signal Co.,  
Buffalo, N. Y.

Gentlemen:

Acknowledging receipt of yours of the 23rd.

1533 The plant at Texarkana was not put in by plans prepared by us, until they had been approved by the Commission, and the plant has to be accepted by the Railway Commission's Engineer.

The plant stands twice condemned, and it was not to be paid for until it was acceptable to the Engineer for the Railway Commission of Texas.

1534 The laws of Texas give the Railway Commission supreme authority over interlocking plants. It was under the orders promulgated by the Commission that the plant was put in. The plant having been twice condemned, the mistake that this office made was—that they did not ask for new bids at once, and throw the old material in the ditch, unless the people that brought it there would take possession of it, or do something with it.

1535 This company has always stood ready to carry out anything that was agreed to—but no more. If the plant had been put in a *satisfactory* manner, it would have been accepted on first inspection, and that is well understood. I made the agreement with Mr. Cade at his earnest solicitations, because the young man who planned this plant, (Dickson I think is the name) was so anxious that the plant be not condemned, it being his first effort in this line, and I was willing to give them all the opportunities which were consistent, to make the plant acceptable to the Railway Commission of Texas,—and, if they did so, we would feel under obligations to pay for it, whether it was seemingly up to what we would like to have it or not. This is the history of this plant up to the time

when a new set came on the scene, and attempted to take up work which the other were looking after, and we proposed to have done what we agreed should be done before the Texas & Pacific, and other lines of railway will pay for this plant. We are not under any obligations to pay for it, until it is accepted by the Commission through its Engineer. 1537

While it was not good business judgment to have agreed to any changes in the plant, until it has been accepted or a third time rejected, I now realize. The "Cotton Belt" tracks were changed in accordance with the first agreement. A long time after that they attempted to reach an industry, located not very far from the Interlocker with a switch, and to do this, they came within the interlocking limits, and they put in this track without my knowledge or consent, but your Mr. Wuerpel was notified that this track cut no figure whatever in the remainder of the plant; that we were not going to permit this track to be interlocked, until this plant was accepted by the Commission's Engineer, unless the Cotton Belt people took the matter up with the Commission's Engineer direct, and got his authority to interlock this particular track, and do it in such manner that it would not in any way change the complications which had existed heretofore. 1538  
1539  
1540

The man Walshe that was sent to Texarkana was told by Div. Supt. Ayres that he had nothing whatever to do with the plant in regard to any improvements which the Signal Company were to make, or that the Commission had ordered to be

- 1541 made there, nor to in any way change the original plans; that he must report to this office, which he declined to do with a statement that had orders not to report to this office. In addition to that, he made a number of other statements to me and also to the Division Supt. which were not true, and which we found to be not true, on investigation.
- 1542 It was agreed between myself and Mr. Cade that the plant should be entirely re-wired, taking advantage of the permit of the Commission's Engineer to change the plans of the "Cotton Belt" yards, so as to simplify the movements and operation of their yard. We were willing, if the plant was accepted by the Commission's Engineer (after all the work had been done) to pay for the new work made necessary by the changes in the
- 1543 "Cotton Belt" yard.

- In looking over the correspondence with the "Animal" Wurpel, after being advised by me that I knew nothing about Mr. Walshe being in Texarkana, he persisted that it was my business to know where Walshe was, or that I could assume from other correspondence that he would be
- 1544 in Texarkana, and this is about a sample of the manner in which all of this business has been done.

When Mr. Wurpel threatened the drop the whole matter, etc., it was entirely satisfactory to us, and I had already prepared circulars asking for new bids on plant complete, when I got an appeal from the man Walshe, to please let him go ahead and do what was wanted done, and I am sure he did this more because we had discovered

he was making statements at Dallas and Texarkana which were not true, than for any other reason. 1545

With the purpose that the Texas & Pacific Railway Company would allow whatever agreement had been made to be carried out in good faith, I decided to let him make the changes which had been agreed upon, in the way of rewiring, etc., and that Mr. Ayres understood that it was done; all of which Mr. Ayres denies, and that if anything was done by Mr. Walshe in the way of rewiring, he knew nothing about it. He knew he was tinkering around doing something, but what he was doing, and under whose instructions he was acting, he knew nothing about. 1546

I repeat that it will be entirely satisfactory for you to remove the plant off of our right-of-way, or you will be required to carry out all of the provisions of the agreement which I made with the Pneumatic Signal Company, and the plant will be accepted by the Railway Commission's Engineer, before we will accept it, and there is no need for further correspondence about the matter. 1547

To you personally—I will say—that when I make a statement, I am in the habit of standing by the statement, and will make a personal matter of anything when the party wishes it, and while we are a good ways apart, we can get together; if you desire it I am sure I do. Yourself and every one belonging to your service with whom I have had business are prevaricators, and will be so acted towards by me. 1548

Yours truly,

(S'd.)

B. S. WATHEN,  
Chief Engineer.

1549

## EXHIBIT 61.

(Can't find this.

~~W. H. TOMPKINS).~~

## EXHIBIT 62.

1550

Engineering Department.  
 The *Texas & Pacific* Railway Company,  
 B. S. Wathen,  
 Consulting Engineer.  
 Dallas, Texas, Sept. 3, 1906.  
 (Copy).

The General Railway Signal Company,  
 Rochester, N. Y.

1551

Gentlemen:

The attached is respectfully referred.

This condition has existed since the work was done, and of course, 'gets worse. Having been put in under the protest of our people, while it is not a very great matter to correct, we don't feel at liberty to do so.

1552

Yours truly,

62 (Signed) B. S. WATHEN,  
 Enc. TRG Chief Engineer.

## EXHIBIT 63.

1553

Office of Chief Engineer.  
 The Texas & Pacific Railway Company,  
 B. S. Wathen, Chief Engineer,  
 C. H. Chamberlain,  
 Assistant Chief Engineer.

Dallas, Texas, Sept. 2, 1906.

(*Copy*).

1554

Major B. S. Wathen,  
 Chief Engineer, T. & P. R'y Co.,  
 Dallas, Texas.

Dear sir:

I attach hereto a copy of letter from our main-  
 tainer in reference to levers No. 2 and No. 25,  
 which explains itself. This is part of the new  
 work done by the Signal Company in making the  
 changes for the "Cotton Belt" R'y Company.  
 The maintainer, Mr. Atkinson, and myself went  
 over this work several times during the construc-  
 tion, and called the attention of the Signal Com-  
 pany's Supt. to the conditions, and class of work  
 that they were doing. As I wrote you in a former  
 report, the material and workmanship is very  
 poor. I have written Mr. Atkinson to do the best  
 he could and watch things carefully, until you  
 could hear from the Signal Co., whether they  
 would look into the matter or not.

1555

1556

Very respectfully,

(S'd.)

F. W. KANE,

Enc. 63

TRG

1557

## EXHIBIT 64.

Dallas, Texas, July 8, 1905.

Mr. W. W. Salmon,  
 %General Railway Signal Co.,  
 Buffalo, N. Y.

Dear sir:

1558 Your letter of July 5th just received, and contents noted.

1559 We see from it that you are not very well advised as to the plant at Texarkana. When this plant was put in, it was put in under contract, which called for a 60 days' test before any part of the contract price should be due to the Signal Co., and the plant of course subject to the approval of the Railway Commission of Texas. After the plant had been in operation for this period, the inspection was made by the Engineer of the Railway Commission of Texas, and condemned. It was not condemned because of any conditions which prevailed as to the condition of the tracks but because of the continued failures of the plant to work, as evidenced by the daily reports.

1560

The people installing this plant advised us that this was the first plant of the kind, which they had attempted to put in operation, and that doubtless there were many details which experience would prove should be corrected, which might be faulty in this plant. At our request the Railway Commission granted another period for inspection and on the second inspection the report was unfavorable.

The tracks of the Texas & Pacific Railway Co., and the tracks of the K. C. S. Railway Co. were in as good condition as the average at interlocking plants in this southwestern country.

1561

There was some complaint that the tracks of the St. L. & S. W. were not as good as the others. After going over the matter thoroughly with the Commission's Engineer, he consented to certain remodeling of the tracks in the yard of the St. L. & S. W. Railway Company, which would facilitate the handling of their business at this yard—that is the Engineer agreed to the change of derails from the standard distances as given in the rules promulgated by the Texas Commission. It was agreed that if the Signal Co. would correct the defects which were very apparent in the plant, that the Railway Company would take advantage of the permit of the Commission, and make some changes in its yards, and in doing so would place heavier rails through their section of the yard covered by the interlocker. In pursuance of these agreements, and the further fact that the interlocking plant would be given additional time in which to make the corrections demanded by the Commission, in their plant, (the agreement was—that as soon as the changes in the yard were made, that the Signal Co., would install additional devices, and when this was done, if the plant worked satisfactorily, it would be paid for.) it being fully understood and agreed that whatever new work was necessary to take advantage of the new ruling of the Commission (wherein the St. L. & S. W. Railway Co. was interested, that all of this new work would be paid for in addition to the contract price of the plant). When the St.

1562

1563

1564

- 1565 L. & S. W. Railway Co. had made its changes so as to take advantage of the new ruling of the Commission, application was made to the General Railway Signal Co., to install the new parts and perfect the plant, but we were advised that they didn't care to submit a bid, but would sell the material, or they would install the plant at a cost of 15%. All conditions considered, this
- 1566 was a very extraordinary proposition on the part of the Signal Company, because their plant had been condemned twice by the Commission, and in condemning this plant, the Commission's Engineer was fully cognizant of the conditions of the tracks covered by the interlocking plant at such crossings, but this was not such as to warrant the Signal Co. in refusing to install the work to cover the new changes in the yards.
- 1567

Under the agreement it was the duty of the Signal Co. whether it be the concern with whom the contract was made, or its successor, to install this new work, and carry out this agreement, relative to the plant without imposing any extra burdens on the Railroad Co.

- 1568 It is not the custom in this part of the world, to charge cost and 15%. The universal custom is cost and 10%.

In replying to our request for a bid, to get the plant remodelled in accordance with the plans of the Railway Commission, a demand was made, that some understanding should be reached relative to the old plant before the Signal Co. would agree to putting in new works, when as a matter of fact, the agreement was, that as soon as the

new work had been added to the plant, that a re-inspection by the Commission would be asked, and if the plant was accepted by the Commission the Company would pay for the plant. The old plant stands condemned on two inspections, and we thought we were treating the Signal Company very liberally, in agreeing to give them an additional period in which to perfect their plant, instead of taking the report of the Commission and condemning the plant and notifying the Signal Co. that the plant was condemned, and that bids for a new plant would be asked for.

1569

1570

In making the changes in the plant, it was not because of any imperfect design, so far as the yards were involved, nor was the St. L. & S. W. Railway Company under any obligations to take the changes, but they were permitted to do so when the Commission should grant them the permit to make the changes in the yard. They had no option except by the consent of the Commission's Engineer.

1571

So far as any idea of any member or officer of the St. Louis & S. W. Ry. Co. is concerned, they had nothing whatever to do with the agreements, made by the representatives of this Company with the Signal Co.'s people as all the business relating to this interlocker was controlled absolutely by the Texas & Pacific Railway Company's employees, under rules already established, which the St. Louis & S. W. Ry. Co. was committed to. Therefore because any one or more members of the St. L. & S. W. Railway Co.'s management thinking that because the Commission had recalled its order, for the interlocking of all crossings

1572

- 1573 within the boundaries of the State of Texas, this plant could be eliminated; the opinion of any of these persons or people had no more to do with the plant than had a man in the moon, because we, of the Texas & Pacific, took the opposite view—that the crossing having been ordered installed, that it must be installed in accordance with the requirements of the Commission; nor did
- 1574 the St. Louis & S. W. requirement make any further objection to the matter, and went to work at the changes involved by the permit to change their yards, when they were notified that this Company did not agree with the idea that this plant could be eliminated by reason of the Commission's new ruling.

- 1575 As soon as this was done, we asked for bids for making the changes, which brought about my letter of 24th of April.

- The Commission has very kindly deferred any action in this matter since the last inspection, at our request, so that the new work could be installed, and the plant given another trial before another inspection by the Engineer for the Commission.
- 1576

We, therefore, say now, as we have always said—that if the Signal Company will go ahead and put in this new work, and do it at a fair price; within 30 days from the time the work is installed, if the plant works satisfactorily, they will be paid in full for the plant, but if they persist in trying to “hold us up” in the price of material and labor necessary to carry out the agreement made with Mr. Cade, et al., then we shall never

ask for another inspection by the Commission, and will notify them that the General Railway Signal Co., has refused to make good the plant, and the inspection of the plant previously made will obtain, and this Company must, to comply with the Commission's orders ask for new bids on this plant. 1577

On receipt of this you will please advise me if you people will complete the installment of this plant, within a reasonable time, and at a reasonable cost, so that we may know what to say to the Railway Commission of Texas. 1578

Nothing pertaining to this plant has ever been up for criticism, except the working of the interlocker, nor would any changes of the interlocker plant have been suggested, had it not been to the interests of the Railway Company, to take advantage of the new ruling of the Commission and make changes in their tracks. The Engineer for the Railway Commission of Texas refused these changes when the first plans were being prepared, and we thought we had obtained a very great concession, when we got the Commission to change its rules relative to the de-rails, etc., on the line of the St. Louis & South Western Railway. 1579  
1580

Yours truly,

B. S. WATHEN,  
*Chief Engineer.*

If it takes from April 24th to July 5th to get any sort of a reply to our request for the completion of this plant, the plant will probably be worn out before I get answer to this.

1581 It has been something of a mystery to us why the agreement made with Mr. Cade has not been complied with, as the \$16000.00 payment was contingent on this being carried out.

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EXHIBIT 65.

1582

July 17th, 1905.

Mr. B. S. Wathen,  
Chief Engineer, T. & P. Ry.,  
Dallas, Texas.

Dear Sir:

Owing to my absence from Buffalo your esteemed favor of the 8th inst., has only now reached me.

1583

I wish to thank you for the very complete statement you have made with respect to your view of the Texarkana interlocking matter but I hope that you will permit me to say that my understanding of this matter differs radically in some essential features from that set forth in your letter.

1584

In the first place you state that the plant was condemned by the Engineer of the Texas State Commission and that this condemnation was due not to the condition of the tracks but to the failure of the interlocking.

With respect to this I will say that on June 28th the Engineer of the Commission made his inspection and on July 7th the Commission issued a "special order" *approving* the operation of the

plant until October 1904 and calling for the performance of certain additional work prior to that date, at which time another inspection was to be made to ascertain whether such additional work had been performed.

1585

This work called for by the Commission was under seven headings, the first three affecting the Signal Company, the other four affecting the Railroad Company. At the time of the second inspection the Signal Company had performed the work called for by the Commission and the Railroad had not performed its part of the work. In consequence it was not to be expected that the Commission finding its orders had been disregarded by the Railway Company, would approve the plant.

1586

1587

I do not assert that the work as installed by the Pneumatic Signal Company was in absolutely perfect condition nor can I say positively that had the railway done the work called for by the Commission, the plant would have been finally accepted at the time of the second inspection. But it is certain that even had all apparatus furnished and all work done by the Signal Company been in every respect perfect, the Commission could not have consistently accepted the plant, owing to the disregard by the Railway Company of its order of July 7th, 1904.

1588

At the time of Mr. Cade's visit to the plant in December, 1904, it was found that certain of the apparatus furnished by the Signal Company was in poor condition, this being in part due to original defects and in part due to poor maintenance

1589 or to its use on bad tracks. It was agreed by Mr. Cade that the Signal Company would put this apparatus in good condition and it was at the same time agreed by Mr. Lang that the tracks would be put in proper shape and the plant be properly maintained.

1590 The Signal Company at once proceeded to perform its part of the agreement without cost to the Railway Company and it completed its part of the work by the latter part of February and kept a man there until April 12th in the hope that the railway would attend to its part of the agreement; but up to that time, absolutely not a single thing had been done by the railway of all it had agreed to do.

1591 It, therefore, seems to me that the Signal Company did all that it agreed to do and, as stated in my letter to you of the 5th inst., I believe that the operation of the plant as shown by the copies of the railroad's reports, affords ample evidence that the plant is working as well as can be reasonably expected in view of the track and maintenance conditions existing during the period covered by the reports. Such being the case, the Signal Company is entitled to payment of the original contract price and this should not be held back pending the carrying out of new work or the making of changes in arrangement of signaling not at all covered by or in any manner relating to this original contract.

1592

Furthermore, the General Railway Signal Company should not be expected to furnish either material or labor for such changes, subject to the

condition that such materials and labor shall be paid for only in the event of your paying for the installation made for you by the Pneumatic Signal Company.

1593

We are perfectly willing to sell you material and labor at the lowest price at which we sell to any customer but we cannot agree to sell to you at a lower price than to others, nor to have payment for such material and labor made contingent upon your acceptance of certain other merchandise.

1594

I believe that if you will give this matter further thought you will find that Mr. Cade did not agree to put in new work to take care of changes in your tracks and signaling, such new work to be paid for only in case the original plant is paid for. He certainly made no mention to me of any such agreement nor does his letter to Mr. Lang under date of December 15th, 1904, indicate any such understanding and I therefore believe you are in error as to this and that if you will confer with Mr. Lang you will find that his understanding on this matter does not coincide with yours.

1595

Permit me, therefore, to suggest that if you have decided to make the changes in your signaling it be done on the following basis:

1596

We to furnish materials on regular purchase orders at our *net* selling price and to furnish you with such man, or men, as you require, you to take them on your rolls and pay them their regular rate of wages and to furnish them such tools as they require.

1597 In this way, we would receive from you payment only for materials actually furnished as per list covered by our proposal of April 21st to Mr. Lang, and as you would yourself employ the labor and pay for it you could have no reason to feel that you were paying too much for it.

1598 If on the other hand you insist that we furnish labor and tools we cannot do so on more favorable terms than stated in our letter of April 21st.

1599 I do not know what the practice of other Signal Companies may be in respect to percentage to be added to net cost of labor, for use of tools and profit, where changes are made similar to those required at Texarkana; but we have only one price whether it is in Texas or Maine and that is 15% and where that is not acceptable we prefer that the railway furnish their own labor and tools. On *new* work where we furnish the materials required, 10% is satisfactory; but on changes where a great deal of material has to be taken out of one location and put in another and where, in consequence, very little new material is required we invariably charge 15% and you are not justified in calling it a "hold up" since if you do not want to have us furnish the labor and tools on these terms there is no reason in the world why you should not do the work yourself and thus avoid paying us any percentage.

1600

With respect to delay in replying to your former letter, I will say that I could not make reply until I heard from the Pneumatic Signal Company and I was unable to compel them to hurry their answer in just the same way that I

suppose Mr. Lang was unable to give us a decision as to changes to be made in tracks and signaling. We wrote him repeatedly for such plans and it took three months for us to get them; but I do not hold Mr. Lang responsible for his inability to force other companies to hurry their decision. 1601

To summarize this whole matter I will say that our position is as follows: 1602

We will furnish materials required for changes, as per our proposal of April 21st and we will furnish labor on the 15% basis or you may, if you prefer, furnish labor yourself; but whatever we furnish must be subject to the understanding that it is to be paid for regardless of the acceptance or non-acceptance of the plant as installed under the original contract. 1603

I hope that you will recognize the fact that this is an absolutely fair proposal and that you will give us an order to proceed on this basis.

But should you insist upon our furnishing materials and labor subject to the condition that they will not be paid for except you decide to pay for the plant as originally installed, the matter may as well be dropped at once and we are under no obligation, either legal or moral, to take any such chances. I have absolutely no doubt as to the ability of the Pneumatic Company to collect the entire \$16,000 with interest from March 1st, 1905, but I do not propose to do anything that in the event of the refusal of your company to make 1604

1605 payment for the work done by the Pneumatic Company, would necessitate our taking part in the litigation that is sure to follow such decision.

You ask that upon receipt of your letter I will advise whether my people will complete the installment of the plant within a reasonable time and at a reasonable cost so that you may know what to say to the Railway Commission of Texas.

1606 Replying, I beg to say that the plant, so far as the original contract is concerned, and with respect to Mr. Cade's agreement, has been completed in exact conformity with the terms of such contract and such agreement since March 1st, 1905; that the work now proposed to be done has nothing whatever to do with the Cade agreement, the original contract or the obligations assumed thereunder by the Pneumatic Signal Co. and that the General Railway Signal Co. will undertake such work only upon the terms hereinbefore enumerated.

1607

In the autograph postscript of your letter of the 8th inst., you say, "it has been something of a mystery to us why the agreement made with Mr. Cade has not been complied with as the \$16,000 payment was contingent upon this being carried out." In reply to this I will say that the Signal Company's part of this agreement was promptly and fully carried out in every detail, all the work agreed to be done having been completed by March 1st, whereas not the first thing of all the railway had agreed to do had received the slightest attention, and it has been a good deal of a mystery to us why such has been the case. Mr. Wuerpel and Mr. Dodgson, both of whom were present at your interview with Mr.

1608

Cade assert most positively that it was not even suggested that the acceptance of the plant was to be contingent upon the making of certain changes in track layout and the making of changes in signaling to suit such track changes. Mr. Cade's letter of Dec. 15th to Mr. Lang makes no mention of any such arrangement and nothing ever received from your company until your letter of July 8th ever contained even a hint of such an understanding. If I were as ready as you seem to be to accuse people of being in the "hold up" business I might find in this, as in many other incidents of this affair, reason to accuse you of an attempt to "hold us up" but, while it would doubtless look that way to some people I am assured by a number of people who have the pleasure of your acquaintance that you are a gentleman, and I therefore believe that the heat you display in your letters is due to a mistake and that upon receipt of this letter you will look further into the matter and, finding that you are in the wrong will do what any gentleman may be counted upon to do under similar circumstances.

Awaiting your further commands, I am, with highest respect,

Sincerely yours,

W. W. SALMON,  
*President.*

Dictated by W. W. Salmon.

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1812

1613

## EXHIBIT 66.

Dallas, Texas, Aug. 4, 1905.

Mr. W. W. Salmon,  
 Pres., General Railway Signal Company,  
 Buffalo, New York.

Dear Sir:

1614 The material which will be required to change  
 the plant at Texarkana would be:

1 2-arm dwarf signal,  
 2,000 feet #14 simplex wire,  
 600 feet 2 x 3 trunking,  
 400 feet 1 x 1 trunking,

and the new interlocking material, dogs, screws,  
 etc., which should accompany same.

1615

I will advise you whether or not to ship this  
 material.

Yours truly,

B. S. WATHEN,  
*Chief Engineer.*

1616

## EXHIBIT 67.

Dallas, Texas, October 9, 1905.

Mr. M. Wuerpel, Jr.,  
 %General Railway & Signal Co.,  
 Buffalo, New York.

Dear Sir:

Acknowledging receipt of yours of October 6th:  
 Quarantine restrictions at Texarkana are just as  
 rigid as ever, but the period when frosts can be

expected in this territory is now close at hand. **1617**  
 As soon as frost comes in this district, quarantine  
 will be lifted. It is usual to have frost at Tex-  
 arkana before the first of November.

Material sent forward now would not likely  
 reach Texarkana before quarantine restrictions  
 would be removed.

Yours truly, **1618**

B. S. WATHEN,  
*Chief Engineer.*

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EXHIBIT 68.

**1619**

SPECIAL ORDER.

Monthly reports on Interlocking Devices.

Austin, Texas, May 24, 1904.

In pursuance of the requirements of Rule 7,  
 Circular No. 1597, issued May 31, 1902, it is or- **1620**  
 dered by the Railroad Commission of Texas that  
 reports for each month shall be made to it by the  
 General Manager, General Superintendent or  
 Signal Engineer of each railroad company in this  
 state operating and maintaining interlocking de-  
 vices at railroad crossings, upon forms pre-  
 scribed, furnished by the said Commission, show-  
 ing the general condition of the apparatus and  
 machinery of said devices and character and ex-  
 tent of accidents and derailments, if any, that  
 have occurred, etc.

1621 It is further ordered that the said reports shall be filed with the said Commission within fifteen (15) days after the end of the month for which the report is made.

This order shall take effect July 1, 1904.

1622

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EXHIBIT 69.

April 21, 1905.

Mr. O. H. Lang,  
Asst. Chief Engineer, T. & P. R'y,  
Dallas, Texas.

Dear Sir:

1623 As per our letter of April 11th, which acknowledged receipt of your favor of April 4th, forwarded to our Chicago office, enclosing print showing proposed changes in the Texarkana Interlocking plant, we give below list of material which we have figured will be required to make the changes as shown on your plan:

1624 1 2-arm dwarf signal,  
New material for detector bars,  
2,000 ft. #14 Simplex wire,  
600 ft. 2 x 3 trunking,  
400 ft. 1 x 1 trunking,  
New interlocking material—dogs,  
screws, etc.

We will be pleased to furnish this additional material for the sum of Three Hundred Sixty Dollars (\$360.00), f. o. b. our works.

In regard to the estimate for labor, it is rather a difficult matter for us to make a lump sum

proposal for this, and therefore have to advise **1625**  
that we will furnish the necessary labor for making these changes at cost to us plus 15%.

We wish to inform you, however, that we will not undertake to do any work on these proposed changes until some definite understanding has been reached in regard to settlement of the original contract. In another letter we are writing **1626**  
you in regard to this.

Yours truly,

M. WUERPEL,  
*Engineer Sales & Inst.*

#10 MW FAD

**1627**

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EXHIBIT 70.

THE TEXAS & PACIFIC RAILWAY CO.

Interlocking Tower Station, Texarkana, 5/16/06.  
Mr. R. B. Ayres, Supt in charge,

Texarkana, Tex. **1628**

Dear Sir: I beg to advise that the new switches, derails & signals, on "Cotton Belt" track layout will be put in service Wednesday, May 16th, at 11 o'clock.

Respectfully yours,

J. M. WALSHE,  
*Towerman,*  
Gen. Ry. Sig. Co.

1629 EXHIBIT 71.

THE TEXAS & PACIFIC RAILWAY CO.

Office of Interlocking Tower,  
May 16th, 1906.

F. W. Kane, Sig. Engr.,  
Chief Engr. Office,

1630 Dallas, Tex.

Your wire even date. We have finished except  
cleaning up. Will be ready for you tomorrow.

J. M. WALSHE.

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1631 EXHIBIT 72.

THE TEXAS & PACIFIC RAILWAY CO.

Date, May 21st, 1906.

To F. W. Kane,  
% Chief Engr. Office,

Dallas, Tex.

1632 Have received no word from you. Have finished. Men leave here tonight.

J. M. WALSHE,  
*Foreman, Gen. Ry. Sig. Co.*

## EXHIBIT 73.

1633

Consisting of weekly reports of the daily workings of the interlocking plant made by the towerman to O. H. Lang, Assistant Engineer, and filed with the Engineer of the Railroad Commission. Each report covers the preceding week.

July 24th, at 11:45 P. M. Track Circuit lever, No. 11 failed to take current. Cause not known. 1634

July 25th, No Failures.

July 26th, No Failures.

July 27th, No Failures.

July 28th, at 3 A. M. Signal lever, No. 43, on T. S. & N. failed to indicate normal. Cause not known.

July 29th, No Failures.

1635

July 30th, No Failures.

July 31st, No Failures.

Aug. 1st, No Failures.

Aug. 2nd, No Failures.

Aug. 3rd, about 2 A. M. X over No. 15 failed to take current acct. not making good contact in indication box, repaired & working O. K. 7 A. M

Aug. 4th, No Failures.

Aug. 5th, No Failures.

1636

Aug. 6th, No Failures.

Aug. 7th, No Failures.

Aug. 8th, No Failures.

“ 9th, “ “

“ 10th, “ “

“ 11th, “ “

“ 12th, “ “

“ 13th, “ “

**1637** Aug. 14 at 4:30 A. M. X over No. 15 failed to take current, acct. dirty brushes. Brushes cleaned and working O. K. at 4:45 A. M.

Aug. 15, No Failures.

Aug. 16, " "

Aug. 17, " "

Aug. 18, " "

**1638** Aug. 19, " "

Aug. 20. " "

Aug. 21st, No Failures.

Aug. 22nd, about 3:30 A. M. Switch and derail No. 13 failed to work. Cause not known, not repaired at 7 A. M. Aug. 22nd, about 3:45 A. M. Derail No. 37 failed to take current. Cause not known, not repaired at 7 A. M.

**1639**

Aug. 23rd, about 3:50 A. M. Derail lever No. 34 failed to work. Cause not known, not repaired at 7 A. M.

Aug. 24th, about 2 A. M. Derail No. 34 failed to take current. Cause not known, not repaired at 7 A. M.

**1640**

Aug. 25th, No Failures.

Aug. 26th, No Failures.

Aug. 27th, No Failures.

Aug. 28th, No Failures.

Aug. 29th, No Failures.

Aug. 30th, No Failures.

Aug. 31st, No Failures.

Sept. 1st, No Failures.

Sept. 2nd. X over No. 16 failed to take current, acct. bent spring in lever box at 7 A. M. **1641**

Sept. 2nd, at 11:30 P. M. X over No. 16 failed to work, acct. short current in indication box.

Sept. 2nd, at 9:20 P. M. Switch and derail No. 17 failed to work, cause not known. Not repaired at 12, midnight. At 10 P. M. switch and derail No. 13 failed to work, acct. short circuit in indication box. **1642**

Sept. 3rd, at 5 P. M. Switch and derail No. 13 failed to work, acct. short circuit in indication box.

Sept. 3rd, at 5 P. M. Switch and derail No. 13 failed to work, acct. short circuit in indication box. **1643**

Sept. 4th, at 11:20 P. M. Signal No. 28 failed to clear. Cause not known.

Sept. 5th, at 8:20 P. M. Signal No. 28 failed to clear. Cause not known.

Sept. 6th, at 9 P. M. Switch and derail No. 13 failed to work. Cause not known.

Sept. 7th. No failures. **1644**

Sept. 8th. No. 11 track circuit failed to work, cause not known.

Sept. 9th, at 7 P. M. Derail No. 19 failed to work. Cause not known. At 11 P. M. X over No. 16 failed to take current. Cause not known.

Sept. 10th. No Failures.

Sept. 11th. No Failures.

Sept. 11th. No Failures.

- 1645 Sept. 12th, at 8:35 P. M. Switch and derail No. 13 failed to work. Cause not known.
- Sept. 13th, at 8:50. Derail lever No. 54 failed to indicate. Cause not known.
- Sept. 14th. No Failures.
- Sept. 15th. No Failures.
- Sept. 16th. No Failures.
- Sept. 17th. No Failures.
- 1646 Sept. 18th. No Failures.
- Sept. 19th. No Failures.
- Sept. 21st. No Failures.
- Sept. 22nd. " "
- Sept. 23rd. " "
- Sept. 24th. " "
- Was off duty Sept. 20th.
- Sept. 24. No Failures.
- 1647 Sept. 25, at 5 P. M. Signal arm No. 40 failed to clear, cause not known.
- Sept. 26. No. 43 Signal lever not indicating at 12 midnight.
- Sept. 27, at 7 P. M. Switch & Derail 13 failed to take current acct. bent spring in lever box. Repaired and working O. K. at 12 Mid. ?
- 1648 Sept. 28, at 7:20 P. M. Signal No. 52 failed to clear, cause not known, working O. K. at 12 Mid. No repairs made.
- Sept. 29. No Failures.
- Sept. 30, at 10:45 P. M. Switch and derail No. 13 failed to take current acct. dirty brushes. Brushes cleaned and work O. K. at 10:55 P. M.
- Oct. 1st. No Failures.
- Oct. 2nd. No Failures.

Oct. 3rd. No Failures. 1649  
 Oct. 4th. " " " "  
 Oct. 5th, at 7 P. M. Switch and derail No. 37 failed to work. Cause not known.  
 Oct. 6th. No Failures.  
 Oct. 7. No Failures.  
 Oct. 8. No Failures.  
 Oct. 9th. No Failures. 1650  
 Oct. 10, at 5 P. M. X over No. 16 failed to take Current. Cause not known at 7:15 P. M. Signal No. 52 failed to clear. Cause not known, working O. K. at 12 Mid. No repairs made.  
 Oct. 11. No Failures.  
 Oct. 12, at 10:15 P. M. lower arm signal No. 50 failed to clear, cause not known. 1651  
 Oct. 13. No Failures.  
 Oct. 14, No Failures.  
 Oct. 15. No Failures 8 P. M. to 8 A. M.  
 Oct. 15. No Failures.  
 Oct. 16, No. 43 Signal on J. & P. Main line not indication at 12 Mid. Cause not known.  
 Oct. 17, No Failures. 1652  
 Oct. 18. No Failures.  
 Oct. 19. No Failures.  
 Oct. 20. No Failures.  
 Oct. 21. No Failures.  
 Oct. 22. No Failures.  
 Oct. 23. About 3:50 P. M. Derail No. 46 failed to take Current Acct. Spring in lever box not making contact.  
 Oct. 24. No Failures.

1653 Oct. 25, at 5:50 P. M. Derail No. 48 failed to work. Cause not known. Not repaired at 12 Mid.

Oct. 26. No Failures.

Oct. 27. " "

Oct. 28. " "

Oct. 29. " "

Oct. 30. " "

Oct. 31. " "

1654

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EXHIBIT 74.

THE TEXAS & PACIFIC RAILWAY  
COMPANY.

1655 Report of Operation of Interlocking Plant  
For the Month of March, 1905.

Interlocker No. 42. Located at Texarkana, Texas.  
At crossings of the St. L. S. W. Ry., T. & F.  
S. Ry., R. , and the T. & P. Ry. Co.  
Texarkana, Texas, Apl. 4, 1905.

1656 In accordance with the Special Order of the  
Railroad Commission of Texas, issued May 24,  
1904, I beg to submit the following report on In-  
terlocking Device No. 42 located at Texarkana,  
Texas:

1. General condition of Interlocking (from last daily report) Good.
2. General condition of crossing frogs, Good.
3. Has device been out of service since last report? (State length of time, extent, cause, etc., in each case.) See supplementary report.

4. Have the defects in machinery and apparatus been remedied? Yes—except 11—14 & 36 track circuits and No. 50 Signal. 1657

5. Have there been any derailments or accidents of any kind to trains? (State character and extent in full). No.

6. Have trains been delayed at interlocking? (State trains and 'cause of delay). See supplementary report. 1658

7. Have annunciators been out of service? No.

8. Have track circuits been out of service? Yes. See report 3.

9. Are all detector bars, switches, derails, locks and signals connected up and in good working order? Yes—except signal No. 50. 1659

10. Is device being operated and maintained in accordance with the regulations of the Commission? Yes.

11. Do you require daily reports from the towerman? Yes.

12. How many trains per day, each road, have passed through the interlocking? 1660

Remarks:	Trains	S. W. Engr.
T. & P.	33	13
St. L. S. W.	45	56
T. & F. S.	15	23

I hereby certify that the above report is correct and in accordance with Daily reports received from the towerman.

.....  
Division Superintendent.

- 1661 This report will be made up and sent to the Assistant General Manager at end of each month.  
190

- 1662 Exhibit 74 consists of a bundle of reports attached to the deposition of R. B. Ayres, Division Superintendent of defendant's railroad. This bundle of reports consists of 47 general monthly reports of the same general character as the above. To these monthly reports are attached supplemental detail reports, there being from one to nine pages of supplemental report attached to each general report and aggregating 176 pages. There are also weekly reports made by the tower-men in charge of the operation of the plant as follows: C. J. Atkinson, 24 reports; W. B. Carmack, 120 reports; E. N. Cullums, 305 reports; E. Fisher, 49 reports; E. E. Peysert, 183 reports; J. R. Thomas, 272 reports; and 14 reports made by five other employees of defendant.
- 1663

This bundle of reports will be handed up to the Court upon the argument of this appeal.

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1664 STIPULATION.

It is hereby stipulated that the foregoing case contains all the evidence introduced upon the trial of the action.

Dated, April 30, 1913.

MEDCALF, AVERILL & TOMPKINS,  
*Attorneys for Plaintiff.*

PIERCE & GREER,  
*Attorneys for Defendant.*

## ORDER SETTLING AND FILING CASE. 1665

The foregoing case and exceptions containing all the evidence given on the trial of this action, is hereby signed, settled and ordered filed in Monroe County Clerk's office.

Dated, ~~April~~ <sup>July 1st</sup> 1913.

GEORGE A. BENTON, 1666  
J. S. C.

## STIPULATION WAIVING CERTIFICATION.

It is hereby stipulated that the foregoing consists of true and correct copies of the Notice of Appeal, the Judgment Roll, Order Denying Motion for New Trial, the Case and Exceptions which contains all the evidence given on the trial and the Order settling the same and the whole thereof now on file in the office of the Clerk of the County of Monroe; and certification thereof by the Clerk of said County pursuant to Section 1353, is hereby waived. 1667

Dated, Rochester, N. Y., April 30 1913. 1668

MEDCALF, AVERILL & TOMPKINS,  
*Attorneys for Appellant.*

PIERCE & GREER,  
*Attorneys for Respondent.*

## 1669 AFFIDAVIT OF NO OPINION.

SUPREME COURT—COUNTY OF MONROE.

	PNEUMATIC SIGNAL COM- PANY,	} <i>Appellant,</i>
	against	
1670	TEXAS and PACIFIC RAIL- WAY COMPANY,	} <i>Respondent.</i>

State of New York,	} ss.:
County of Monroe,	
City of Rochester.	

1671 WILLIAM H. TOMPKINS, being duly sworn, says that he is one of the attorneys for the plaintiff in the above entitled action. That no opinion or memorandum was given by the Trial Judge in said action, except what was taken down by the stenographer upon defendant's motion for direction of verdict, and which appears upon the printed case and exceptions at page 260.

1672

WILLIAM H. TOMPKINS.

Sworn to before me this  
*30<sup>th</sup>* day of April, 1913.  
 Charlotte A. Houston,  
 Com'r of Deeds.





STATE OF NEW YORK.

# Supreme Court

APPELLATE DIVISION—FOURTH DEPARTMENT.

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PNEUMATIC SIGNAL COMPANY,  
*Appellant,*  
against  
TEXAS AND PACIFIC RAILWAY  
COMPANY,  
*Respondent.*

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## BRIEF FOR APPELLANT.

### STATEMENT.

This is an appeal from a judgment dismissing the complaint in the above entitled action upon the merits, with costs against the plaintiff for \$301.17, entered upon a verdict of the jury in favor of the defendant and against the plaintiff on January 15th, 1912; also from an order granted on the same day denying plaintiff's motion for a new trial, made on all the grounds stated in Section 999 of the Code.

This action was begun in the Supreme Court, Monroe County, by service of the summons upon the defendant October 10th, 1907. Issue was thereafter joined; and the action was tried before Justice Sawyer and a jury. At the close of

which trial, December 18th, 1908, a verdict was directed for the defendant, and the complaint was dismissed upon the merits. A motion for a new trial was denied. The judgment for the defendant and order denying a new trial were affirmed by the Appellate Division, Fourth Department, by a divided court, Justice Robson dissenting. (133 A. D. 781). The Court of Appeals reversed the judgments of the Supreme Court and the Appellate Division, and directed a new trial. (200 N. Y. 125). On February 20th, 1911, Justice Foote permitted the plaintiff to amend its complaint, by inserting the allegation that defendant had used and accepted the interlocking plant, which is the subject of this controversy. The order of Justice Foote was affirmed on appeal. The action was next brought on for trial in September, 1911, before Justice Foote and a jury. On September 27th, the jury, being unable to agree, was discharged. On January 8th, 1912, the third trial of the action was begun before Justice Benton and a jury; and on January 15th a verdict was rendered by the jury for the defendant, and plaintiff's motion for a new trial was denied.

This action is brought to recover for the erection and installation by the plaintiff of an interlocking plant, or system, at Texarkana, Texas, upon a written contract made between the parties to this action. At Texarkana, Texas, three railroads, to wit, the defendant's railroad, the St. L. & S. W., and the T. & Ft. S. Ry. cross each other at a common grade. In the year 1901, the Texas Legislature enacted a law (Ex. 1, p. 265) that where two or more railroads crossed each other

at a common grade in Texas, the crossings should be protected by interlocking, or other safety devices, to prevent trains colliding at such crossings. Section 5 provided that any railroad company which refused or neglected to comply with any order of the Railroad Commission made pursuant to said Act, should forfeit to the State of Texas the sum of \$500.00 per week. (P. 265). The statute also provided, Section 4, that whenever such interlocking device should be constructed and maintained in good order to the satisfaction of the Railroad Commission, then, in that case it should be lawful for engines and trains to pass over such crossings without stopping.

On June 5th, 1902, the Railroad Commission of Texas made an order directing that certain enumerated railroads should comply with the statute referred to and protect the crossings at the places therein named by interlocking devices. This order specifically applied to the said three railroads which crossed each other at Texarkana, Texas. (Ex. 2, p. 267).

On May 31st, 1902, the Railroad Commission of Texas adopted certain general rules regulating the installation, maintenance and operation of interlocking devices. (Ex. 3, p. 269). By Rule 3 it was provided that the petition for an inspection of the interlocking device, after the same had been installed, should be signed by an officer of each of the railroads parties to such crossing. The fifth rule provided that when it had been determined by actual inspection that an interlocking device had been constructed in accordance with approved plans and was operated in a safe

manner, that a permit would be issued authorizing trains to run over said crossing without stopping. The sixth rule provided that if at any time the Commission should determine that any interlocking device was not properly maintained and efficiently operated, that the Commission should cancel its permit and all trains should be required to stop at such crossings as if no interlocking device existed. The seventh rule provided that reports should be made by the Railroad Company showing the condition of the devices with detailed reports as to accident, etc.

A written contract was entered into June 25th, 1903, between the parties to this action for the erection of such an interlocking device by the plaintiff at the Texarkana crossing. (Ex. 4, p. 271). The defendant was acting on behalf of the two other railroads parties to the crossing. This contract provided for the erection of an interlocking system, not of the best make or design in the market, but of the design and manufacture of this plaintiff. (Fol. 1107). The principal material provisions of this contract, so far as this appeal is concerned, are as follows:

1st. "The materials and apparatus to be furnished and labor to be performed \* \* \* should be in conformity with the specifications and satisfactory and acceptable to the Chief Engineer or other authorized officer of defendant." (Fol. 1088).

2nd. Also to the engineer of the Railroad Commission of Texas. (Fol. 1088).

3rd. The plaintiff should operate the plant sixty days at its own expense. (Fol. 1100).

4th. The plant should be accepted by the Railroad Commission of Texas. (Fol. 1100).

5th. In the event that the plant should not work satisfactorily or be accepted by the Railroad Commission of Texas, plaintiff should not be entitled to pay; and the work done and materials furnished by plaintiff should be forfeited to the defendant as liquidated damages. (Fols. 1100-1).

6th. In the event that any fines, penalties or damages should be assessed against the defendant under any rule of the Railroad Commission of Texas or law of the State of Texas because of the failure of the Railroad Commission of Texas to accept this plant, then plaintiff should pay the same. (Fols. 1097-98).

7th. Plaintiff agreed to replace promptly any part of the apparatus and material furnished which within one year from the date of installation failed to perform its proper function because of any defect in construction or erection. (Fol. 1099).

8th. Defendant agreed to pay the contract price of \$16,650.00 within thirty days after completion and acceptance. (Fol. 1132).

This interlocking device, in brief, consisted of a controlling machine located in the tower which was situated at about the center of this crossing,

and about sixty or seventy other machines which manipulated signals and derails. These machines which operated the signals and derails consisted of gears and motors and were controlled from the tower by means of an electric current which passed from the tower to the machine through wires. The signals which protected the crossings and crossovers were for the purpose of showing the engineer of an approaching engine whether the track was clear or otherwise. The derails, which were a kind of half switch located on one rail, were placed at some distance from the crossing. When the signal was set at danger at that particular crossing, the derail was then open, so if the engineer disregarded the signal and proceeded ahead, his engine, instead of colliding with the engine which was rightfully crossing his track, would be, through operation of the open derail, derailed. In other words, it was the man who disregarded the signal, the guilty man, who got hurt instead of the one who had the right of way. It is unnecessary and practically impossible to give a clear description of the working of the controlling machine in the tower. It is enough to say, however, that when the signals were set at safety on one road going north and south, it then became impossible for the operator to set the signals on the east and west road at safety, because when he set the north and south road signals at safety, that act locked the other signals on the east and west road at danger with the derail on that road open. (Fols. 136-147).

The allegations of the pleadings which are pertinent to this appeal, in brief, are as follows:

1st. The complaint alleges that plaintiff erect-

ed and installed said interlocking plant in full and complete compliance with the contract, plans and specifications. (Fol. 17).

Denied in the answer. (Fol. 60).

2nd. The complaint alleges that on July 7th, 1904, the Railroad Commission of Texas made an order temporarily approving the plant and directing that certain alterations and changes be made; and providing that upon the satisfactory completion of the same the Commission would issue an order finally approving the plant. (Fols. 20-22).

The answer admits making the order, but denies plaintiff's construction of the same. (Fol. 54).

3rd. The complaint alleges that the plaintiff thereafter did comply with said order; and that the defendant did not; that because of defendant's failure to comply with the same, said plant had not been approved finally by the Railroad Commission; and that the failure of the Railroad Commission to finally approve the plant is due to the aforesaid default, neglect and omission of said defendant. (Fols. 24-27).

Denied in the answer. (Fols. 56-57).

4th. The complaint alleges, that on or about March 1st, 1905, the plaintiff had fully and finally completed said interlocking plant according to the terms of said contract; had operated the same successfully for a period of sixty days and

had fully complied with said order of the Railroad Commission of Texas, and that said defendant had continuously used and operated said plant in connection with its railroad since said March 1st. (Fol. 28).

Answer denies all except that plant has been in partial use. (Fol. 58).

5th. The complaint alleges that said defendant has retained, used, operated and accepted said interlocking system and plant. (Fol. 29).

Denied in answer. (Fol. 59).

6th. The answer further alleges that the plant was never finally accepted by the Railroad Commission of Texas, but, by order of August 12th, 1907, was finally disapproved by said Commission. (Fol. 63).

7th. The answer further alleges that by reason of said final disapproval of the Commission, defendant has been obliged to construct a new device of greater cost, and that the device constructed by plaintiff was of no value to defendant. (Fols. 71-72).

8th. The answer further alleges that the contract price of \$16,650 has been and is forfeited in full and the work done and materials furnished by plaintiff are also forfeited to the defendant as liquidated damages for failure to carry out its contract. (Fol. 74).

The installation of the plant was completed in February, 1904, when Mr. Dodgson, plaintiff's

Chief Engineer, went to Texarkana and put it into service. (Fol. 112). The operation of the plant was continued. The plant was inspected on defendant's application on June 27th, 1904, by the Railroad Commission's engineer, who, on July 5th, 1904, made his written report. (Ex. 3, p. 288). In this report Mr. Thompson says that while some of the features of the interlocking device are admirable, others were subject to considerable improvement. (Fol. 1059). He then suggests that certain things and additions be done before the Commission permanently authorizes the operation of the device.

On July 7th, 1904, an order (Ex. 8, p. 284) was made by the Railroad Commission of Texas "approving until October ----, 1904, the operation" of this interlocking device. The order provides that eight separate things be done. A part of these pertain to the plant itself and part to the roadbed. The order concludes "That upon the completion of said construction, additions and improvements and upon the safe and successful operation" of the device, the Commission will issue its order approving finally said device. It further ordered (Fol. 1147) that until further order of the Commission, all trains should pass through the limits of said device at a speed not greater than ten miles per hour. The plaintiff claimed it carried out the provisions of said order so far as the same pertained to it, and evidence was given to substantiate this claim. The defendant complied with only part of the provisions which pertained to it. A second inspection was made by Engineer Thompson, November 12th. He made no written report to the Com-

mission, but instead wrote a letter to the defendant (Ex. 8, p. 304) in which he criticises the plant, and states (Fol. 1217) that the reports of the operation of the plant during the preceding three months show numerous and increasing failures. These reports (Ex. 73) show that during the greater part of the time there was absolutely no failure of the apparatus to work from any cause whatsoever; that where there was a failure and the cause was known, it was due either to dirty brushes in the motor, bent springs, or short circuits, there being a total during these three months of but thirty-three so-called failures out of approximately twenty thousand operations. In this letter the engineer of the Commission, who before becoming an engineer, had been in the employ of one of the railroads party to this crossing, stated to the defendant that he thinks the layout can be revised and several functions eliminated to the advantage of operation and decreased cost of maintenance (Fol. 1223) and that unless the defendant desires it, he will make no formal report disapproving the device. (Fol. 1224).

Mr. Lang, the defendant's assistant engineer, testified that at the time of the first inspection Mr. Thompson said in words or effect to him (Fol. 522), "If you want me to condemn this plant without any second inspection, I do it right now"; that Thompson told him in the presence of a Taylor Company representative that he would be glad to see a Taylor plant (a rival concern) go in; that he preferred the Taylor plant to this plant and knew what the Taylor plant was. (Fols. 523-525).

On December 17th, 1904, a meeting was held at Texarkana attended by Messrs. Cade, Dodgson and Wuerpel on behalf of the Signal Company and by representatives of the three railroad companies. Prior to this meeting an examination had been made in detail of each apparatus connected with the plant by Mr. Wuerpel and notes taken in writing by him as to the condition of each machine and what was needed, if anything, to put the same in first class working order. (Fols. 1021-1032). In general, the different parts needed oiling and cleaning, some parts adjusting and occasionally some broken part replaced. At this conference some talk was had about making certain changes in the layout of the plant, which, it was believed, would result in more satisfactory operation, by reducing the number of delays caused by the use of the interlocker. The changes in the layout were especially in relation to the St. L. & S. W. Company's line known as the Cotton Belt. They are referred to in Mr. Lang's testimony. (Fols. 538 to 542). The representatives of the Signal Company also requested that the tracks should be improved by using heavier rails and that cinder ballast should be replaced by gravel. (Fols. 546-47).

After this conference at Texarkana, the representatives of the Signal Company, together with Mr. Lang of the defendant's company, proceeded to Dallas to confer with Major Wathen, defendant's chief engineer.

As to what was said and agreed upon at this conference there are two versions, the plaintiff claiming that its representatives agreed to do

what was necessary to put the plant in good working order, to correct the faults of improper maintenance. Their position is supported by the testimony of Mr. Wuerpel, (Fols. 1014-1016), who was present on this occasion, and also by a letter written by Mr. Cade December 24th, 1904, (Ex. 17) immediately after the conference, to Mr. Lang at the latter's request. The plaintiff also claims that the defendant agreed to correct the faults in its roadbed and that there was some talk about certain changes being made in the layout of the plant upon the Cotton Belt lines. The testimony of Mr. Lang supports plaintiff's claim as to what was said and done at this Dallas conference. (Fols. 534, 535, 546, 550).

Major Wathen, however, makes several claims as to what was agreed at this conference, at one time claiming that while the change in the Cotton Belt lines was mentioned, he told Mr. Cade it was a matter nobody could pass on. (Fol. 983). Again, claiming that if Mr. Cade would agree to correct the apparent defects in the plant, the defendant would carry out the new arrangement of tracks on the St. L. & S. W. line. (Fol. 1355). Again, claiming that the agreement was that the entire plant should be rewired. (Fol. 1515).

The memorandum made by Mr. Wuerpel while at Texarkana as to what was necessary to be done to put the plant in good shape was, by him, turned over to the company's foreman, Mr. Walshe. (Fol. 1036). Immediately after the Dallas conference Mr. Walshe proceeded to carry out his instructions. On February 14th. Mr. Wuerpel wrote to Mr. Lang (Ex. 19, p. 317) that

the work which plaintiff had agreed to do was about done, and again, on March 11th, 1905, (Ex. 20) that the work was completed, while, as yet, the defendant had done nothing to better the condition of its roadbed.

During the time the plant had been in operation monthly reports (Ex. 74) were made under the supervision of Mr. Ayres, defendant's division superintendent. (Fol. 378). The first feature of this report was as to the "general condition of interlocking." This had been reported down to the report of March 8th, 1905, as "Fair." The report on that date, which covered the condition of the interlocker for the month of February was "Good"; and the reports as to the general condition of interlocking continued "Good" for many months thereafter.

Mr. Lang, on receiving Mr. Wuerpel's letter of March 11th, replied by letter dated March 15th. (Ex. 18, p. 316). In this letter he does not deny that the plaintiff has completed the work it agreed to do, but explains why the railroad had failed to do its part of the work.

On April 4th, 1905, Mr. Lang sent the plaintiff's representative, the General Railway Signal Company, plans showing what the proposed changes on the Cotton Belt would be and asking them to submit a bid therefor. (Ex. 21). The General Railway Signal Company replied by letter of April 23rd, 1905, (Ex. 69, p. 406), submitting a bid and also stating that before undertaking any work on the proposed changes some understanding must be had as to the settlement of the origi-

nal contract. This letter gave rise to considerable correspondence in regard to the matter. The position taken by the plaintiff and its representative, the General Railway Signal Company, throughout the entire controversy was, that it had fully and finally completed both its original contract and also the Dallas supplemental agreement on March 1st, 1905; that it was then and there entitled to full remuneration under its original contract and that the proposed changes on the Cotton Belt line and had nothing whatever to do with the original contract made by plaintiff. (Fols. 1266, 1272-73, 1327-28, 1446, 1604-05, 1606-07, 1608, 1524-25, 1529-30, 1491). Plaintiff's attitude in regard to this matter was unequivocally and consistently maintained throughout the correspondence. As to what defendant's attitude was in this matter, it is difficult to ascertain, as the letters are full of contradictions and inconsistent statements. At one time it is claimed that as soon as the changes were made in the Cotton Belt yards, the Signal Company agreed to install additional devices, and then if the plant worked satisfactorily it would be paid for. (Fol. 1564). Again it was claimed that the entire plant should be rewired before another inspection could be asked. (Fol. 1515). Again it was claimed that whatever material was required to make the changes would be paid for regardless of the Commission's decision. (Fol. 1356). At various times it was claimed that the plant had already been twice condemned and that the same should be removed by the plaintiff. (Fols. 1316, 1480, 1502-03).

Changes were finally made in the Cotton Belt yards and the new work necessary to connect up these changes with the interlocker was installed by the General Railway Signal Company in April and May, 1906.

On April 7th, 1906, a letter was written to defendant (Ex. 52, p. 372), informing it that the matter was laid before the Pneumatic Signal Company who advised that they would place the matter in the hands of their attorney for further action. April 23rd, 1906, followed the last letter from the General Railway Signal Company to defendant, in which it is stated that although the engineer of the Commission might refuse to accept the plant until rewired, they did not understand that would have any bearing on the question as to whether the plant should be paid for, unless defendant could furnish a copy of an agreement showing that rewiring was to be without cost to defendant. (Fol. 1530). This letter was replied to April 27th (Ex. 60, p. 383) in which the writer, Major Wathen, concludes by saying:

“To you personally—I will say—that when I make a statement, I am in the habit of standing by the statement, and will make a personal matter of anything when the party wishes it, and while we are a good ways apart, we can get together; if you desire it I am sure I do. Yourself and every one belonging to your service with whom I have had business are prevaricators, and will be so acted towards by me.” (Fol. 1548).

On May 16th and 21st followed three telegrams from the General Railway Signal Company's

representative, Walshe, who installed the new work, advising the defendant's superintendent that the new work was complete and his men were leaving. These telegrams completed the correspondence between the parties with the exception of a letter from defendant to the General Railway Signal Company in respect to the new work on the Cotton Belt lines. (Exs. 62 and 63, p. 388). This letter was not replied to.

The defendant continued to use the interlocking plant in connection with its crossing from the time of Mr. Wuerpel's letter to it on March 11th, 1905, to September, 1908. (Ex. 74; Fol. 945).

On July 20th, 1907, the defendant's solicitor applied to the Railroad Commission for another inspection of the plant. (Fol. 1177).

July 31st, 1907, the engineer made an inspection of the plant and on August 9th, 1907, made a written report to the Railroad Commission. (P. 293). A reading of this report, especially the Fifth, Eighth and Ninth sections, shows the demoralized condition of the various apparatus including the track and foundations of the machines. An order was made by the Railroad Commission August 12th, 1907, directing the construction of a new device, but permitting the continued use of the present device at the crossing until the construction of the new device. After the making of this order the plant was operated by the defendant for more than one year before a new device was finally installed. (Fol. 945).

There was a vast amount of testimony given upon the trial by two of defendant's maintainers

Cullums and Atkinson, showing in detail how the plant worked during the three or four years it was used by the defendant. It is unnecessary to review this testimony as the plaintiff is willing to concede that the defendant had more or less trouble with the operation of this plant during the entire period and that the longer the plant was used by the defendant the more demoralized condition it was permitted to get into, through failure to make repairs and renew parts as it became necessary. A summary of its general condition after about three and a half years continuous use appears in the report of the Commission's engineer under Exhibit 4 in the deposition of R. A. Thompson, p. 293, sections 5, 8 and 9. As the plaintiff claims that the defendant's continuous use of the plant from March 1st, 1905, for the very purpose for which it was installed is an unequivocal acceptance thereof, it becomes unnecessary to examine the petty difficulties and little annoyances the defendant had during the period it operated this plant, which consisted of about seventy separate and distinct machines operated by electricity.

After the plant was installed in the summer of 1904, there was a merger of the American interests of this plaintiff and the Taylor Signal Company, a rival corporation. The General Railway Signal Company was formed and the American assets of both concerns were assigned to it, each company guaranteeing the collection of its accounts. Before this action was started there was a re-assignment to plaintiff of the contract in question by the General Railway Signal Company. After the formation of the General Rail-

way Signal Company all negotiations carried on with the defendant in respect to this contract, were carried on between it and the General Railway Signal Company as the representative of this plaintiff. (Fols. 250-260).

## **POINTS.**

### **POINT I.**

THE CONTINUED USE AND OPERATION OF THE INTERLOCKING DEVICE BY DEFENDANT FROM MARCH 1st, 1905, WHEN IT WAS NOTIFIED OF ITS FINAL COMPLETION, TO JUNE 20th, 1907, WHEN IT APPLIED TO THE RAILROAD COMMISSION FOR AN INSPECTION, WAS AN ACCEPTANCE THEREOF; AND THE VERDICT OF THE JURY IS AGAINST THE WEIGHT OF EVIDENCE.

The court submitted to the jury the question whether the plant was accepted by the defendant. By the twelfth paragraph of the complaint the plaintiff alleged that the defendant had retained, used, operated and accepted said interlocking plant. The real controversy was practically whether this continued use and operation of the plant by the defendant in its own business for the purposes for which it was designed, constituted an acceptance thereof by it, which was a waiver of the conditions precedent in the contract and made defendant liable to pay the contract price thereof. With that in view we will now proceed to discuss what the contract actually meant, what this use was, the circumstances under which the

use continued, the attitude of the parties, and the legal effect of the user.

**I. The primary object of the contract between the parties to this action was to provide for the erection of an interlocking plant, which would enable the defendant and the two other interested railroads to protect and safeguard the crossing at Texarkana in compliance with the law of the State of Texas and the rules of the State Railroad Commission.**

The defendant and the two other railroads it represents are public service corporations. As to those portions of their roads which are within the State of Texas, they are subject to the laws of the State, and to the rules and regulations of the Railroad Commission made pursuant to such laws. The contract in question was not a contract made solely for the purpose of furthering the business interests and welfare of the defendant. It was a contract made after the enactment of Chapter 89 of the General Laws of the 27th Legislature of the State of Texas (Ex. 1); it was made after the Special Order of May 21st, 1902, (Ex. 2) and the General Order of May 31st, 1902, (Ex. 3) of the Railroad Commission of the State of Texas. It was made pursuant to and in compliance with said statute and said orders. Consequently, those portions of this contract which specifically refer to the Railroad Commission of the State of Texas, or to any of its officers, or to any act to be performed by either, must be construed in the light of this statute of the State of Texas, and the orders of the Commission which

directed the defendant and the other railroads to do the very thing provided for in this contract. For the purpose of giving an intelligent construction to these portions of the contract having to do with the acceptance of the plant by the State Officials of Texas, we will examine those portions of the statute and the Commission's rules applicable thereto.

#### THE TEXAS STATUTE.

In 1901, the Texas Legislature enacted a statute which became effective July 9th, 1901, and which provided for the protection of common grade railroad crossings, by some kind of a safety device; and authorized the Railroad Commission to regulate the enforcement of the statute. The language of the statute shows conclusively that its object was, not to enable the railroads to pay greater dividends, but was to protect the life and limb of both passengers and trainmen at common grade crossings. The language of section 2, in part, is as follows:

“Sec. 2. That in any case where the tracks of two or more railways cross each other at a common grade in this State, it shall be the duty of such railroad company to protect such crossings by interlocking or other safety devices, under regulations to be designated by the Railroad Commission of Texas, to prevent trains colliding at such crossings \* \* \*”.  
(Fols. 1060-61).

When the railroads at such crossings had complied with this law, they were then permitted to let engines and trains pass such crossings without stopping. Section 4 provides:

“Sec. 4. Whenever interlocking or other safety devices are constructed and maintained in good order to the satisfaction of the Railroad Commission in compliance with sections 2 and 3 of this act, then and in that case it shall be lawful for the engines and trains of such railroad or railroads to pass over such crossings without stopping.” (Fol. 1062).

The statute also provided that any railroad company which neglected to comply with any order of the Railroad Commission made pursuant to the statute should forfeit \$500.00 a week. This provision is found in section 5 and is as follows:

“Sec. 5. Any company, corporation, receiver or person operating any railroad who shall refuse or neglect to comply with any order made by the said Railroad Commission in pursuance with the terms of this act shall forfeit and pay to the State of Texas a penal sum of five hundred dollars per week for each week of such refusal and neglect \* \* \*”. (Fol. 1063).

It thus appears beyond question, that the object of the statute was “*to prevent trains colliding at such crossings.*” It further appears, that when the interlocking or safety devices were constructed and maintained to the satisfaction of the Railroad Commission, then, it should be lawful for trains and engines to pass such crossings without stopping. Both the object of the statute and the effect of a compliance therewith are important in the construction of the contract in question, and should be borne in mind during the discussion which follows:

June 5th, 1902, the Railroad Commission of Texas pursuant to the last mentioned statute made a special order, in which it directed that the defendant and the two other interested railroads protect the crossings at Texarkana in compliance with said statute, and further directed that the interlocking devices be put into operation under the permit of the Commission on or before June 30th, 1903; that the expense of erecting the interlocking devices be borne equally by the railroad companies parties to the crossings. (Ex. 2, p. 267).

#### GENERAL RULES OF THE RAILROAD COMMISSION.

May 31st, 1902, the Railroad Commission of the State of Texas promulgated general rules and regulations providing for the installation, maintenance and operation of interlocking devices between grade crossings. (Ex. 3). Sec. 2 provides that when the plan approved by it for an interlocking device has been constructed and is ready for operation, a petition shall be made to the Commission for an inspection thereof accompanied by a plan showing the device as actually constructed. Sec. 3 provides that the petition for an inspection must be signed by some officer of each railroad party to the crossing. Sec. 5 provides that when it has been determined that the device is constructed in accordance with the approved plans and is operated in a thoroughly reliable and safe manner, that "*then a permit will be issued authorizing trains to run over said crossing without stopping.*" Sec. 6 provides:

“If at any time it should be determined by the Commission that any interlocking device is not properly maintained and efficiently operated, then it shall be the duty of the Commission to *cancel* its permit approving the operation of such interlocking device, and all trains will be required to stop at such crossing the same as if no interlocking device existed.”

Sec. 7 provides for detailed reports to be made to the Commission of the general condition of the interlocking device and of all accidents which may occur at such crossings.

It will be observed that the only thing which the Railroad Commission is called upon to do, after it has determined that an interlocking device has been properly installed and is safely operated, is, to issue a *permit* authorizing trains to run over such crossings without stopping. It will further be observed that these rules do not say that these permits are to authorize trains *permanently* to run over such crossings without stopping. They do not say that the Railroad Commission after they have once granted such permit will then take their hands off, turn their backs and let railroad companies operate devices in such way as may seem to them best suited for their plans and purposes. On the contrary, rule 6 specifically provides that if at *any time* it shall be determined, that the interlocking device is not properly maintained and efficiently operated, that the Commission must then and thereupon *revoke* its said permit and require all trains to be stopped as if no such device existed. For the purpose of carry-

ing out this last provision, the Railroad Companies, by Sec. 7, are directed to make regular monthly reports as to the conditions existing at the devices, showing the general condition of the interlocking and what accidents, if any, occur. The vigilant eye of the Commission was to be perpetually upon the operating railroads with a view to safeguarding the public which used these common grade crossings. Whenever the condition of the interlocking was such as to endanger the lives of those using the crossing, the permits were to be cancelled and all trains were to stop. There is no provision either in the statute or in the rules of the Commission for an order of the Commission which would permit any railroad company to operate any interlocking device permanently. A device installed according to approved plans, accepted by the Commission as safe and reliable in every respect today, may tomorrow be put out of service by becoming unsafe through failure to properly maintain and efficiently operate.

#### PROVISIONS OF THE CONTRACT.

The following provisions of the contract in question refer either to some of the officials of the Railroad Commission of Texas, to some act to be done by them, or to some rule of the Commission or Statute of the State. The contract provides:

1. "That the materials and apparatus to be furnished and labor to be performed \* \* \* be satisfactory and acceptable \* \* \* to the engineer of the Railroad Commission of Texas." (Fols. 1087-88).

2. That "the party of the first part agrees to "pay any and all fines, penalties or damages so "assessed against said party of the second part "on account of the failure to have said plant completed and accepted by the Railroad Commission of Texas." (Fol. 1098).

3. To pay the contract price "after being accepted by the Railroad Commission of Texas." (Fol. 1100). In the event that the plant should not be accepted by the Railroad Commission of Texas the contract price should be forfeited "and "the *work done* and *material furnished* by the "party of the first part shall also be forfeited."

The contract provides that the material and labor must be satisfactory to the Commission's engineer; that the plant itself must be accepted by the Commission. What power, what authority did the parties to this contract contemplate giving to the engineer on the one hand and what to the Commission on the other? It is self evident that they did not contemplate giving the engineer the same power which is given the Commission. His power is over the *material* and *labor*, not over the plant as a whole. His power was supervisory. He could condemn the material as defective, the workmanship as poor, and demand that it be replaced with good material installed by good workmanship. He could not condemn the plant as a whole. That power is specifically given to the Commission. What, then, was meant by that provision of the contract which stated that the plant must be accepted by the Commission before it would be paid for? What is acceptance by the Commission? We must examine the law

creating the Commission, and the rules promulgated by the Commission. The law says, that when the Commission is satisfied that the devices are constructed and maintained in good order in compliance with the law, then, trains shall pass over such crossings without stopping. (Fol. 1062). The rules of the Commission say that after it has been determined that the plant is constructed in accordance with approved plans and is properly operated, then that they will issue a permit authorizing trains to run over such crossings without stopping. (Fol. 1079). Does it require argument to say that the only acceptance contemplated by the contract was the issuance of a permit specified in Sec. 5 of the Commission's General Rules? Could any certificate issued by the Commission to the defendant in respect to this plant, have been of greater force or value than the permit specified in Sec. 5? Absolutely not, so long as rule 6 remained in force, directing the cancellation of such permit whenever said plant should become improperly maintained and inefficiently operated.

An interlocking device which the Commission would not permit the defendant to operate would have been of no value to the defendant; as it would not have complied with the State statute; and the defendant would have been subjected to the penalty provided for in section 5 of the statute. The defendant realized this, when it entered into this contract with the plaintiff, and so incorporated in the contract the provision that the plant must be accepted by the Commission. It realized it when it interposed the answer to the original complaint, as in that answer it specifical-

ly alleged (after referring to the statute and rules) that the contract stipulated, among other things, that the plaintiff should not be entitled to any part of the payment, unless said plant should be accepted by the Commission.

“For the reason that unless said plant should be so accepted, under the provisions of said statute it could not be used by this defendant, and would be *utterly valueless* to it.” (Fol. 81).

In other words, the defendant did not wish to contract and pay for a plant, that the Commission would not permit it to use, and which therefore would be valueless to it.

Acceptance, then, as used in the contract and construed in connection with the statute and rules meant one thing and one only; i. e. Permission by the Railroad Commission to the defendant to use this plant, and let its trains and engines run over the crossings without stopping. Not permission to do this perpetually, but a *revokable* permission, revokable whenever the defendant itself should cease to properly maintain and efficiently operate the interlocking device.

Acceptance did not mean that the Commission should say: This is the best plant in the world; that it is a perfect plant; that it meets with our approval in every respect. Not at all! It meant simply that the Commission should by its *act*, accept this plant sufficiently to let the defendant railroad company operate the same as a compliance with both the statute and the Commission's Rules.

**II. The interlocking plant was used continually by the defendant in safeguarding the crossings at Texarkana from February, 1904, until September, 1908.**

The history of the use of this plant by the defendant and the two other interested railroads, briefly, is as follows:

In February, 1904, the installation of the plant was completed. (Fol. 112).

From February, 1904, date of the installation, to June 27th, 1904, time of the first inspection, the plant was operated under the supervision of the plaintiff's representatives.

On June 27th, 1904, the plant was inspected by the engineer of the Railway Commission upon the application of the defendant's Assistant General Superintendent. The Commission's engineer made a written report of this inspection to the Railroad Commission. (Ex. 3, p. 288). This report does not condemn any of the devices installed, any of the material used nor any of the workmanship employed. Some things were criticised, others praised, and several additions recommended.

The Railroad Commission July 7th, 1904, made an order (Ex. 8) approving to October , 1904, the operation of this device, and directing that eight specific things be done on or before October , 1904. It provided upon the completion of said additions and improvements, and upon the safe and successful operation of the device as

shown by the daily reports to be filed, that the Commission after a further inspection on or before October , 1904, would finally approve the device. It was further ordered that until further ordered by the Commission, trains should pass through the device at a speed not greater than ten miles an hour.

Between July and November 1st, 1904, both parties were engaged in complying with the conditions of the Commission's order. Plaintiff claimed that it complied with the first three provisions which applied to it, and that the defendant did not comply with the remaining conditions which devolved upon the railroads. Defendant did not comply with part of the fourth, with the fifth and seventh provisions of the order. Defendant conceded it did not comply with the fifth. Ex. 73 gives a detailed report as to the working of the plant during this period.

November 12th, 1904, the Commission's engineer Thompson made a second inspection. He made no written report to the Commission, but wrote a letter to defendant's Chief Engineer Wathen. (Ex. 10, p. 304). In this letter he states (Fol. 1217) "the report shows that there "have been numerous and increasing failures of "parts of the machinery operating the several "functions of the plant." The reports themselves (Ex. 73) show the contrary. These reports are discussed by the plaintiff's expert Dodgson. (P. 250).

No order was made by the Commission, however, revoking the original permit to operate the plant and the operation of the plant continued.

On December 17th, 1904, three representatives of the plaintiff, Messrs. Cade, Dodgson and Wuerpel met the representatives of the three railroads at Texarkana for the purpose of looking over the plant and seeing what, if anything, needed to be done to put the plant in good shape. Mr. Wuerpel made on this occasion a personal examination of the condition of each device, and at the same time made a memorandum as to what was necessary to put the same in good shape. These memoranda were retained by him, and he testified as to their contents upon the trial. (Fols. 1021-1032). It appears from the examination of this report that some broken parts were to be replaced, but in general all that was necessary was cleaning and oiling. Considerable discussion was had as to a revised layout as to certain parts of the plant. The defendant's Assistant Engineer, Lang outlined such a layout. (Fols. 538-539). It was agreed that such revision would enable them to avoid delays which the operation of the plant entailed. Engineer Thompson in his letter above referred to (Ex. 10) wrote (Fol. 1223) that it appeared the layout could be revised, several features eliminated to the advantage of operation and decreased cost of maintenance.

Immediately following this conference at Texarkana the plaintiff's representatives, together with Mr. Lang, proceeded to Dallas, Texas, and there had a conference with Major Wathen, defendant's Chief Engineer. There are two versions as to the agreement reached at this conference. The plaintiff claiming that it agreed to put the plant in good working shape, while at the same time defendant should put its roadbed in

good condition. This version is supported by the testimony of Mr. Wuerpel, (Fols. 1015-1016), by a letter written by Cade to Lang on December 24th, 1904, (Ex. 17), and by the testimony of Lang himself. (Fols. 497-499). On the other hand Major Wathen claimed that the plaintiff agreed to re-wire the entire plant free of cost. (Fol. 953). His testimony as to this is absolutely uncorroborated.

After the Dallas agreement Wuerpel gave his memorandum to Mr. Walshe, who, with two men, proceeded to carry out the same. (Fol. 1036). On February 14th, Wuerpel wrote to Lang the work was about done. (Ex. 19). On March 11th Wuerpel again wrote Lang that the work was all done, while the railroad had not made good their agreement as to track improvement. (Ex. 20). Lang replied and did not deny the claim that plaintiff's part of the agreement was completed, while he admitted the railroad had not made their track improvements. (Ex. 18).

Between March, 1905, and April, 1906, negotiations were had between the General Railway Signal Co., and defendant in regard to changes made in the layout of the St. Louis and Southwestern line, commonly known as the Cotton Belt. During these negotiations between the defendant and the Signal Company, the former continued to use the plant in operating the switches and signals at the Texarkana crossings. The changes in the layout of the plant on the Cotton Belt lines were finally completed some time early in 1906, and the General Railway Signal Company completed necessary work to

connect up these changes in May, 1906. (Exs. 70, 71, 72).

After the General Railway Signal Company's foreman, Walshe, had left Texarkana in May, 1906, the defendant continued to use the plant; and upon June 20th, 1907, its solicitor petitioned the Railroad Commission for an inspection of the same. (Fol. 1177). The generally demoralized condition of the whole plant at the time the inspection was asked for appears from the report of Engineer Thompson. (Fols. 1148-1188). This same report of August 9th, 1907, shows that the plant had been in continuous operation since July 7th, 1904, as shown by the monthly reports filed by the defendant, which had its operation and maintenance in charge. (Fol. 1176).

The order of the Commission of August 12th, 1907, (p. 301) directed that the immediate construction of a new interlocking device in place of the one in question, to be completed and ready for operation one year from said date. (Fol. 1209). It provided, however, as its engineer had recommended (Fol. 1201) that the device in question might be operated in the meantime, instead of canceling the permit as the rules provided. (Fol. 1080). The relations between the defendant and the Commission's engineer (who on the first inspection in 1904, was ready to condemn this plant, Fol. 525) were such that after the defendant procured the order which it evidently was seeking, it made no haste to comply with the same. Instead of having the new plant ready for operation within a year, it did not even make a contract therefor until a year from the date of

the order. The reports of defendant's Division Superintendent show that this plant was in operation until September, 1908. How much longer the operation continued does not appear.

It is this continuous operation of this interlocking device by the defendant, for the purposes for which it was installed and as a compliance with the Texas statute and Commission's rules, that the plaintiff claims is an acceptance of the plant itself.

**III. The changes on the "Cotton Belt" line made by the St. L. & W. Ry. Co. some time in 1906 and which were connected by the General Railway Signal Co.'s representatives in April and May, 1906, had absolutely nothing to do with plaintiff's fulfilment either of its contract or the supplemental Dallas agreement, but was a separate matter between the defendant and the General Railway Signal Co.**

These changes had nothing to do with the original contract, with its fulfilment, or with carrying out the Dallas agreement. They were not made because of any defect in the interlocking devices. They were due primarily because certain rules of the Commission as to the original layout were impractical, and caused an unnecessary number of delays to traffic at the crossings. The original rules provided that the derails should be four or five hundred feet distant from the crossing. The Commission finally permitted this distance to be shortened to 150 feet. As originally laid out it was necessary to stop a train

four or five hundred feet from the crossing. As revised, trains could approach to 150 feet from the crossing. The defendant had experienced the same difficulty with their plant at Ft. Worth, Texas. Mr. Lang testified:

“In the meantime an interlocking plant in Ft. Worth was installed, which, if it had been installed according to the Commission’s rules it would have destroyed the most principal yard in the State of Texas, and we tried to get some changes of those Commission rules which we got through. The change was that in place of the derails being located from four to five hundred feet away from the crossing, we were allowed to place them about 150 to the crossing. That simplified matters a good deal and did not destroy the yard.” (Fols. 489-490).

“This led to the changes which took place in the Cotton Belt track, which in substance were the narrowing of the limits of the interlocker on this general plan so as to allow this simpler operation and the taking out of the necessary switches and derails and reinstalling them.” (Fols. 493-494).

The above quotations clearly show what the changes on the Cotton Belt were, and both their cause and object. At the Texarkana conference in December, 1904, Mr. Lang blocked out the proposed changes and Mr. Cade in his letter of December 24th, 1904, (Ex. 17) refers to it as follows:

“Even if the above is done, however, you will not get as much satisfaction from the interlocking at this crossing as might be done

if the tracks were rearranged as you suggest." (Fol. 1254).

Mr. Lang testified in regard as to what was said at the Texarkana conference as follows:

"At that conference some mention was made about changes to the yards of the Cotton Belt. (Fol. 538). \* \* \* I don't know who spoke about it, I think that I laid out the scheme, the way it could be done and presented it to the whole conference there." (Fol. 539).

"The object of those changes was to relieve some of the trains from having to stop, relieve traffic conditions, and at the same time help out the interlocker, that it didn't have to make so many moves." (Fols. 540-541) \* \* \* "The men in the tower wouldn't have to throw so many levers. That would be a benefit to the company who had charge of the maintenance, benefit all the companies." (Fol. 542).

Major Wathen testified that while the question of the changes was mentioned at the Dallas conference, nothing was agreed upon. He said:

"This question of this change at the Cotton Belt yard was mentioned, but I told him that was a matter nobody could pass on, it was not a matter within our province to say much about until we could learn whether or not Mr. Thompson or the Commission would sanction it." (Fol. 893).

On February 14th, Mr. Wuerpel, in a letter to Mr. Lang (Ex. 19) referred to these changes as follows:

“If it is the intention to make the alterations, we should have plans in order to make estimate of cost. We understand that the matter is being held up by the Cotton Belt people in the hope that the plant will be thrown out of service.” (Fol. 1269).

March 15th Mr. Lang wrote Mr. Wuerpel (Ex. 20) as follows:

“We took up the matter of changes with the Cotton Belt several times and received assurance that they will make the changes. The trouble is with the failure to get track material.” (Fol. 1262).

On April 4th Mr. Lang forwarded to the General Railway Signal Co. (Ex. 21) the plans for the proposed changes, saying:

“I send you herewith plan of proposed changes in Texarkana plant. My understanding is that the changes are not quite made. Please let me know what you propose to do, regards costs.” (Fol. 1280).

Several letters then passed between defendant and the General Railway Signal Company, until on July 20th Major Wathen wrote to Mr. Salmon that the new material for the Cotton Belt changes was to be paid for regardless of the decision of the Commission, saying:

“My agreement with Mr. Cade was, that whatever material was required to make the changes in the plant would be paid for regardless of what the decision of the Commission of Texas would be on final inspection of plant.” (Fol. 1356).

On receipt of this letter (Ex. 31) Mr. Salmon wrote to Major Wathen, June 27th specifically referring to Major Wathen's promise as to payment and stating that he had given an order to assemble the necessary material.

While Major Wathen at times claimed that it was the duty of the Signal Company to make these changes as a part of the Dallas agreement, Mr. Salmon, on behalf of the Signal Company, repeatedly stated that this work had nothing to do with that agreement. On July 17th, 1905, he wrote as follows (Ex. 65):

“The work now proposed to be done has nothing whatever to do with the Cade agreement, the original contract or the obligations assumed thereunder by the Pneumatic Signal Co. and that the General Railway Signal Co. will undertake such work only upon the terms hereinbefore enumerated.” (Fols. 1606-07).

Major Wathen himself admitted that these changes on the Cotton Belt were for the interests of the railroad company writing on July 8th, 1905, as follows:

“Nor would any changes of the interlocker plant have been suggested, had it not been to the interests of the Railway Company, to take advantage of the new ruling of the Commission and make changes in their tracks.” (Fols. 1578-79).

When the General Railway Signal Company's representative, Mr. Walshe, went to Texarkana to connect up the changes on the Cotton Belt yards,

he found that the changes which the railroad companies had made, did not correspond with the plans which had been sent to his company with Mr. Lang's letter of April 4th, 1905, (Ex. 21). Mr. Wuerpel then called Major Wathen's attention to this, in his letter of March 6th, 1906, (Ex. 41), as follows:

“Referring again to the subject of changes at Texarkana, we are in receipt of a report from our Mr. Walshe whom we sent to this plant, to the effect that the track changes made on the Cotton Belt track do not correspond with our plan No. 23507, which was sent to Mr. Lang; with our letter of February 7th. Mr. Walshe states that in addition to other changes which the Cotton Belt people have made on their track, they have added a switch, etc., etc.” (Fol. 1420).

Major Wathen replied March 12th, 1906, (Ex. 42) and admitted what the Cotton Belt had done was without the sanction of the Commission's engineer. On March 19th Major Wathen again wrote as follows (Ex. 44):

“Whatever work may be necessary to carry into effect the wishes of the Cotton Belt people to put in their switch, will be attended to by them and paid for by them strictly.” (Fol. 1452).

Yet on July 8th, 1905, Major Wathen had written to Mr. Salmon (Ex. 64),

“All the business relating to the interlocker was controlled absolutely by the T. & P. Railway Co.'s employees, under rules already established, which the St. L. & S. W.

Ry. Co. (the Cotton Belt) was committed to.”  
(Fol. 1572).

He admitted in the same letter that some of the Cotton Belt's people had thought that the plant might be eliminated, “Because the Commission “had recalled its order for the interlocking of all “crossings within the boundaries of the State of “Texas.” (Fol. 1572).

To briefly summarize the evidence as to these changes on the Cotton Belt: The original layout of the plant in accordance with the Commission's rules was impractical for the reason that it included unnecessary territory within the safety limits. This caused delays to traffic and annoyance to the companies who used the crossing. The railroads finally succeeded in getting the Commission to change their rules in respect to the distance of derails from crossings. The Signal Company was willing this change should be made, but claimed that the changes had nothing to do with the original contract, or with their carrying out the Dallas agreement, and that they were under no obligation to make the connections entailed by these changes. The General Railway Signal Company refused to do this work except as an independent proposition, and during all negotiations asserted that this work was an entirely independent proposition, for which it should be paid.

The plaintiff claims, as appears in “IV,” that its contract was fully performed on March 1st, 1905, and that the matter of the Cotton Belt changes had nothing whatever to do with its ful-

fillment of that contract. We believe that the evidence shows beyond question that these changes were an entirely separate matter wholly disconnected with the original contract, and from any duty which plaintiff was thereunder called upon to perform in the fulfillment of the same. So much of the testimony in the case and the letters in evidence, however, have to do with these changes, that we have thought it necessary to show specifically that these matters were entirely separate; and further, that an action was brought by the General Railway Signal Company against the defendant for the purpose of adjusting the Cotton Belt changes. (Fols. 968-969).

**IV. From March 1st, 1905, plaintiff's attitude toward this plant as expressed to the defendant, was, that both the original contract and the supplemental Dallas agreement were fulfilled; and that the plaintiff was then and there entitled to receive the full contract price therefor.**

As the plaintiff claims that the defendant accepted this plant by its continuous use of the same in the prosecution of its business, and for the purposes the plant was designed to fulfill, it is proper to examine the circumstances under which the plant was so used, and the attitude of the parties in respect to the same. The position of the parties is expressed in the correspondence which was carried on between defendant and plaintiff's representative, the General Railway Signal Company, from March, 1905, to April, 1906. Immediately following the Dallas agreement of Decem-

ber, 1904, Mr. Wuerpel gave the memoranda as to what was necessary to be done to the plant to foreman Walshe, with instructions to carry the same out. (Fol. 1036). Walshe, with two workmen, immediately proceeded to do this, and by the middle of February the work was about complete.

February 14th Mr. Wuerpel wrote Mr. Lang (Ex. 19) that the work at Texarkana which was agreed to be done at the December conference, was about complete, but that the railroad companies had done nothing toward putting the tracks in good shape.

On March 11th Wuerpel again wrote to Lang (Ex. 20) that the work on behalf of the Signal Company toward putting the plant in good shape was completed. The letter in part is as follows:

“You will kindly refer to our letter of February 14th, in regard to the work at Texarkana, to which we have received no reply from you. As stated in letter referred to, *we have completed all the work* which we were to do on our part towards putting the plant in shape \* \* \*.” (Fols. 1272-73).

On March 15th, 1905, Lang replied to that letter. (Ex. 18). He does not controvert Wuerpel's statement that the work the Signal Company was to do was completed. He admits that the railroad companies have not made the track improvements and says the reason is that the railroads can not get track material.

On April 24th Major Wathen wrote to plaintiff's representative (Ex. 29) that the plant had been twice condemned and that “You may con-

“sider the plant as yours and we will proceed to  
“ask for bids for a new plant at Texarkana.”  
(Fol. 1316).

The General Railway Signal Company replied to this letter July 5th, (Ex. 30) stating that it had laid the matter before the Pneumatic Signal Company, which, after full consideration, had made a statement of its views and wishes from which the writer, Mr. Salmon, quotes as follows:

“In view of the above statements we feel that the proposition of the T. & P. Ry. Co. is unjust and we must positively decline to accept it, and should any attempt be made to give it effect we shall take such steps as may seem to us best suited to protect our legitimate interests.” (Fols. 1327-28).

Mr. Salmon then continues:

“\* \* \* I am of the opinion that if the Pneumatic Signal Company sees fit to do so it can compel the acceptance of the plant and payment by the Railway Company.” (Fol. 1346).

On July 8th Major Wathen wrote to Mr. Salmon, the president of the General Railway Signal Company, (Ex. 64), in which letter various claims were made as to what the Dallas agreement was and what should be done by the Signal Company.

Mr. Salmon replied to this letter on July 17th. (Ex. 65). In this letter Mr. Salmon again reiterates that the Signal Company has fulfilled its obligation; that the contract price is due with interest from March 1st, 1905, and that the Dallas,

or Cade agreement, has been fulfilled, saying in respect to these things as follows:

“I have absolutely no doubt as to the ability of the Pneumatic Company to collect the entire \$16,000 with interest from March 1st, 1905, but I do not propose to do anything that in the event of the refusal of your company to make payment for the work done by the Pneumatic Company, would necessitate our taking part in the litigation that is sure to follow such decision.” (Fols. 1604-05).

“Replying I beg to say that the plant, so far as the original contract is concerned, and with respect to Mr. Cade’s agreement, has been completed in exact conformity with the terms of such contract and such agreement since March 1st, 1905; that the work now proposed to be done has nothing whatever to do with the Cade agreement, the original contract or the obligations assumed thereunder by the Pneumatic Signal Co. and that the General Railway Signal Co. will undertake such work only upon the terms hereinbefore enumerated.” (Fols. 1606-07).

“\* \* \* The Signal Company’s part of this agreement was promptly and fully carried out in detail, all the work agreed to be done having been completed by March 1st \* \* \*.” (Fol. 1608).

On July 20th Major Wathen wrote Mr. Salmon (Ex. 31) in which letter he stated that the new materials required to make the Cotton Belt changes were to be paid for *regardless* of the decision of the Commission on final inspection, saying, (Fol. 1356);

“My agreement with Mr. Cade was, that whatever material was required to make the changes in the plant would be paid for regardless of what the decision of the Commission of Texas would be on final inspection.”

On July 27th Mr. Salmon replied to that letter (Ex. 32) referring to this point. (Fol. 1362). He then said that he had issued an order for the assembly of the necessary materials, and asked for advice in respect to the changes and whether the Signal Company or the defendant should furnish the labor and tools for making the changes.

On July 28th, Major Wathen wrote Mr. Salmon (Ex. 33) in which he criticised the wiring of the plant.

August 1st Mr. Salmon replied to this letter (Ex. 34) in which he discusses the reasons as to why the defendant is having trouble with the wires, referring to the track conditions, the ballasting with cinder, poor drainage, etc., and stating that if the wire failures are wholly or chiefly due to the poor character of material or poor workmanship he is willing to replace the same without cost to the company, but he does not understand that to be the real cause of the trouble defendant is having. (Fol. 1375).

In this connection it should be remembered that under Section 3 of the contract (Fol. 1091) plaintiff was bound to replace all defective material furnished under the contract which failed to perform its function within one year from installation.

The correspondence between the date of the last letter and March, 1906, had to do with directions for shipping the material, the State of Texas having been placed under quarantine restrictions the greater portion of the intervening time. Several letters passed in February and March in relation as to whom the Signal Company's foreman, Walshe, who was to connect up the changes on the Cotton Belt line should report to.

On March 28th, 1906, Major Wathen wrote Mr. Wuerpel (Ex. 49) that it would be entirely satisfactory for defendant should the Signal Company refuse to do anything more at Texarkana, as the plant then stood condemned by the State Engineer and there was nothing left for the writer to do but to ask for bids for a new plant at Texarkana.

Mr. Wuerpel replied to this letter April 7th, 1906, (Ex. 52), in which he stated as follows:

“For your information we wish to state that this whole matter was laid before the officers of the Pneumatic Signal Company, who advise that they in turn will place the matter in the hands of their attorney for further action. Therefore, the General Railway Signal Company will have nothing further to do with the case.” (Fol. 1491).

On April 10th Major Wathen replied to Mr. Wuerpel (Ex. 54) stating that they were asking for bids for a new plant at Texarkana.

On April 17th, 1906, he again wrote Mr. Wuerpel (Ex. 55), that the plant would never be accepted until rewired in accordance with the agreement made with Mr. Cade.

April 23rd Mr. Salmon replied to Major Wathen, letter of April 17th. (Ex. 59). In this letter he said:

“Therefore, so far as I understand the matter, everything which Mr. Cade agreed to do with respect to putting the old Texarkana installation in proper operating condition was actually done early in 1905, and the work which Mr. Walshe is now engaged in doing is in connection with certain changes in track and signal arrangements having no bearing whatever upon the old contract. If I am in error as to this, I shall be pleased to receive from you a copy of agreement made with you by Mr. Cade as referred to in your letter of the 17th inst.” (Fols. 1524-25).

“It may, of course, be possible that the engineer for the State Commission will refuse to accept the plant until the wiring is renewed, but we do not understand that this will have any bearing whatever upon the question of whether this plant shall or shall not be paid for by your company, unless, as above stated, you can furnish copy of an agreement with some representative of this company or of the Pneumatic Co., showing that agreement was made with you to make the change without cost to your company.” (Fols. 1529-30).

A reading of the correspondence above quoted, irresistibly compels the conclusion that plaintiff

unequivocally asserted full and complete performance of its contract, and that the contract price was then due. March 11th, 1905, it said "The work is done." July 5th it positively declined to accept defendant's proposition to take back the plant. July 17th it again asserted complete performance since March 1st and said that the proposed changes on the Cotton Belt had nothing to do with the Cade agreement or the original contract. April 7th, 1908, <sup>6</sup>defendant was directly informed that plaintiff would place the matter in the hands of its attorneys and finally, April 23rd, Mr. Salmon wrote that although the Commission's engineer might not accept the plant, that would have no bearing on whether the plant should be paid for.

Plaintiff's position throughout this entire correspondence was clear, unequivocal and consistent. How could it have made stronger or more persistent statements? To epitomize, it said; "We are done. You owe us. The Cotton Belt changes have nothing to do with the original contract or Cade agreement. Will put the matter in the hands of our attorneys. Whether the Commission's engineer accepts the plant or not, it must be paid for!"

It is true Mr. Salmon wrote "If you can show us a written agreement to rewire made by Cade, will carry it out, although Cade exceeded his authority." It is true he wrote that if the faulty wiring was due to poor material or defective workmanship he would replace the same. Are these statements inconsistent in the slightest, with the position that the contract was fulfilled?

Mr. Salmon knew that there was no written agreement. He simply put the defendant to its proof. When he said his company would correct defects in wiring due to defective material or poor workmanship, he at the same time pointed out the cause of the trouble defendant was having with the wiring, due first to the wires being placed underground in a cinder ballast with defective drainage, and second, to numerous derailments. He also realized that by Section 3 of the contract the Signal Company was bound to replace defective material and faulty workmanship. In making these statements he did not for one moment concede or admit the claim of the defendant, that it was the *duty* of the Signal Company to rewire the plant before the same should be accepted and paid for. The defendant was not misled by these statements. It knew there was no written contract. It knew the causes of the trouble it was having with the wiring, and it knew the obligation of the plaintiff under Section 3 of the contract to make good all defects.

While the General Railway Signal Company was willing to do the new work necessary to connect up the Cotton Belt changes, it refused absolutely to let it depend in any way, or have any connection with the original contract. It was only when Major Wathen wrote in his letter of July 20th (Ex. 31) that the Cotton Belt changes would be paid for *irrespective of the decision of the Commission* as to the plant, (Fol. 1356) that Mr. Salmon agreed to consider the proposition of doing the work. He maintained consistently throughout his correspondence that these changes on the Cotton Belt line had nothing to do with

the original contract, or with the Dallas agreement.

After Mr. Salmon wrote his letter of April 23rd, 1906, (Ex. 59) which concluded with a postscript as follows: "In case you decide to authorize the rewiring of the plant in connection with other work now being done for you by Mr. Walshe, will you please wire us to that effect." (Fol. 1531). Major Wathen replied with the letter of April 27th which he concludes with an invitation to make a *personal matter* of the controversy and which reads more like a romantic novel than business correspondence. No reply was made to this letter. Apparently the only permissible reply would have been, for Mr. Salmon to have taken a course in gun practice and then proceed to Dallas. The work then under construction by Mr. Walshe was completed as appears by his telegrams (Exs. 70, 71 and 72) on May 16th. Mr. Salmon had already written in his letter of April 23rd that the plant must be paid for whether accepted by the State Engineer or not. (Fol. 1529). There was nothing further for the Signal Company to say. It had made its position clear, unequivocal and final. The defendant, knowing its position, continued to use the plant in the prosecution of its business for the very purpose for which it was designed, to safeguard the crossing. That it fulfilled its purpose appears beyond dispute from the testimony of defendant's maintainer Collums that there was no collision at any time while the plant was in operation protecting this crossing, (Fol. 858); and from the fact that the Railroad Commission received monthly reports as to its operation, and knowing its condition, permitted its operation!

**V. Between March, 1905 and May 1906, the attitude of the defendant toward this plant and as to what the plaintiff should do in respect to the same, was equivocal, inconsistent and as variable as the proverbial weather cock.**

Major Wathen, in his correspondence with Mr. Salmon, at one time asserts that his agreement with Mr. Cade at Dallas was to remodel the plant to conform to the Cotton Belt changes; at another time, to rewire the plant; again, that the changes would be paid for if the Commission accepted the plant; at another time the changes would be paid for regardless of the decision of the Commission. The following are extracts from Major Wathen's letter and his testimony:

Major Wathen to General Railway Signal Co., April 27th, 1906. (Ex. 60).

"It was agreed between myself and Mr. Cade that the plant should be entirely re-wired, taking advantage of the permit of the Commission's engineer to change the plans of the 'Cotton Belt' yards. \* \* \* \* \* " (Fol. 1542).

Major Wathen to Mr. Salmon, July 8th, 1905. (Ex. 64).

"\* \* \* \* \* The agreement was—that as soon as the changes in the yard were made, that the Signal Co., would install additional devices, and when this was done, if the plant worked satisfactorily, it would be paid for \* \* \* " (Fol. 1564).

Major Wathen testified on this point upon his direct examination regarding the Dallas agreement with Cade as follows:

“This question of this change at the Cotton Belt yard was mentioned, but I told him that was a matter nobody could pass on.” (Fol. 893).

Major Wathen to General Railway Signal Co.,  
April 27th, 1906. (Ex. 60).

“We were willing, if the plant was accepted by the Commission’s engineer (after all the work had been done) to pay for the new work made necessary by the changes in the ‘Cotton Belt’ yard.” (Fol. 1542).

Major Wathen to Mr. Salmon, July 20th, 1905.  
(Ex. 31.)

“My agreement with Mr. Cade was, that whatever material was required to make the changes in the plant would be paid for regardless of what the decision of the Commission of Texas would be on final inspection of the plant.” (Fol. 1356).

It thus appears that on April 27th, Major Wathen wrote that the Cade agreement was to entirely rewire the plant to take advantage of the engineer’s permit to change the Cotton Belt layout, while on July 8th, he wrote that the agreement was that when the changes in the yards were made, the Signal Company would install additional devices. Yet his direct testimony was that while the Cotton Belt changes were mentioned to Cade, he told him that it was a matter nobody could pass on until they learned whether Thompson and the Commission would sanction it. On April 27th, Major Wathen wrote that they were willing to pay for the new work made necessary

by the changes in the Cotton Belt yard if the Commission's engineer accepted the plant, while on July 20th he had written that the Cade agreement was that the changes would be paid for regardless of the decision of the Commission.

As to what the defendant claimed was the matter with the plant, we find it at one time claiming that the failures, so-called, are due to wiring; at another time that the only thing complained of is the working of the interlocker. On this point Major Wathen wrote as follows:

Major Wathen to Mr. Salmon, July 28th, 1905. (Ex. 53).

“Recent inspection by ourselves indicates the machine working fairly well, the failures are due to the wiring, which is a sorry fraud.” (Fol. 1370).

Major Wathen to Mr. Salmon, July 8th, 1905. (Ex. 64).

“Nothing pertaining to this plant has ever been up for criticism, except the working of the interlocker, nor would any changes of the interlocker plant have been suggested, had it not been to the interests of the Railway Company to take advantage of the new ruling of the Commission and make changes in their tracks.” (Fols. 1578-79).

On April 10th, 1906, we find Major Wathen writing to Mr. Wuerpel. (Ex. 54).

“We are asking for bids for a new plant at Texarkana, the plant that was installed there some time ago having been condemned.” (Fol. 1502).

On cross examination (Fols. 946-948) the Major was forced to admit that prior to the condemnation of the plant in 1907, he had not asked for bids for a new plant.

July 20th, 1905, the Major wrote to Mr. Salmon that the order of the Railroad Commission of July 7th, 1904, had never reached his office, but on cross examination (Fol. 949) he was compelled to admit that he received a copy of this order shortly after it was made.

On April 17th, 1906, Major Wathen wrote to Mr. Wuerpel that the Commission's engineer would not accept the plant until it was *rewired* in accordance with the agreement with Mr. Cade, while about three weeks before he had written, March 28th, that the plant had been operated by the tolerance of the engineer with the idea that it would be *remodeled* in accordance with latter's decision relative to the Cotton Belt tracks.

Major Wathen to Mr. Wuerpel, April 17th, 1906. (Ex. 56).

“\* \* \* Rest assured that this plant will never be accepted until it is rewired in accordance with the agreement that I made with Mr. Cade, and I am sure the Commission's engineer will never accept it until this is done.” (Fol. 1508).

Major Wathen to Mr. Wuerpel, March 28th, 1906. (Ex. 49).

“The plant was patched up, and by the tolerance of the engineer of the Commission, it has been operated with the idea that it

would be remodeled in accordance with his latest decision relative to the Cotton Belt tracks \* \* \* ” (Fol. 1479).

What was the position of the defendant in respect to this plant during this period? It is consistent in only one particular, that is, of persistent inconsistent fault finding. The chief engineer was bound to be dissatisfied. He continually reiterated that the plant had been twice condemned, which was absolutely untrue. One day he demands that the plaintiff shall remodel the plant to conform to the Cotton Belt change. The next day he asserts the plant should be rewired. Yesterday, he was willing to pay for the changes of remodeling *regardless* of the Commission's decision; while today he says the changes shall be paid for *provided* the Commission accepts the plant. One day the trouble is with the wiring, another, with the interlocker. Although he wrote that the Cade agreement was to remodel the plant, he testified that he told Cade that it was a matter nobody could pass on until Thompson had sanctioned it. At one time, he wrote that they were asking for bids for a new plant, but he was forced to admit this was not so, a mere bluff. In one letter he referred to Mr. Wuerpel as “the animal Wuerpel” (Fol. 1543) and called the President of the General Railway Signal Company, and everyone connected with it “prevaricators” (Fol. 1548); and finally he attempted to make a personal matter of the controversy with Mr. Salmon himself!

It was unfortunate indeed, that the business end of an important transaction on behalf of a

great railroad corporation should have been intrusted to a man of the temperament and caliber of Major Wathen; but it is his employer, the defendant, however, and not the plaintiff who should suffer for his unfortunate handling of the affair. What reply could the Signal Company make that it did not make? What was it called upon to do that it did not do? The plant was being used during this entire period and the defendant and the two interested railroads were receiving the full benefit of its use. The reports that the defendant's own officer, Mr. Ayres, was making as to the general condition of the interlocking during this very time (Ex. 74 and the reports referred to) show that the condition of the interlocker during this entire period from March, 1905, to and including May, 1906, was GOOD!

**VI. The defendant was under no compulsion to continue using the plant from March 1st, 1905, to June 20th 1907, if the same, during that interval was not acceptable to the Railroad Commission of Texas.**

It was urged on the trial on behalf of defendant that it could not have discontinued using this device; and the learned court in its charge also said that defendant could not have summarily discarded this device. (Fol. 1052). This position, however, is not maintainable, unless this plant was *acceptable* to the Railroad Commission. If, however, it was acceptable to the Commission, then defendant is bound to pay for the same according to its contract. The plaintiff claims that user is acceptance; such user, how-

ever, must be voluntary and not under compulsion.

Defendant itself while using the plant did not claim that such user was under compulsion. On the contrary, it specifically stated that its use could be discontinued at any time, the plant removed and the orders already made by the Commission and its engineer, stand. Defendant's position in this respect appears from its letters, as follows:

Major Wathen to Standard Signal Co., April 24th, 1905. (Ex. 29).

“\* \* \* If satisfactory to you, we will let the engineer's report as made on the two previous inspections stand, and you may consider the plant as yours, and we will proceed to ask for bids for a new plant at Texarkana.” (Fol. 1316).

Major Wathen to Mr. Salmon, July 8th, 1905. (Ex. 64).

“\* \* \* If they persist in trying to 'hold us up' in the price of material and labor necessary to carry out the agreement made with Mr. Cade, et al. then we shall never ask for another inspection by the Commission, and will notify them that the General Railway Signal Co., has refused to make good the plant and the inspection of the plant previously made will obtain, and this company must, to comply with the Commission's order, ask for new bids on this plant.” (Fol. 1579).

Major Wathen to Mr. Wuerpel, March 28th, 1906. (Ex. 49).

“It would be entirely satisfactory to us for you to refuse to do anything more at the plant at Texarkana, as the plant now stands condemned by the State Engineer, and if this plant is removed, we can have a good plant put in that will pass the inspection, by somebody else. The plant was patched up, and by the tolerance of the engineer for the Commission, it has been operated, with the idea that it would be remodeled in accordance with his latest decision relative to the ‘Cotton Belt’ tracks. \* \* \* \* I see nothing left for me to do except to ask for new bids for the plant at Texarkana, to conform to the ruling of the Commission’s engineer. Kindly advise how soon you can take all your stuff away from Texarkana, as it will be very much in our way getting the new plant installed.” (Fols. 1478-1480).

Major Wathen to Mr. Wuerpel, April 10th, 1906. (Ex. 54).

“We are asking for bids for a new plant at Texarkana, the plant that was installed there some time ago having been condemned. You had notice from me not to remove the new material at Texarkana, but to remove all of the material that had ever been sent there, if you felt disposed to do so.” (Fols. 1502-03).

The defendant claimed during this period, extending over a year, that the plant was already condemned; that the previous inspections must

stand; that it has been operated only by *tolerance* of the engineer; that the Signal Company could take all of its stuff away; that they were asking for bids for a new plant. Can defendant now be permitted after making such unequivocal statements for more than a year, during which time it enjoyed the use and benefit of this plant, to come into court and say that it has used the plant under compulsion; that it couldn't have stopped using it? Assuredly not! The doctrine of estoppel will prevent it.

Suppose it had stopped using the plant and the Railroad Commission had determined that it had done so wrongfully, what would have been the result? Under the law of the State of Texas and the rules of the Commission, simply this: Section 5 of the statute, (Ex. 1) would have been enforced, and the railroad would have been subjected to the penalty of \$500.00 a week. The Railroad Company, however, was fully protected against any such penalty as this by the contract itself. Section 8 of the contract (Ex. 4) specifically provided that plaintiff should pay any and all penalties assessed against the defendant under any rule or order of the Railroad Commission of Texas, or any law of the State of Texas. (Fol. 1097).

The defendant was not obliged to use the plant, if the same was not acceptable to the Railroad Commission of Texas. If the plant was not acceptable to the Railroad Commission of Texas, not only was the defendant under no obligation to use the same, but it was the express duty of the Railroad Commission under the rules promulgat-

ed by it, to have forthwith discontinued its use. Rule 6 (Ex. 3) provided,

“If at any time it should be determined by the Commission that any interlocking device is not properly maintained and efficiently operated then it shall be the duty of the Commission to cancel its permit approving the operation of such interlocking device, and all trains will be required to stop at such crossing the same as if no interlocking device existed.” (Fols. 1080-81).

Rule 7 provided that the railroad company should furnish to the Railroad Commission detailed reports showing the operation of the plant. Ostensibly this was for the very purpose of enlightening the Railroad Commission as to whether the interlocking plant was safely performing its function. The defendant did furnish these reports to the Railroad Commission and they are to be found in Ex. 74. The Commission had these reports as to the condition of the plant, but took no action in the matter. The only inference is that the Commission believed that the plant was properly performing its function of safeguarding the crossing. In other words, that the plant, during this entire time, was acceptable to the Commission. The Court of Appeals held that “accepted by”, in this case, means “acceptable to.” Therefore the plant was acceptable to the Commission and must be paid for under the contract.

The defendant was not using this plant under compulsion during these two years, if at any time during this period it could by its own initia-

tive have procured the cancellation of the order of the Commission under which it was operating the plant. It not only *could* have done this, but it *did* do it on June 20th, 1907, by its petition for further inspection. The only party recognized by the Commission who had a right to petition for an inspection was one of the railroad parties to the crossing, as provided for under Rule 3 of the General Rules. (Ex. 3). On that inspection in 1907, petitioned for by defendant, an order was made directing the installation of a new plant. If defendant could petition for the inspection on June 20th, 1907, it could have petitioned for a like inspection at any time between March, 1905, and June 20th, 1907. If it could get permission to install a new plant by petitioning therefor on June 20th, 1907, it certainly could have procured a like permission at any time during the two years and more prior thereto, assuming that during that period the plant was unacceptable to the Commission.

If the defendant, while using the plant, was claiming its user was by tolerance instead of compulsion; if the penalty of noncompliance with the Texas statute was contemplated by the parties and provided for in the contract; if the Commission's rules prohibited the use of an unacceptable plant; if the defendant might, at any time, have relieved itself from using the plant by petitioning the Commission; then by what manner of means, by what process of reason, can it be said that from March 1st, 1905, to June 20th, 1907, this defendant was using an unacceptable plant under compulsion?

**VII. The continued use and operation of the interlocking plant by the defendant in its business from March 1st, 1905 to June 20th, 1907, was an unequivocal act of acceptance of such device by the defendant.**

- Brown v. Foster*, 108 N. Y. 387, 391.  
*Chambers v. Lancaster*, 3 App. Div. 215.  
*Chambers v. Lancaster*, 160 N. Y. 342.  
*Hospital Supply Co. v. O'Neil*, 31 Supp. 792, (10 Misc. 655); Aff. 155 N. Y. 634.  
*Callahan v. O'Rourke*, 110 A. D. 779  
*Hercules Iron Co. v. Dodgworth et al*, 57 Fed. Rep. 556.  
*Fox v. Wilkinson*, 133 Wis. 337.  
*Otis Elevator Co. v. Headley*, 81 N. J. L. R. 173.  
*Dennis v. Stroughton*, 55 Vt. 371.  
*Noel & McGinnis v. Kaufman Buggy Co.*, 32 Ken. L. R. 576.  
*Edwards v. Wooldridge*, 52 Tex. 512.

The proposition of law laid down and applied in the above cited cases is, that the continued use of a machine by the purchaser in the promotion of his own business with knowledge of its imperfections, is an unequivocal act of acceptance of the same. In other words, it is a conclusive election to accept the machine which is used, which no words of the user can qualify. We will now show briefly what was held in several of these cases upon this point:

In *Brown v. Foster*, 108 N. Y. 387, plaintiff sued defendant for failure to deliver "an engine,

“boiler and saw mill \* \* \* contracted to be supplied, set up and put in running order by the “defendants.” Defendant alleged performance and also acceptance by plaintiff. After receiving the mill plaintiff rejected it. Defendant then made certain alterations, and plaintiff continued to use it from September 1st to the latter part of November.

In deciding that this was an unequivocal act of acceptance, Judge Danforth says at 391 :

“The evidence in this case, however, permits an inference that the plaintiff exercised a dominion over the machinery inconsistent with ownership in the defendants, and consistent only with title as well as possession in himself. He used the machinery in the prosecution of his business, and although complaining did not intermit its use. Knowing its defects he continued to run it. \* \* \* The continued use of the machine in the promotion of his own business interests, with knowledge of its imperfections, was an unequivocal act of acceptance which no words of his own could qualify.”

And on page 392:

“It is true the vendee said ‘I will not accept’ but this was of no consequence, when, after an opportunity to inspect, and with full knowledge of its quality, he still not only retained the machinery, but enjoyed its use. That act was one of ownership and completed the transaction.”

*Chambers v. Lancaster*, 3 A. D. 215, aff. in 160 N. Y. 342, was an action upon a contract to erect

and complete a stone crushing plant, consisting in part of two stone crushers and a screen. The crushers constantly broke down; were inadequate and insufficient. Defendant, however, used the crushers for about five months whenever they were in condition to be used.

The Appellate Division held upon the authority of *Brown v. Foster*, that this continuous use was an acceptance, and Judge Cullen says, pages 217-18:

“But after the defective character of the machines had become known by the trial, then the company was put to its election to accept or reject them. The use of the machine, for the purpose of their business, after the trial had shown they were defective, was a conclusive election to accept.”

This court concurred in this position, in these words, 160 N. Y., p. 347:

“The court reached the conclusion that the use of the machines for the purposes of the company for so long a period as five months, after a trial had shown that they were defective, was a conclusive election to accept them within the doctrine as laid down by this court in *Brown v. Foster*, 108 N. Y. 387. With that view we are agreed.”

In *Hospital Supply Co. v. O'Neil*, 31 Supp. 792, it was held that the continued use of a laundry plant for two months and a half was an acceptance, the court saying at page 794:

“Conceding, however, that the defendant did urge objections to the machine, neverthe-

less he continued its use from November 1st to the 15th of January; and retention and use after discovery of defects impose a liability to pay for the article. Words of disapproval yield in effect to acts of approval.”

In *Hercules Iron Co. v. Dodgson*, 57 Fed. Rep. 556, an action was brought to recover the contract price of an ice machine which defendant claimed did not fulfill the contract as it would not produce the stipulated amount of ice. The opinion was written by former President Taft, in which he says as follows:

“It appeared beyond controversy that the machine was ready for operation about June, 1890; that it was operated during the summer and fall of that year; that the ice made was sold by and for the benefit of the defendants; that in September defendants sent word to plaintiff that the machine furnished did not fulfill the contract in any respect and was not accepted and requested its removal; that plaintiff declined to remove the same claiming that there had been a full compliance with the contract on its part and that the machine had been accepted by defendants in the July previous; that after this correspondence defendants continued to make ice with the machine during the entire ice season of '91 and '92, and had sold the ice thus made for their own benefit \* \* \*.

“The court \* \* \* charged the jury that the course of the defendants was an acceptance of the machine under the contract, which made the defendants liable for the contract price, but that they could recoup from that price

damages of two kinds. 1st, the equivalent of the sum required to cure defects in the machine as described by parts in the contract, and 2nd, the differences between the value of the machine producing the amount of ice per day it could produce and its value if it had been a twenty-five ton machine. It will not be necessary to review the correctness of that view of the law, for it was fully argued at the trial and a conclusion reached only after full consideration."

In the case of *Otis Elevator Co. v. Headley*, 81 N. J. L. R., 173, the plaintiff agreed to install an elevator which would lift a certain load. The elevator did not meet this requirement, but the defendant continued to use the same. The Trial Court, for the purpose of determining defendant's liability, directed the jury to determine whether this defect in the elevator's lifting capacity was due to the plaintiff or to the defendant. The Appellate Court held this was error, saying at page 175:

"The retention of the appliance by the defendants after knowledge of the defect and its continuous use by them for nearly two years thereafter was an election on their part to accept it in its defective condition."

In *Edwards v. Wooldridge*, 52 Tex. 512, an action was brought to recover for three safes sold by plaintiff to defendant. The Trial Court charged that if plaintiff shipped defendant inferior safes and defendant reasonably notified plaintiff the safes were not satisfactory, plaintiff could not recover, although defendant had retained and con-

tinued to use the safes. The Appellate Court held this error, saying at page 513:

“As we construe the law appellant would be entitled to recover even though appellee did notify him that he would refuse the safes, if he nevertheless actually accepted them by using them in his business.”

An examination of these cases shows this rule, (that the continued use of machinery, though defective and unsatisfactory, in the business of the user is an acceptance thereof) to be uniformly applied in the Courts of last resort in the various States, and also in the Federal Court.

The defendant has sought to apply, however, to its user the rule which governs an owner's occupation of a building that does not conform to the contract for its erection, as laid down in *Smith v. Brady*, 17 N. Y., 173. These two classes of cases are vitally different; and there is really no reason or excuse for any confusion in the application of the two rules. The class of cases of which *Smith v. Brady* is a leading case, applies solely to buildings annexed to the freehold, the silent occupation of which is absolutely no evidence that the same conform to the plans and specifications. The other class of cases, of which *Brown v. Foster* is a leading case, applies to cases where machinery is installed for a particular purpose, and is actually used by the purchaser for that purpose. In the one case, it is held that moving into and continuing to occupy a two-story house standing upon the owner's premises, is not evidence that such house conforms to the plans which call for a three-story house. While in the

other class of cases it is held that continuing to use a saw mill to saw logs, a stone crusher to crush stones, an ice plant to make ice, an elevator to carry passengers, a laundry plant to do laundry work is evidence that such machines do the work they were intended to perform, and that continuing to use them is an absolute election to accept the same.

These machinery cases do not hold, however, that such acceptance leaves the user without remedy in case such machine is defective. They hold that where there is an express warranty, such warranty survives acceptance, and the user of the machine has his protection in the warranty; but that he can not retain the machine and use the same in his own business, and then say to the one who installed it that he will pay nothing for it.

The reason why the silent occupation of a building is not an election to accept the same, is well put in the case of *Smith v. Brady*. The opinion of Comstock, J., in which all the members of the court concur, says at page 188:

“To impute to him a voluntary waiver of conditions precedent, from the mere use and occupation of the building erected, unattended by other circumstances, is unreasonable and illogical because he is not in a situation to elect whether he will or will not accept the benefit of an imperfect performance. To be enabled to stand upon the contract he cannot reasonably be required to tear down and destroy the edifice if he prefers it to remain.”

We fail to perceive how the defendant can reasonably contend that the rule governing the erection of buildings applies to the case at bar.

The plant erected by the plaintiff for the defendant at Texarkana was not a building, a round house, or a depot. It consisted entirely of machinery and of apparatus which conducted the power to the machines. It included, in brief, as described in the specifications (Fol. 1108) a controlling machine, charging plant, batteries, signals, signal machines, switch machines and all other apparatus and material required in the proper control and movement of signals, derails, switches, movable point frogs and crossing bars. (The tower mentioned in this connection was erected by the defendant and belonged to it. Fol. 931). Besides the controlling machine and the charging plant, which included a gasoline engine, there were 69 separate and distinct machines used in controlling the switches, derails and signals, as appears from the report of Engineer Thompson. (Fol. 1156). These 69 separate machines were each operated and controlled from the tower through the controlling machine by means of electric currents which passed through wires from the tower to each machine. Defendant has urged that because these machines were attached to the freehold that they became a part thereof like a building. The answer to that is, that in order to use any stationary machinery of any size it must be affixed to the freehold. All machinery which is used in factories is firmly affixed to the building itself, for the machine must stand on a firm foundation, and be solidly fixed to the same. It does not make that machine any less a machine, or change it into a building. Laundry machines, ice machines, must be affixed to the building in order to use them. An elevator must be firmly affixed to the building in which it is in-

stalled. They still remained machines, however, the continued *operation* of which the courts held was an election to accept.

If the continued use of an engine, boiler and saw mill for three months, which the user claimed was defective, as in *Brown v. Foster*, was, in the language of the court, "an unequivocal act of acceptance which no words qualify"; if the continued use of a stone crusher which constantly broke down, for five months, as in *Chambers v. Lancaster*, was, in the language of Judge Cullen, "a conclusive election to accept"; if the continued use of a laundry plant to which the defendant was urging objections, for two months and a half, as in *Hospital Supply Co. v. O'Neil*, was an acceptance thereof; if the use of an ice plant, which did not fulfill the contract in any respect, and which the defendant requested plaintiff to remove, but plaintiff did not, and defendant used the same for two years, was an acceptance thereof, as in *Hercules Iron Works v. Dodgworth*; if the continued use of an elevator which would not lift the load it was contracted to lift, for about two years, was an election of the user to accept it in its defective condition, as in *Otis Elevator Company v. Headley*; assuredly then, the use of this interlocking plant, consisting of 70 separate and distinct machines, by the defendant in its business from March 1st, 1905, when it was notified the contract was fully performed, to June 20th, 1907, with full notice that plaintiff claimed the contract was performed, and the contract price was then and there due, assuredly such use under these circumstances was an unequivocal act of acceptance of the same, which no words could qualify; was a

final and absolute election to accept this plant as its own!

There is practically no conflict of testimony as to the fact of the user of this plant by defendant from March 1st, 1905, to June 20th, 1907. This use was continuous. It was with the knowledge of the Railroad Commission of Texas. They received monthly reports showing such use.

To summarize the conditions under which this use continued: This plant was used by defendant for over two years with knowledge that plaintiff claimed it had fully performed its contract. It was used with knowledge that plaintiff claimed the contract price had been due from March 1st, 1905. It was used with knowledge that plaintiff denied absolutely defendant's claim that the plant was to be rewired or remodeled as part of the Dallas supplemental agreement. It was used for more than a year after defendant had been notified that the plaintiff was placing the matter in its attorneys' hands. It was used for over a year after defendant was finally warned, April 23rd, 1906, that the plant must be paid for whether the Commission's engineer accepted it or not. It was used while defendant was trying to cajole and bully plaintiff into rewiring the entire plant free of charge, in the face of plaintiff's positive refusal to be bullied or cajoled. It was used from March 1st, 1905, to June 20th, 1907, in its own business for the very purpose for which it was designed, in full compliance both with the statute directing its installation and the rules governing its use.

It was used by the defendant, operated by the defendant and maintained by the defendant until,

in the language of Engineer Thompson, the wiring was "torn up and exposed above the ground "over practically the entire plant," (Fol. 1184), and the plant was "in general in a bad condition "and needs thorough overhauling and renewing," (Fol. 1190), at which time defendant's solicitor adroitly asked for an inspection by the Commission; although the Commission, with detailed knowledge as to its condition, was still permitting its use!

During the fifteen months' use after March 1st, 1905, the defendant's own Division Superintendent Ayres made fifteen monthly official reports for the Railroad Commission, each one of which describes the general condition of the interlocking as "Good;" and the next ten prior to the inspection as "Fair!"

The defendant was not using this plant during this time, under compulsion, either physical, legal, or contractual. During its correspondence with the Signal Company between March, 1905, and May, 1906, defendant made no claim that it was using the plant under compulsion. On the contrary, it said the plant was condemned; that it was used by *tolerance* of the Commission's engineer; that the Signal Company could take it out; that they were satisfied to let the report of the engineer stand; that it was asking bids for a new plant! Defendant did petition for an inspection June 20th, 1907. It could have petitioned for an inspection at any time prior to June 20th, 1907, if necessary, to relieve it from any duty to continue the use of the plant. It failed to do so, but continued to use the plant for its own business,

to its own advantage in complying with the Texas statute and the Commission's rules. If it had discontinued using the plant it would have had to install another in its place. It seemed to defendant a better proposition to continue the use of this plant rather than to go to the expense of replacing it with a new one.

That parts of machines broke; that the wiring became defective; that poor material may have been used, or workmanship been inferior; that it had trouble in operating the plant between March 1st, 1905, and June 20th, 1907, is absolutely immaterial on the question of an acceptance predicated on continuous use. The defendant contemplated that these very conditions would exist. It provided for them by Sec. 3 of the contract. It inserted in the contract a year's guarantee for just such defects as these. This guarantee was an express warranty. An express warranty survives acceptance. Therefore these alleged defects of material and workmanship are absolutely no defense to acceptance but they constitute a counterclaim to be pleaded as such in an action brought for the contract price. Defendant has simply mistaken its remedy.

That defendant may have found fault with the operation of this plant is no defense to acceptance in the face of its continued user. As in the language of Judge Danforth in *Brown v. Foster*, defendant "although complaining, did not intermit its use. Knowing its defects he continued to "run it." And in the language of Justice Pryor in *Hospital Supply Co. v. O'Neil*: "Words of disapproval yield in effect to acts of approval.

“\* \* \* Actual acceptance prevails against a verbal rejection.”

A finding by the jury that the defendant did not accept this plant is against the weight of evidence, as the facts upon which such acceptance is predicated are practically uncontradicted. It is said that acceptance is a question of intent. In a way that is true. Intent is ordinarily a state of mind. Corporations, as such, can have no mental intent. Individual officers of the corporation each may have an intent, but as individual officers may entertain different intents at the same time, the intent of the corporation is not to be found in what the officers *think*, but in what the corporation, acting through its officials and employees, *does*. Consequently, it was of no moment that Major Wathen himself may not have intended to accept this plant, nor that the corporation should pay for the same. The question is, not what was in Major Wathen's mind, but rather what the defendant corporation, acting through him and others said to the plaintiff, and did in connection with the plant. The corporation did use the plant, knowing it was expected to pay for the same. They continued to use the plant “In the promotion of their own business interests with knowledge of its imperfections,” and this “Was an unequivocal act of acceptance, which no words of their own could qualify.”

When defendant claimed the plant was defective and did not fulfil the contract; when it claimed that the plant was not acceptable to the Railroad Commission, and was thereupon notified

that it must nevertheless be paid for; it was then and there put to its election either to quit using the plant, (by actually stopping, or applying to the Commission to stop) or to go on using the plant and accept the same, relying on its express warranty to protect it as to defects. It did not stop using the plant, nor make any effort to stop. It continued to use it for over two years, until it was practically worn out. This use constituted a conclusive election to accept.

## **POINT II.**

THE COURT HAVING ADMITTED OVER PLAINTIFF'S EXCEPTION ALL OF THE WRITTEN REPORTS MADE BY THE DEFENDANT'S OFFICERS AND EMPLOYEES TO IT, UPON THE GROUND THAT THEY WERE COMPETENT TO SHOW THE INTENTION OF THE DEFENDANT IN USING THE PLANT, IT WAS ERROR FOR THE COURT TO CHARGE THAT SUCH PORTIONS OF THOSE REPORTS WHICH DESCRIBED THE GENERAL CONDITION OF THE INTERLOCKER AS "GOOD" WERE NO EVIDENCE OF THE ACCEPTANCE AND WAIVER OF THE CONDITIONS OF THE CONTRACT.

Ex. 74 consists of a large bundle of about 1,000 written reports attached to one of defendant's depositions. It includes 47 monthly reports, beginning with Nov. 3rd, 1904, and concluding with Sept. 4th, 1908, showing the general condition existing at the plant during the preceding month, to each of which is attached supplemental

detail reports of from 1 to 9 pages. It contains also about 1,000 daily detail reports made by the six tower men in charge of the operation of the plant.

The 47 monthly reports were made by R. B. Ayres, defendant's Division Superintendent, to the management of the defendant for the Railroad Commission of Texas; and were based upon the daily reports made by the tower men to the Division Superintendent. They were then sent to the Assistant General Manager and forwarded by him to the Railroad Commission of Texas. (Fols. 375-380). These reports were made pursuant to Sec. 7 of the General Rules of the Railroad Commission. (Ex. 3 Fol. 1082). This bundle of reports made to the defendant by its employees and officers was admitted over plaintiff's objections. Full discussion was had at the time of their admission regarding the grounds of their competency and objections thereto. It is as follows (Fols. 408-413):

"Mr. Tompkins: I object to any report except the three months upon the ground that the same were reports made by the employees to the defendant and are not evidence of the facts therein contained.

"The Court: Does expert testimony based on hearsay amount to anything?

"Mr. Matson: I think those reports are all competent upon the question of our intention to accept this plant. I think every report made from the beginning to end is competent to show what the trouble with the plant was.

"The Court: I receive them.

“Mr. Matson: Your Honor receives all reports attached to these depositions?”

“The Court: Yes, reports made by employees pursuant to the direction of the Railroad Commission or of the Railroad Company.

“Mr. Tompkins: The court permits any report that has been made by an employee to the Railroad Company pursuant to the Railroad Company’s directions?”

“The Court: Yes.

“Mr. Tompkins excepted.

“The Court: I do not receive them as a basis for an expert opinion but I receive them as competent evidence on the question of whether the Railroad Company was dealing with this instrument as its own, or was seeing what they could do to find out whether they would take it or not.

“Mr. Tompkins: Are they received as evidence of the correctness of the facts therein contained?”

“The Court: Not necessarily, no. I do not think they prove themselves to be absolutely true; they prove what the Company was doing and what intention it had.”

These reports were marked in evidence page 250:

“Mr. Tompkins: I would like to have the monthly reports in the deposition of Mr Ayres of which copies were filed with the Railroad Commission, marked.

“Mr. Matson: All the reports are in evidence attached to that deposition. They are all offered every report there.

“Marked Exhibit 74.”

Counsel for the plaintiff in his summary for the jury urged that certain portions of these reports (Ex. 74) especially where Div. Supt. Ayres had characterized the general condition of the interlocking as "Good," was the strongest kind of evidence as to how the defendant actually considered this plant; that defendant's actual intention in using the plant should be deduced from its own characterization thereof. Counsel for the defendant probably fearing the effect of this argument with the jury, asked the court to charge as follows: (Fol. 1058):

"Mr. Matson asked the court to charge the jury that the reports of the good condition made by Mr. Ayres of the apparatus is no evidence of the acceptance and waiver of the conditions of the contract.

"The Court: I charge that.

"Plaintiff excepted."

We have this peculiar situation in regard to these reports which the defendant earnestly sought to have introduced. The very reason urged for their competency was that they were "all competent upon the question of our intention "to accept this plant." (Fol. 408). The court in receiving them said: "I receive them as competent evidence on the question as to whether the "Railroad Company was dealing with the instrument as its own." (Fol. 411). "They prove "what the Company was doing and what intention it had." (Fol. 413). Although received for the express purpose of showing whether the company intended to accept the plant, yet the court charged that those portions of the reports which

the plaintiff urged showed acceptance, was no evidence of the acceptance of the plant. In other words the defendant was permitted to use any part of the reports made by its own employees to show that it did not accept the plant, while the plaintiff's mouth was judicially closed to deny it. Introduced as competent evidence of intention, yet incompetent when plaintiff attempts to show what that intention was! Competent for defendant, incompetent for plaintiff.

We believe that the reported condition of the interlocker in these reports is competent and convincing evidence upon the question of defendant's intention to accept the plant. These reports began with November 3rd, 1904, and ended with September 4th, 1908. On the point in question, the reports are as follows:

Date of Report.		Gen. Condition of Interlocking, (from last daily report.)				
Nov.	3, 1904	"	"	"	"	Fair.
Dec.	3, "	"	"	"	"	Fair.
Jan.	7, 1905	"	"	"	"	Fair.
Feb.	7, "	"	"	"	"	Fair.
Mar.	8, "	"	"	"	"	Good.
Apl.	4, "	"	"	"	"	Good.
May.	5, "	"	"	"	"	Good.
June	7, "	"	"	"	"	Good.
July	4, "	"	"	"	"	Good.
Aug.	4, "	"	"	"	"	Good.
Sept.	5, "	"	"	"	"	Good.
Oct.	2, "	"	"	"	"	Good.
Nov.	3, "	"	"	"	"	Good.
Dec.	7, "	"	"	"	"	Good.
Jan.	5, 1906	"	"	"	"	Good.
Feb.	8, "	"	"	"	"	Good.

Date of Report.		Gen. Condition of Interlocking, (from last daily report.)				
Mar. 11,	"	"	"	"	"	Good.
Apl. 6,	"	"	"	"	"	Good.
May 6,	"	"	"	"	"	Good.
June 8,	"	"	"	"	"	Good.
July 11,	"	"	"	"	"	Good.
Aug. 10,	"	"	"	"	"	Fair.
Sept. 12,	"	"	"	"	"	Fair.
Oct. 4,	"	"	"	"	"	Fair.
Nov. 6,	"	"	"	"	"	Fair.
Dec. 6,	"	"	"	"	"	Fair.
Jan. 5, 1907	"	"	"	"	"	Fair.
Feb. 9,	"	"	"	"	"	Fair.
Mar. 11,	"	"	"	"	"	Fair.
Apl. 5,	"	"	"	"	"	Fair.
May 7,	"	"	"	"	"	Fair.
June 12,	"	"	"	"	"	Fair.
July 17,	"	"	"	"	"	Fair.
Aug. 12,	"	"	"	"	"	Fair.
Sept. 24,	"	"	"	"	"	Fair.
Oct. 9,	"	"	"	"	"	Fair.
Nov. 19,	"	"	"	"	"	Fair.
Dec. 13,	"	"	"	"	"	Fair.
Jan. 17, 1908	"	"	"	"	"	Fair.
Feb. 19,	"	"	"	"	"	Fair.
Mar. 6,	"	"	"	"	"	Fair.
Apl. 8,	"	"	"	"	"	Fair.
May 13,	"	"	"	"	"	Fair.
June 16,	"	"	"	"	"	Fair.
July 14,	"	"	"	"	"	Poor.
Aug. 7,	"	"	"	"	"	Poor.
Sept. 4,	"	"	"	"	"	Poor.

The first period, from November, 1904, to February 7th, 1905, during which time the reported condition is "Fair," covers the time during

which Engineer Thompson made his report criticizing the condition of the plant; the Texarkana and Dallas conference in December, 1904; and the time *before* the plant had finally been put in good shape by Foreman Walshe in carrying out the Dallas agreement.

The second period, during which the condition of the interlocking was reported "Good," began with the March 8th, 1905, report. February 14th, 1905, Weurpel wrote to Lang that the work was about complete; and on March 11th, he wrote that the work was completed. It is a most significant fact that the report of March 8, 1905, which covered the month of February, described the condition of the interlocking as "GOOD." That condition continued, according to these reports, for seventeen consecutive months. During this *very time* Major Wathen was finding all sorts of fault with the plant, while the Division Superintendent was reporting the condition of the interlocker as "GOOD!"

The learned court charged the jury that "Acceptance is largely a question of intent. To prove what a man intends to do we should take what he *says* and what he *does* and the circumstances under which he acts and talks." (Fols. 1049-1050) and further: "when you come to the question of intent, you have a right to give such force to the argument of *probabilities* as your good sense and sound judgment says it ought to have." (Fol. 1054).

Now, if these propositions are sound law, and the jury in passing on the question of intent, was

to take what the defendant *says* and *does*, and the circumstances under which it said and did it, it then became preeminently essential that they should have considered what the defendant's officers were saying *among themselves* in regard to this plant, as to its condition, and how it was working. If Ayres had reported during this entire period that the interlocking was "Bad," would not defendant have urged that as evidence of its intention not to accept? If the jury were to consider upon the question of intent, what the defendant would *probably* have done under the circumstances, was not the condition of this interlocker during this time one of the vital circumstances in determining the probabilities? If the condition was "Bad," during the entire time, it would have been improbable that the defendant would have accepted it. On the other hand, if the condition at one time was "Fair" and then became "Good," and continued "Good" for a year and a half, acceptance was the natural probability. Was it fair and just to this plaintiff after the learned court had charged the jury to consider what the defendant *said* and *did*, in determining the probabilities, to preclude the jury from considering on this question, defendant's own declaration on a point of most vital importance, the actual condition of the interlocker?

If these reports of Mr. Ayres were not competent evidence upon the question of acceptance, then the whole mass of reports, marked Exhibit 74, were not evidence for any purpose, but were incompetent. Reports made by employees to the employer as to the condition of the machinery operated by them, its failures to operate, etc.,

certainly are not evidence *for* the employer to whom they are made of the facts therein contained. They may be admissible *against* the employer as admissions or declarations. The only possible ground that could be urged for their admission *on behalf* of the employed, is upon the question of intent. Upon that ground they are, without question, admissible as against the employer. But competent or incompetent, having been once introduced and placed before the jury upon the theory that they showed defendant's intent in using the plant, the court, at the close of the trial, had no right to limit their competency and effect solely to the support of the defendant, and to the prejudice of the plaintiff.

### POINT III.

THE COURT MADE NUMEROUS ERRORS UPON THE TRIAL OF THE ACTION IN THE ADMISSION AND EXCLUSION OF EVIDENCE OVER PLAINTIFF'S EXCEPTIONS.

**I. It was error for the Court to permit defendant's witness Neff to testify how the delays since the installation of the new plant, compared with the delays while the plant in question was being operated. (Fols. 642-644.)**

It is difficult, indeed, to imagine any possible ground upon which the admission of such testimony could be justified or excused. Plaintiff did not contract that the plant it was to install was to be as good as some other system; or as good as some plant which might some time re-

place it. What difference then did it make, whether the delays of the old plant were more or less numerous than the delays of its successor? There is no evidence showing any of the conditions under which the new plant was operated, as to the number of trains using the crossing; the number of switches and derails in operation; whether the layout is the same for the new plant as it was for the old; whether the maintainers of the new plant were more or less competent than the maintainers of the old plant. There was not one single fact before the court and jury, which made it possible to make a fair comparison between the working of the new and the old plants. The testimony was necessarily harmful to the plaintiff. It necessarily tended to discredit the plant in question, so that when the jury came to weigh the probabilities as to acceptance as charged by the court (Fol. 1054), it must have been taken into consideration by them to the prejudice of the plaintiff. This witness was even permitted to testify that he had received no *complaints* of the new plant so far as the operation of trains was concerned. (Fol. 644). It was absolutely unfair to the plaintiff to permit the introduction of such clearly incompetent and irrelevant hearsay evidence as this.

**2. It was error for the Court to permit the witness Thompson to give an expert opinion as to the condition of the plant based upon daily reports as to its workings between September 16th, 1903 and August 9th, 1907, which reports were not in evidence. (Fols. 395-402)**

In giving his evidence the witness was not testifying as the Commission's engineer, but as an expert. The basis of his testimony was not evidence already in the case. It was not the result of personal knowledge. It was based upon written reports made by the employees of the defendant. Necessarily, the witness must have assumed that the facts stated in these reports were true. Although these reports were later put in evidence, they did not establish the truth of the facts therein contained as evidence on behalf of the defendant, whose employees made the reports.

At this point it is rather illuminating to observe that the witness, in answer to this question testified, (Fol. 399) that the reports show that the device was not properly performing its functions and was "endangering the safe operation of trains." And yet, the Commission, who was receiving these reports continued, without let or hindrance of any kind, to permit the operation of this safety device, which was "endangering the safe operation of trains," for several years until the defendant itself came before it, and adroitly asked for an inspection!

**3. It was error for the Court to permit the witness Thompson to testify that the design of the plant and its functions were imperfect and in an experimental stage. (Fols. 298-300.)**

The contract specifically provides that this plant was to be of the plaintiff's design and manufacture except as therein provided. (Fol. 1107). There was no question raised by the pleadings or properly before the jury as to

whether the plaintiff's design was the best or next to the best; as to whether it was fully tried, or experimental. The issues were, how did the plant work; was it acceptable to the Commission; was it accepted by the defendant. This testimony was clearly irrelevant and prejudicial to the plaintiff.

**4. It was error for the Court to permit Mr. Thompson, the Commission's Engineer to testify that the interlocking device was never approved by him and was never satisfactory to the Railroad Commission of Texas. (Fols. 279-281.)**

Engineer Thompson had a certain function to perform defined by the contract, in effect, that the *work* and *material* should be satisfactory to him. (Fol. 1088). If he was dissatisfied he should have, at that time, manifested his dissatisfaction by condemning those portions of the material and the work which were not satisfactory to him. The contract does not say that the interlocking device must be approved by him. That being so, in what way is it material to this case, and to the rights of the parties upon the contract whether or no he did approve the device? If not material, it was certainly prejudicial to the plaintiff to permit him to say that he had not approved the device.

Thompson was also permitted to testify that the device was never satisfactory to the Railroad Commission of Texas. We are unable to discover upon what theory a party is permitted to prove the satisfaction or dissatisfaction of a semi-judicial body like the Railroad Commission of Texas which was to express its satisfaction or

dissatisfaction by written orders, by the testimony of its employee! Such testimony was clearly prejudicial to the plaintiff.

**5. It was error for the Court to permit Engineer Thompson to testify as to whether the different apparatus was satisfactory to him in respect to material, workmanship, design and operation. (Fols. 301-303.)**

As has been stated, the contract provided that the material and workmanship should be satisfactory to the Commission's engineer. But that satisfaction or dissatisfaction, on the part of the engineer must have been timely expressed. If the engineer was not satisfied at the time, yet did not express that dissatisfaction until the trial of the case, its materiality had been lost. What his state of mind was, while this plant was being erected and put into operation made no difference at the time of the trial, unless that state of mind was expressed at the time. It was what he said and did at the time, not what he thinks he thought at the time.

**6. It was error for the Court to permit the members of the Railroad Commission of Texas to explain what was the basis of making their final order of August 12th, 1907 and whether the Commission received as true, Engineer Thompson's report. (Fols. 330-335.)**

The Railroad Commission of Texas was a semi-judicial body created under the statute of the State of Texas. By these statutes it had certain

well defined functions to perform. In this case it had performed, or attempted to perform its functions by the making of certain written orders in respect to the use and operation of the plant in question. How, then, can any individual member of this body testify as to what was the basis of these orders? The Commission spoke officially as a body, not as individuals. Then, how can one member of the Commission testify "whether or not the Commission received as true" certain reports made by Thompson? The whole scope of the examination of the Commission was clearly incompetent.

**7. The Court having refused to permit plaintiff's witnesses to characterize conditions at Texarkana, it was clearly incompetent to permit defendant's witnesses to characterize similar conditions over plaintiff's objections.**

When plaintiff's witness Dodgson described certain railroad tracks as in "good condition," the court said, "You will have to testify to what you saw, not characterize it, but state the fact." (Fols. 150-151). Yet the court permitted the testimony of the defendant's witness Thompson that certain apparatus did not successfully perform its functions, to stand. (Fol. 312). The court permitted the witness Lang to testify over plaintiff's objection as being too general "that the crossings were generally in good shape." (Fols. 483-484).

The court also permitted defendant's witness Neff to testify that the condition of the tracks

was "good", although motion was made to strike out as too general. (Fols. 601, 602).

The court also permitted defendant's witness Atkinson to testify that the wire was "very bad." (Fol. 665).

After the court had specifically ruled that plaintiff's witness Dodgson should not characterize, but state the fact, we contend that it was improper and unfair to plaintiff to permit the defendant's witnesses on numerous occasions to give general characterizations, especially when the attention of the court was directly called to the point.

**8. It was error for the Court to permit the defendant to show conditions existing elsewhere in Texas, and then to preclude plaintiff from giving the same kind of testimony.**

The witness Neff was permitted to testify as to the weight of rails in other yards operated by his railroad in 1904, although plaintiff objected to the same until shown that the apparatus and machinery used were similar to those at Texarkana. (Fol. 606). And yet when plaintiff attempted to show by its witness Wuerpel that the trunking used at Ft. Worth, one of the defendant's plants, was similar to that used at Texarkana, the testimony on that point was struck out. (Fol. 1019). We submit that this was unfair treatment to the plaintiff. If the testimony as to the conditions in other yards was admitted on behalf of the defendant, it should have been admitted on behalf of the plaintiff. If Mr. Wuerpel's

testimony was incompetent on behalf of the plaintiff, then certainly Mr. Neff's testimony was clearly incompetent on behalf of the defendant and the testimony given was clearly prejudicial to plaintiff as the whole of it attempted to discredit the working of the plant at Texarkana.

**9. It was error for the Court to permit the defendant to testify to the defective condition of the various apparatus at any time after the same had been installed one year.**

This class of testimony was objected to on behalf of the plaintiff, and the reasons for such objections were clearly stated. (Fol. 700). The parties contemplated that some material would be defective, that some workmanship would be poor; and they provided therefor in the contract by incorporating therein Sec. 3, which provides that the plaintiff will replace promptly parts of any apparatus and material furnished under the contract, which shall within one year from its installation fail to perform its proper function because of any defect in the construction or erection of such apparatus or material. (Fol. 1091). If plaintiff failed to perform this part of its agreement, it certainly would have been proper for the defendant to have interposed a counterclaim therefor, and testimony as to defective apparatus and material which developed *within* a year after its installation would have been proper and competent. A large part of the testimony given by defendant's witnesses Cullums and Atkinson had to do with the condition of the apparatus at a period beyond the first year of its in-

stallation. Upon what issue was this competent? It was clearly incompetent and was prejudicial to plaintiff.

**POINT IV.**

THE JUDGMENT AND ORDER APPEALED FROM SHOULD BE REVERSED AND A NEW TRIAL GRANTED.

Respectfully submitted,

MEDCALF, AVERILL & TOMPKINS,  
*Appellant's Attorneys.*

W. H. Tompkins,  
*Of Counsel.*

# State of New York,

SUPREME COURT,

APPELLATE DIVISION, FOURTH DEPARTMENT.

PNEUMATIC SIGNAL COMPANY,  
Plaintiff-Appellant,

AGAINST

TEXAS AND PACIFIC RAILWAY COM-  
PANY,  
Defendant-Respondent.

## **BRIEF OF RESPONDENT, THE TEXAS AND PACIFIC RAILWAY COMPANY.**

### **Statement.**

#### **1. The litigation.**

This is an appeal by the Pneumatic Signal Company, plaintiff in an action entitled "Pneumatic Signal Company, plaintiff, against Texas and Pacific Railway Company, defendant," from a judgment dismissing the complaint in that action upon the merits, and adjudging that defendant recover from the plaintiff costs in the amount of \$301.17, entered in the Supreme Court, Monroe County, upon the verdict of a jury, in favor of the defendant and against the plaintiff; and

also from an order granted on the same day by the Trial Justice, denying plaintiff's motion for a new trial.

The action was begun by service of summons, October 10, 1907. The complaint alleged that the parties had entered into contract in September, 1903, whereby the plaintiff undertook to construct and install for the defendant at Texarkana, Texas, a system of electric interlocking railroad signals for \$16,650, which was not to be paid, however, unless the plant should be accepted by the Railroad Commission of Texas. The complaint did not allege such acceptance. It declared that the Railroad Commission, by order dated July 7, 1904, directed that certain specified additions and improvements should be made to the plant, and to the railroad at that point. It alleged that plaintiff complied with said order and made the required additions and improvements which pertained to the plant, but defendant failed to make those which pertained to the railroad; and that "by reason of said defendant's failure as aforesaid to comply with the provisions and requirements of said order, said plant and all of said work has not been finally approved by said Railroad Commission." The complaint denies that the failure of the Commission to accept the plant was due to any default on the part of the plaintiff, but was due to the default of the defendant.

The answer admitted the contract and the construction of an interlocking device, but denies that it operated successfully or that it was constructed in a first-class and workmanlike manner, or that it was satisfactory and acceptable to the Chief Engineer of the defendant, or to the Engineer of the Railroad Commission, or that it was ever accepted by the Railroad Commission, or that the failure of the Commission to approve and accept it was due to any default on the part of the Railroad Company. It alleged that the device had been operated only by temporary and conditional permission of the Commission; that such permission had been withdrawn, the plant condemned by the Railroad Commission, and the Railroad Company ordered to construct a new interlocking plant; and

that the construction of such new plant involved an expense to the Railroad Company exceeding the contract price of the plaintiff's apparatus.

On these pleadings the case went to trial in December, 1908, before Justice SAWYER and a jury. The plaintiff's witnesses testified that the device was constructed according to specifications and operated properly. They also testified that the plaintiff performed all of the requirements of the Commission's order alluded to above which pertained to the signal apparatus; that the Railway Company did not perform all the requirements pertaining to the road.

The defendant read in evidence an order of the Commission dated August 12, 1907, disapproving the device and ordering the Railway Company to remove it and install another; whereupon the Court directed a verdict in favor of the defendant. After the jury had been so charged and directed, plaintiff's counsel requested to be allowed to go to the jury on the question whether the use of the apparatus did not constitute an acceptance of the device by the Commission, and on the question whether such use was not a waiver by the defendant of the condition precedent to acceptance. The motion was denied.

Judgment was entered on the verdict, and the plaintiff appealed. The Appellate Division affirmed the judgment, Mr. Justice ROBSON dissenting (133 A. D., 781); but the Court of Appeals reversed it on the ground that the Court below erred in not permitting the plaintiff to go to the jury on the issue stated in the complaint—that the defendant, by its default in not performing fully all of the requirements stated in the order of the Commission, had prevented the Commission from accepting the device. The opinion stated that the plaintiff's request to go to the jury on the two other questions of fact to which allusion has just been made, rested on grounds which were not tenable (200 N. Y., 125).

Judgment of reversal having been entered, the plaintiff moved in the Supreme Court for leave to amend its complaint, which motion was granted, and the order thereon affirmed by the Appellate Division,

on condition that all costs up to that time should be paid by plaintiff. The plaintiff thereupon amended its complaint, by omitting the following allegation :

“That defendant’s refusal to accept formally said plant was unreasonable and unjust, and was not due to any default on the part of said plaintiff, or to any defect in said plant as erected and completed by plaintiff.”

For this allegation the amended complaint substituted the following :

“ That said defendant has retained, used, operated and *accepted* said interlocking system and plant.”

It will be observed that of the two issues on which plaintiff’s counsel, at the close of the first trial, asked to go to the jury—viz., first, that use constituted acceptance by the Commission, and, secondly, that use constituted waiver by the Railway Company of the condition precedent of acceptance by the Commission, and amounted to acceptance by the Company—only one, the latter, is tendered by the amended complaint. No intimation is found of an allegation that the Commission ever accepted the plant, so that it seems obvious that the plaintiff must be deemed to have abandoned that claim.

The only material change from the original answer to be found in the answer to the complaint thus amended was a denial of the additional allegation above quoted—of acceptance by the Railway Company through its use of the plant.

On the issues thus joined the action came on to be tried before Mr. Justice FOOTE and a jury in September, 1911, and after a trial lasting for about a week the jury was unable to agree and was discharged. On January 8, 1912, the third trial of the action was begun before Mr. Justice BENTON and a jury, and on January 15 the jury rendered a verdict for the defend-

ant, and the plaintiff's motion for a new trial was denied. It is from the judgment on this verdict that the present appeal has been taken.

## **2. Chronological Statement of the Facts Leading Up to the Litigation, As Dis- closed by the Evidence.**

In the year 1901 the legislature of the State of Texas passed an act providing that where railway tracks crossed at grade it should be the duty of the railway company to provide interlocking or other safety devices. The construction and operation of such devices was to be regulated by the Railroad Commission of the State of Texas (fols. 1059-1064). The next year (1902) the Railroad Commission made an order that several specified crossings should be protected by interlockers, including that of the lines of the Texas and Pacific Railway Company, the St. Louis Southwestern Railway Company of Texas, and the Texarkana and Fort Smith Railway Company (a Kansas City Southern subsidiary) at Texarkana. About the same time the Commission published certain regulations covering the installation, maintenance and operation of interlocking devices (fols. 1065-1071). They provided, among other things, that when a plan had been submitted and approved by the Commission, and the interlocker constructed, a petition should be made for an inspection; to be signed by the general manager or superintendent of each line of railroad party to the crossing; that thereupon, upon notice to each company, a time would be set for inspection by the Commission or its duly authorized employee; that when it was determined that the device had been constructed in accordance with the plan submitted, and was operated in a "thoroughly reliable and safe manner by competent employees," that a permit would be issued authorizing trains to run over the crossing without stopping; but if the device was not properly maintained and efficiently operated the permit would

be canceled. General managers of the railways were required to file monthly reports on blanks to be furnished by the Commission. A specimen of such report showing its form, etc., is printed as Exhibit 74 in the Appeal Book (fols. 1654 *seq.*).

Pursuant to these statutes and orders of the Railroad Commission, the railroad companies party to this crossing at Texarkana took up the matter of installing an interlocker. The Texas and Pacific Railway Co. had the matter in charge, being the senior line. The General Manager referred it to the Chief Engineer, Major Wathen (fol. 877), who had a map of the locality where the plant was to be built prepared by the Assistant Engineer, Otto H. Lang (fol. 880), on which was shown the various switches, derails, signals and other safety devices, according to the rules prescribed by the Railroad Commission (fols. 423, 424, 512). This was simply a "layout," showing under the rules of the Commission where the instruments should go (fol. 426). The approval of this layout by the Commission was obtained (fols. 424, 426) and it was then sent to various signal companies, with a request that they submit bids on installing the plant (fols. 424, 878). The plaintiff, the Pneumatic Signal Company, was one of the companies which responded. Their General Sales Agent, Mr. Ellis, visited Dallas and solicited the contract. He also went over the ground at Texarkana in person at the suggestion of Major Wathen, in order that he might have full information (fols. 427, 880). This was in the late spring or the summer of 1903 (fol. 427). Subsequently, before the execution of this contract, he was furnished with sections of the rails (fol. 1390 *seq.*).

After it had submitted its proposal, the Signal Company prepared specifications. The Railway Company had nothing to do with the specifications. The engineers in Texas at that time were not familiar with the details of interlocking devices. Interlocking was a new thing in Texas, and the railroads depended entirely on the information they could get from the agents of the interlocking companies (fol. 425). As.

Dodgson, the inventor of this device, testified (fols. 165, 166) :

“ Q. Who got up these specifications ?

“ A. This case was one where the railroad company had no signal men, and consequently had no specifications of their own, consequently we did that in this case as we did in hundreds of others, prepared a set of specifications for the Railroad Company. We very often had to act as consulting engineers for the railroad companies in those days.”

The contract (fol. 1089, *seq.*) was executed September 16, 1903. The provisions material to this litigation may be summarized thus :

The Signal Company consented to “ perform all the labor and furnish all the material ” “ necessary to install ” its interlocking system on defendant’s railroad at Texarkana “ for the control and operation of numbered derails, switches and signals, as shown on the attached blueprint.” It further agreed “ to construct the said interlocking system in a first-class and workmanlike manner in all its parts, and to provide all necessary fixtures and appliances \* \* \* to enable said system properly to perform its functions \* \* \* and that the materials and apparatus to be furnished and labor to be performed \* \* \* shall be in conformity with the attached specifications and satisfactory and acceptable to the Chief Engineer ” of the Railroad Company and “ to the Engineer of the Railroad Commission of Texas ” ; to complete the installation before January 1, 1904 ; to “ replace promptly and at its own expense any part of the apparatus and material furnished \* \* \* which shall within one year from the date of its installation fail to perform its proper function because of any defect or defects in the construction or erection of such apparatus or material ; ” that the plant should “ conform in every particular to the plans and specifications ” attached, and to the plans filed with the Commission ; and in case of delay in completion beyond January 1, 1904, to pay any

finer or penalties that might be assessed against the Railroad Company " on account of the failure to have the plant completed and accepted by the Railroad Commission of Texas."

The Railway Company agreed to " furnish and put in place all necessary derails, switches, and long derails and switch tires required for the switch operating mechanism "; and to " blast and remove all rocks " that might " interfere with the setting of any part of the apparatus " of the Signal Company.

With regard to payment it was provided that the Railroad Company should pay \$16,650 for all that the Signal Company " shall have furnished or done under this contract, and the payment shall be made as follows : said party of the first part (Signal Company) shall operate said plant for sixty days at its own expense, and if the same shall work perfectly and satisfactorily in every particular during that period of time, and after being accepted by the Railroad Commission of Texas, then said \$16,650 shall be paid in full to the party of the first part. In the event, however, that the said plant shall not work satisfactorily, or be accepted by the Railroad Commission of Texas, then and in that event, the party of the first part shall not be entitled to any part of said sum, but the same shall be forfeited in full, and the work done and material furnished by the party of the first part shall also be forfeited to the party of the second part as liquidated damages for its failure to carry out the terms of the contract."

Certain provisions of the specifications (fol. 1105 *seq.*) should also be noted :

" The interlocking plant shall comprise the tower, controlling machine, charging plant, batteries, signals, signal machines, switch machines and all other apparatus and material required for the proper control and movement of numbered signals, derails, switches, movable joint frogs and crossing bars shown on attached plan numbered 1032-2 " (fol. 1107 *seq.*).

“ High signal machines to consist of  $\frac{1}{2}$  H. P. motor \* \* \* ” (fol. 1118).

“ All wires to be of sufficient size to carry, without overheating, the current necessary for the work to be done ” (fol. 1121).

“ Minimum size of underground trunking to be not less than 3" x 3" with groove not larger than 1" x 1" ” (fol. 1123).

“ Junction boxes to be placed as shown on plans ” (fol. 1124).

“ No wire joints to be made in trunking ” (fol. 1128).

A word should be added in explanation of the arrangement of tracks at the ground, and the mode of operation interlocking devices in general, and this one in particular.

With respect to the arrangement of tracks, we find that here, as has already been stated, the tracks of three railroad systems crossed at grade. As will be seen by the maps to be submitted at the argument, the Kansas City Southern system (here the Texarkana and Fort Smith Railway—its local subsidiary) had a line partly of single and partly of double track, running north and south. The St. Louis Southwestern (“ Cotton Belt ”) had a line running east and west, which, at the point where it crossed the Kansas City Southern’s line, was composed of three tracks. The Texas and Pacific crossed the Kansas City Southern, north of the Cotton Belt crossing, with its Transcontinental Division—a single track ; and, with a single track line known as the Sulphur Cut-Off, running diagonally from northeast to southwest, the Texas and Pacific also crossed the two tracks of the Cotton Belt, east of the Kansas City Southern crossing and near it. Each of these lines had sidings and switches, and the Cotton Belt’s line divided, just east of the Texas and Pacific crossing, one branch running into its freight yard, the other running northeast to its passenger station.

As appears from the statute and orders of the Com-

mission previously referred to, the primary object of installing the plant was to protect these three crossings at grade ; but the work here went further and took in all the switches, crossovers (which is a switch for passing from one track to another parallel track), and sidings in the vicinity.

There are many systems of interlocking, mechanical, pneumatic and electric, but they all have, in common, certain features. They all have devices for moving switches at a long distance from one central station, called the tower. In all there are signals also to be operated at long distances from the tower ; and in all systems there is in the tower a machine known as an interlocking machine connected in some way with the means for operating the various distant mechanisms, and so connected as to prevent anything being done (a signal being given, for example, or a switch thrown) which would be in conflict with something that had been previously done, or endanger a train in any given position within the region of track covered by these interconnected devices. (The testimony from which this and the paragraphs of description following are made up will be found at folios 136, *seq.*, 990, *seq.*, and Cullums, *passim.*)

The way in which a crossing is protected by one of these plants—of whatever type—will prove illustrative. On each line, on either side of the crossing, “ home ” and “ distance ” signals are placed. Their distance from the crossing is, in Texas, fixed by the regulations of the Commission. The distance signals are to give warning to the engineman, the home signal, when set at danger, expresses an absolute prohibition to his proceeding further. The “ normal ” or usual position of all the signals is generally at “ danger,” to which position they were, in this particular system, returned by gravity. Further protection against an engineman’s disregarding and running past a home signal set at danger is the derail. This is a single switch point set in one rail at or near the home signal, and pointing in the direction of the on-coming train. Its function is to stand open if the signal was adverse

to the train, and if the engineman proceeds past the signal, the train is derailed. The wheels of the train, in case of such derailment, are kept on the ties and parallel with the rails, by a guard-rail.

When a towerman wished to "line up a route" to allow a train to go over the crossing, he first opened the derails on the opposing route and set the signals at danger—if they were not already in that position. Not until he had done that would the interlocking machine in the tower permit him to set at safety the signals on the route he wished to open, and to close the derails on that route, so that it would be in fact safe.

In an all-electrical interlocking plant, which was the type installed here, all movements are made electrically. Each signal, for instance, was here pulled to the safety position by a "signal machine," placed in the base of the signal-post, and consisting of motor, gear-wheels, electric circuit controlling device, etc. The current for operating the motor comes, in these plants, from a suitable source (here a storage battery) through the interlocking machine in the tower; and the interlocking is designed with the idea of making it impossible for the current to flow through it and to the signal machine to pull the signal to the safety position, unless the "opposing route" had been closed by the signal standing at danger, and the derails being open.

Each "function," (that is, the giving of a signal or moving a switch or derail—whatever a piece of apparatus was designed to do) was set in motion by moving a lever on the interlocking machine in the tower. When, for instance, the tower man wished to close a switch, he placed the lever in a certain position known as the "reverse operating position." It could not be moved further until the switch machine had done its work and the switch machine had closed and locked. After that the interlocking machine was so designed that the lever would be released and could be moved or would move of itself for the remainder of the stroke. This final movement was called an "indication" because it told the towerman that the movement

had been fully completed and was found on all the levers governing switches, derails and signals. Not until the machine gave this indication would the levers be released for the next movement in the series. For example, after a train has passed south over the Kansas City Southern, with the derails on that route closed and the signals set at safety, it would not be possible for him to open the Cotton Belt line to permit a train to cross the Kansas City Southern, until not only had he set the signals on the latter line at danger, and had opened the derails, but had also received on the machine in the tower an "indication" allowing the lever just moved to go the full stroke. Obviously if anything happened either to the switch machine out on the line (or to a signal machine, if that were the "function" in question), or to the wire bringing the indication current to the tower, which thing so happening prevented the return of that current, irrespective of whether the derail or signal had completed its movement properly, the towerman would be unable to "line up" the Cotton Belt route and let the train through. It would, however, be possible to get a current from some source other than the indication wire, and so apply it to the machine that the machine would act as though a current had come over the indication wire, and thus permit the complete stroke to be made, and the other levers to be moved. This was known as "forcing an indication," of which much is said in the testimony.

An additional protective device at the switches and derails was the "detector bar," so called. This was a strip of steel fifty feet long placed at a switch or derail along the inside of the rail, its top being about  $\frac{7}{16}$ " below that of the rail. It was so connected with the switch machine that it had to rise until its top was about an inch above the top of the rail before the machine would operate to move the switch or derail. If a car stood on or near the switch the detector bar in attempting to rise would encounter the flange of the car wheels, and the movement could thus not

be made. The object was to prevent a switch being moved with a car on it (fols. 140-142).

A somewhat similar device known as a "fouling bar" or "crossing bar" was provided by the specifications as an additional protection for the crossings (fol. 1117). Subsequently to the execution of the contract, at the instance of the Signal Company, the plan to use crossing bars was changed, and the consent of the Railway Company and the Commission's Engineer was obtained to the use instead of track circuits. The track circuit was a device which necessitated the electrical insulation of a certain piece of track on each side of the crossing. When no car stood on this piece of track a current flow through it and to the machine in the tower, where it operated a lock that would enable the towerman to operate a certain lever which he had to operate before he could move the signals and derails to let a train over the crossing. If a car was standing on the crossing the current would flow through it and would not operate the lock on the interlocking machine. The towerman would thus be "locked up," and could not admit a train to come down and collide with the car on the crossing (fols. 142-147). The failure of these track circuits to operate properly is given considerable attention in the testimony.

This plant also included an electric generator, gasoline engine for operating it, and storage battery.

The contract, as has been noted, provided for completion of the plant by January 1, 1904, but there was much delay during the autumn of 1903, so that Major Wathen, Chief Engineer of the Railway Company, and Mr. Lang, the Assistant Engineer, became somewhat impatient, and demanded to know how long the delay would be, in order that they might obtain from the Commission an extension of time, and thus avoid the fine of \$500 per day. Certain slight changes were also made in the general plan, for which permission of the Commission was obtained (Letters in this period in their chronological order will be found at pages 348,

323, 307, 308, 309, 324, 322, 310, 311, 312). See also, fol. 119 (changes).

During the autumn of 1903, while construction was going on, Mr. Lang went pretty frequently to Texarkana, to familiarize himself "with the scheme in general" and to "observe what they were doing." He noticed that they had put in track circuits instead of detector bars, and wrote to Mr. Ellis of the Signal Company about it, telling them that the Railroad Commission did not admit track circuits, and that if they put in track circuits they would have to put them in on their own responsibility. He said, however, that, being on friendly terms, he would use his influence with Mr. Thompson, the Commission's Engineer, to see what could be done (fols. 429-434). Major Wathen, learning of the unauthorized use of the track circuits, wired the Signal Company to discard them and use detector bars; but after Mr. Thompson had given the Signal Company the option to use them if they choose, he did not press his protest (fols. 940-943; 324, Ex. 25, p. 322, Ex. 23). There is no evidence that he authorized them, however. Indeed, during this period, as at all others, the officers of the Railway Company, with one exception, consistently placed all responsibility of design and construction on the Signal Company, who, as Mr. Dodgson had testified, were acting as consulting engineers of the Railway Company (fols. 940, 943; Ex. 11, p. 307).

That exception was in the matter of the trunking. Mr. Ellis had difficulty in finding proper timber, so Major Wathen, whom he had consulted, said he might use, temporarily, well creosoted pine at least two inches thick. When he saw what was used, he told Mr. Ellis that it would all have to come out; but agreed to let it stay in until after the inspection, which, if the trunking were removed then, would be delayed several months.

The middle of February, 1904, saw the interlocking plant approaching the point where, in the opinion of the officers of the Signal Company, it would be ready to be put in service for the control of trains. Mr.

Dodgson, the inventor, went to Texarkana to test out the work of the men engaged in construction, and put the plant in service (fol. 112). Of the three devices of this system to be installed this was the first to go into service. None of the three is now in use (fol. 157).

Mr. Dodgson found that some parts had to be re-wired, and he had to tear the top off the wooden trunking to do it. He was the first man to do this (fols. 448, 703, 704). The wiring from the storage generator to storage battery was wired improperly, so that although the engine and generator were running there was no effect on the battery. Mr. Dodgson sent for a local electrician to find what was wrong, and to remedy the difficulty (fols. 701, 703-707). The tearing of the covering off the trunking was necessitated by the fact that the junction boxes mentioned in the specifications were not provided (fols. 708, 448).

Before this time, when a train approached a crossing, it stopped and somebody got off the train and opened the gates to let the train through. By the end of February the plant was said to be ready for service, and, permission from the Railroad Commission having been obtained for a tentative operation, Mr. Lang gave instructions that the engine man, instead of stopping at the crossing, should stop at the home signal, which was from 350 to 500 feet away, and there whistle for the signal, and when he got it, should proceed. This was for the purpose of getting the men used to the operation and ways of the system. The Railway Company put in the towermen and the Signal Company had men there, instructing the towermen how to operate, and attending to the plant (fols. 453-455, 887). Of these men, one J. M. Walshe was there from May 23, 1904, until August 11th, 1905 (fols. 176-178).

About June, 1904, the Signal Company requested the Railway Company to ask the Commission for an inspection of the plant which the Railway Company duly did (fols. 888, 452, 456). June 27 was appointed, and Mr. Thompson, the engineer of the Commission, on that day began his inspection, which lasted two days.

Mr. Ellis was present, representing the Signal Company, and at Mr. Lang's invitation there were present Mr. Wuerpel, then connected with the Taylor Signal Company, and the signal engineers of several other roads, members of a recently formed local signal engineers' association.

Mr. Thompson did not, on the whole, regard the plant favorably. He noted that the dwarf signals were not locked, and could be put at safety by hand by anyone who happened to pass through the yard (fol. 459); that there was arcing whenever a lever was pulled in the tower (fol. 461), and there was also arcing in the contact points of all signals (fol. 467). He also called attention to the possibility of forcing indications on the machine in the tower, which he regarded as a crude affair, with no means of locking to prevent forcing of indications (fols. 462, *seq.*, 561). The fact that gear teeth were frequently stripped, and that the signal motors were weak, also engaged his attention.

His report to the Commission, dated July 5, 1904, following this inspection (page 228, fols. 1149 *seq.*) laid stress on the fact that the system was new and practically untried.

He recommended that all switches and derails, and all facing point derails between the home and distant signals should be provided with switch boxes; that distant signals have the wires operating them loop through their home signals. He also recommended that indicators be provided to give the towerman warning of the approach of trains on certain lines; and a telephone installed in the tower; that guard rails be provided, and that the foundations of the crossing be "placed upon suitable foundations of permanent character," and that the Railway Company file with the Commission copies of the daily reports of the towerman, upon which should be "noted in detail any failures of the working machinery and parts, and causes of such failures." He suggested that the order should clearly state that only temporary operation was approved.

The order of the Commission entered on this re-

port, and dated July 7, 1904 (page 284, fol. 1133), after reciting that it appeared that "operation of the device should only be authorized temporarily and conditionally, and that further construction and additions to the present apparatus and machinery should be required to be made" and daily reports filed, directed that the changes above mentioned be made; and that "upon the completion of said construction, additions and improvements noted above and upon the safe and successful operation, to the satisfaction of this commission of the said device, as may be shown by said daily reports filed, then this commission will, after further inspection on or before October , 1904, issue its order approving finally and authorizing permanently the operation of said device; otherwise said companies, parties to said crossing, will be required to construct another device of character and design to be approved by this commission, which shall be first class in every respect."

It was further ordered that until a further order, trains should pass through the limits of said device under full control and at a speed not greater than 10 miles per hour.

On July 14, 1904, Major Wathen wrote to Mr. Ellis enclosing a copy of the report of the Engineer of the Commission, and warning him that all matters requiring correction must be done promptly, or the plant would be condemned (page 325, Ex. 26).

About this time a new company, the General Railway Signal Company, was organized; and on July 1, 1904, took over the American assets and the obligations and duties, both of the Pneumatic Signal Company and the Taylor Signal Company, a rival concern, by which Mr. Wuerpel had previously been employed as resident manager in St. Louis (fols. 251-258, *passim*; 354-356, 359, 372). It was as a representative of the newly formed General Company that he attended the inspection (fol. 359).

During the summer and early fall of 1904 Mr. Wuerpel had several conversations with Mr. Long and Major Wathen, whom he saw frequently on account of

the Ft. Worth interlocker for which he had a contract. In all of these conversations he in effect said that Taylor devices should be substituted for this system (fols. 914-916 ; Ex. 37, fols. 1403, 472, 527, 534).

On September 20, 1904, the General Railway Signal Company sent to the Texas and Pacific a statement of account for the plant at Texarkana. In reply Major Wathen, on September 29, wrote, pointing out that nothing was due because the plant had not been accepted by the Engineer of the Railway Company, or by the Engineer of the Commission. He suggested that if the plant was rejected by the Commission it would devolve on the Signal Company to make it good or remove it without cost to the Railway Company (page 350, Ex. 37).

On October 22, 1904, Mr. Wuerpel wrote to Major Wathen, saying that he had made a report of the condition of the plant to the officials of the General Company, and had made a recommendation as to what should be done, but that they had decided that inasmuch as the work to be done by the Signal Company, ordered to be done by the Commission, had been completed, another inspection should be made by Mr. Thompson. The result of this inspection would determine the best course to pursue. He concluded by asking the Major to arrange the meeting with Mr. Thompson (Ex. 27, page 326, fol. 1301).

November 12 was the date fixed for the second inspection (fol. 273). There were present Messrs. Thompson, Wuerpel and Lang. As they went over the plant, Mr. Thompson again called attention to the unchanged dwarf signals, the arcing of all contact points, and to the interlocking machine; nothing had been done to that. The trunking was in bad condition, exposed and warped, and the joints wide open in many places, and in places the insulation was off. The Signal Company had obeyed the order of the Commission to put in switch boxes and to loop the wires operating distant signals through the home signals; and in putting in the required switch boxes had, in fact, used those of the Taylor system (fol. ).

The result of this inspection was so unsatisfactory that Mr. Thompson said to Mr. Lang (fol. 522) that he was willing, if the representatives of the Railway Company so desired, to condemn it then and there. He added that he would be glad to see the Taylor plant go in ; that he did not regard this as a success ; whereas he knew the Taylor plant and what it was doing.

Notwithstanding the unsatisfactory result of the inspection, Mr. Lang's attitude was one of friendliness and leniency (fol. 175), and more than once he requested Mr. Thompson not to condemn the plant. He wanted the Signal people to "make good"—"out of humanitarian feeling for them," as he put it (fol. 590).

Mr. Wuerpel's attitude was fair and conciliatory. Mr. Lang testified that "right after the inspection Mr. Wuerpel said that he was going to go home and tell his folks to take this plant out and put a Taylor plant in, that that was the only way to fix it up, and he would recommend that to his company" (fols. 488, 489). Installation of Taylor devices was "what he continuously spoke about when he spoke about putting the plant in shape" (fol. 534).

With respect to what Mr. Wuerpel proposed to do Mr. Thompson testified (fols. 388 *et seq.*):

"At a conference regarding my report to the Railroad Commission of Texas, I having stated that I would recommend that said device be disapproved, Mr. Wuerpel stated that he would recommend to his company that the present device be taken out and a new device be installed in accordance with the Taylor system of electric interlocking, which, having been used in connection with other interlocking devices in Texas, had been approved by the Commission. I stated that such an arrangement would be entirely satisfactory to the Railroad Commission of Texas, and Mr. Lang agreed to recommend that his company approve the same and pay the amount of remuneration which the General Railway Signal Company would receive upon the bid which had

originally been made by the Taylor Signal Company for the original construction of this device, the General Railway Signal Company being also the successor of the Taylor Signal Company. This plan appeared to be very satisfactory to all the parties concerned, and was agreed to by all parties present, Mr. Wuerpel, of course stating that his recommendations would be subject to the approval of the General Railway Signal Company."

Two days after this inspection Mr. Thompson wrote to Major Wathen (Exhibit 10, page 304, fols. 1213-1225) that the plant was "not first-class nor up to modern standards of interlocking." He referred to "defective workmanship and materials and crude application of principles"; adding, "the apparatus now installed is but one of the many stages of experiment that must be gone through with." In addition he particularized the clearing of dwarf signals by hand, the "failure and worthlessness of the track circuits," the "failure of selectors and other machinery of high signals to work properly," the "failure of functions on account of wearing out of the underground cables," the "burning out of contacts and arcing of current in indicator boxes," and the "rapid deterioration of machinery and materials without the tower." He testified that the statements contained in this letter were true (fol. 416).

"Should I," his letter said, "at this time be required to make a formal report to the Commission upon the condition of same, I would recommend that it be not approved and the above quoted clause in the order of July 7th, be enforced."

In lieu of a condemnation, however, his letter suggested that the Railway Company make "some compromise agreement looking to the installation of a system that has been approved and is beyond the experimental stage."

In a conversation with Mr. Everman, Assistant General Manager of the Texas and Pacific Railway Com-

pany (fols. 416-418), he stated that in his opinion "the plant was faulty in general conception and design, as well as in materials and workmanship, and could never be made to operate successfully and fulfill the requirements of a first-class interlocking device"; that he "felt inclined to order its removal at once", but that, "on account of the fact that the parties erecting the same had spent a great deal of money, that it would be fair to them to permit its operation for a time, to give them an opportunity to experiment further with same with the view of remedying its defects as to design and materials, if they could possibly do so, and if it was found that it was not possible for them to perfect the plant, to give them an opportunity of installing another plant and system that would be safe and meet with the requirements of the Railroad Commission."

It should be noted that on the stand, when called as a witness for the plaintiff, Mr. Wuerpel denied having said he would recommend the substitution of Taylor appliances; but with the testimony of three witnesses, Major Wathen, Messrs. Thompson and Lang—two entirely disinterested (for Mr. Lang has not for eight years been connected with the road)—directly to the contrary, it seem fair to assume that Mr. Wuerpel was the victim of that strange propensity of the human mind to forget, when it is adverse to one's interest to remember.

On December 15, 1904, Mr. J. S. Cade, Manager of Sales and Installation of the Signal Company, wrote a letter to Major Wathen from some point in Texas (p. 327, Ex. 28), in which he said that, understanding from Mr. Wuerpel that the plant had not been giving satisfactory results, Mr. Wuerpel, Mr. Dodgson and he had come to Texas to learn what could be done to "put this plant in proper shape to give entire satisfaction to yourselves and the R. R. Commission." They had examined the plant at Texarkana. He admitted that there had been failures due to defective construction and installation which had been "exceedingly annoying" and should have been avoided. He assured the Major that those

which had been due to defective construction would be remedied, and for those which had been due to improper maintenance "we are at least equally responsible with yourselves." He complained that track conditions on the St. Louis Southwestern (Cotton Belt) were poor, the effect of which was, he alleged, that satisfactory results could not be obtained, and suggested that they be remedied. He concluded by asking for an immediate conference of representatives of all the roads interested, at Texarkana, suggesting that there were certain changes in the tracks and signals on the Cotton Belt which would "assist in handling traffic at this point."

In this letter two points that play some part in the case first definitely appear: the proposed changes in the Cotton Belt yard, and the attempt of the Signal Company to excuse the poor working of the plant by the condition of the Cotton Belt track. The latter will be again alluded to. The changes in the Cotton Belt yard should be explained at this point.

The regulations of the Railroad Commission, under which the original general plan or layout was made, prescribed an inflexible rule for the distance at which crossing signals should be located from the crossing. As appears from the map, a short distance east of the crossing of the north-and-south line of the Texas and Pacific ("Sulphur Cut Off") by the Cotton Belt, lies the yard of the latter company. The distance regulations carried the limits of the interlocker into this yard, and required signals and derails protecting the crossing to be placed on a large number of tracks in the yard. Between the yard and the crossing was a cross-over from the north to the south track of the Cotton Belt. Obviously these "functions" on the numerous tracks in the yard considerably complicated the interlocker. It also would tend to interfere with traffic, because when a switching engine ran into the limits of the interlocker the crossings were closed to trains on the Sulphur Cut Off and on the Kansas City Southern; though this interference was regarded by the railroad men as of slight importance, on ac-

count of the infrequency of trains on the latter lines (fol. 518).

The matter seems to have been discussed considerably before, and both sides were in favor of a change that would cut the yard out of the interlocking limits. Mr. Wuerpel (fol. 369) said that it was "very much advocated by the Signal Company so as to simplify the layout," and to "eliminate the derail and signal apparatus from the Cotton Belt as far as possible." Mr. Lang said (fol. 492): "We were willing to help the plant out and were even willing to go to the expense of making these changes in order to get the best results out of the plant." He said, "We thought a simple interlocker of that kind would work better, perhaps, than a complicated one" (fol. 451). Mr. Wuerpel had suggested it to Mr. Thompson at the November inspection, saying (fol. 491): "Well, Mr. Thompson, as long as you have granted that concession at the Fort Worth yard, if you grant it at the Texarkana yard we might get rid of some complications in this plant relative to the traffic." Mr. Neff of the Cotton Belt was desirous of the changes because the difficulties in the operation and failures of the plant had interfered with traffic, and he expected that if that operation were narrowed it would result in less delay to trains, which had been serious (fols. 616-619).

The meeting requested was held at Texarkana on December 17, 1904. There were present Messrs. Cade, Wuerpel and Dodgson of the General Railway Signal Company, Mr. Lang of the Texas and Pacific, Mr. Rose of the engineering department of the Texarkana & Ft. Smith, and Mr. W. N. Neff, Vice-President and General Superintendent of the St. Louis Southwestern (fol. 920). They went over the ground and everybody agreed that the changes should be made. The Signal Company men wanted it done (fols. 622-624).

The St. Louis Southwestern tracks at the crossings were parallel and three in number—the main track; south of that the "hostler" track; and south of that the "stock" track. The main track and the line to the

station were of 75 pound heavy rail ; the hostler and stock tracks were of 56 pound rail, which was the predominating weight of rail in Texas at that time (fols. 602-604). As to the conditions of the track and crossings, Mr. Neff and Mr. Lang said that it was good (fols. 483, 484, 628, 629), while the Signal Company witnesses said they were poor.

The Signal Company people at this conference at Texarkana asked Mr. Neff to substitute 75 for 56 pound rail on the hostler track. He told them that he thought it entirely unnecessary ; that 56 pound rail was used successfully at other places where there were interlocking plants, but that he was only too glad to do anything that he could to help the plant along, and would do anything within reason, and would substitute the 75 pound rail as soon as the Company could get the rail, which they then had ordered, and for which they were pushing the mill. The cross over was moved shortly afterward and all the track work was completed by the following May. No request whatever was made by the Signal Company's representatives for a change of ballast on the Cotton Belt (fols. 625-628).

Mr. Wuerpel at this visit to the plant made a memorandum of cleaning, oiling, and minor repairs which should be made to the various " functions ", which he gave to Walshe (fol. 1036), the Signal Company's man looking after the plant. Walshe had been in Texarkana on this job since May 23, 1904, and stayed until the following April (fols. 176, 178). Neither Mr. Wuerpel nor Mr. Cade ever told Mr. Lang what the memorandum contained (fol. 537).

The Signal Company's representatives, with Mr. Lang, went from Texarkana to Dallas, to confer with Major Wathen. Mr. Cade told the Major that there was " no reason why anybody should get uneasy about this plant ; that they were going to fix it up, no matter what it cost," and would do so at once (fol. 497).

In the afternoon Mr. Cade had a private talk with Major Wathen (fols. 499, 954). The latter showed to Mr. Cade the letter of Mr. Thompson, of November 14 (fol. 888), and told him that Mr. Thompson had ap-

pealed to him, the Major, to give the Signal Company another opportunity to make the plant good, and that if Mr. Cade would give his word, or agree to let a supplemental contract be signed, that he would carry out everything that was necessary to put the plant in condition acceptable to Mr. Thompson, he, the Major, would grant a reasonable time to do it in. The Major further agreed that if the Signal Company would make the plant acceptable, he would pay for the work and material necessary to adapt the plant to the proposed changes in the Cotton Belt yard, as an extra to the original contract (fols. 892-895).

The Major and Mr. Cade agreed, as one of the conditions, that the plant should be entirely rewired by the Signal Company. Mr. Cade expressed himself as entirely satisfied with this understanding. Major Wathen invited him to stay over until the next day, but he said he had to be in New York with his family on Christmas Day and hurried away (fols. 890, 891, 895, 953, 954).

In conversation with Mr. Cade, who wished the Railway Company to do various things, Mr. Lang had told him that he was going to use his best efforts to help the Signal people out; and suggested that he write a letter touching on the points he had brought up, and Lang would bring it to the attention of the officials of the road, saying: "If you do your part and show that you are willing to make this plant work properly, I am sure the railroad company are going to help you out with whatever is right." Mr. Lang added in his testimony, "Mr. Cade then wrote me that letter, but nothing was done about the plant" (fols. 500, 501).

Mr. Cade wrote the letter suggested, on his return East, December 24, 1904 (page 313, Ex. 17). In it he admitted that the plant was not working in a satisfactory manner, and averred that it was the intention of the company to "put the plant in good, first-class shape, so that it will give you as good service as any interlocking plant could give at that particular point." He complained of the tracks and switches on the Cotton Belt, and referred to his understanding that

these would be put in good shape and heavy rail be put down. He demanded the abolishing of "compromise joints" (joints between one size of track and another), and said that unless that were done he could not agree that the track circuits would give satisfaction. He urged the rearrangement of the tracks, stated that they had sent down a new generator (the old had given constant trouble), and advocated purchasing the electric power for operation from the outside. He concluded by complaining because the wires were underground, and that the large number of cinders would make their life short. He admitted that the state laws of Texas required them to be underground, but argued that failures on account of wiring should not be charged against the plant.

On February 14, 1905 (page 317, Ex. 19), Mr. Wuerpel wrote to Mr. Lang that the Signal Company had about completed the work it had agreed to do when he, Mr. Cade and Mr. Dodgson were in Texarkana; and that nothing more would be done "until some steps are taken by the railroad companies to put their work in good shape." It will be recalled that Mr. Cade in his letter of December 24, 1904, had asked that the Cotton Belt only should install heavier rail, which Mr. Neff had promised to do as soon as he could get the rail from the mill, and that, within Mr. Lang's knowledge (he left in August, 1905), the crossings had all been placed on suitable foundations. There is in the case no evidence that the Signal Company had done anything whatever with the plant in this time, and Mr. Lang testified that they did not (fol. 503).

Mr. Wuerpel also inquired what the intention was as to the proposed alteration to the Cotton belt yard tracks.

In a letter dated March 11, 1905 (page 318, Ex. 20), Mr. Wuerpel wrote again, stating that he had heard that the Kansas City Southern was about to relay their line with 75-pound rail, and to change all rails and switch points within the limits of the interlocking, and that the Cotton Belt engineers were surveying for the proposed alterations. He asked for copies of the

plans of the alterations so that they could be prepared to get the material out promptly.

March 15, 1905, Mr. Lang replied (page 316, Ex. 18) explaining that the Cotton Belt had not been able to get track material ; and on April 4, 1905 (page 320, Ex. 21), he wrote enclosing the plan, stating that he understood that the changes were not quite made, and asking what the Signal Company proposed to do with regard to costs.

On April 21, 1905 (page 406, Ex. 69), Mr. Wuerpel wrote back that the material would cost \$360 ; that the charge for labor would be cost to the Signal Company, plus 15%. He added :

“ We will not undertake to do any work on those proposed changes until some definite understanding has been reached in regard to settlement of the original contract.”

April 24, 1905, Major Wathen responded (page 329, Ex. 29), suggesting that the plant had been twice condemned by the Engineers of the Commission, who had withheld from further inspection and report so that the Signal Company might correct the defects of the old plant. He added that, therefore, he had no promises to make ; that the material for the proposed alterations was something entirely new ; but that after its installment and a proper period for trial, the plant must stand or fall on the report of the Commission's Engineer. He further suggested that if this was not satisfactory they could consider the plant as theirs, and he would ask for bids on a new plant.

He added that he would not pay more than the usual 10% for installing work.

By May of this year (1905) the Cotton Belt had received the heavy rail from the mill and had completed the relaying of the track on gravel ballast. It had previously moved the crossover, so that its part of the agreement with Mr. Cade was more than completed.

It will be subsequently shown that of the five

requirements in the order of July 7, 1904, which devolved upon the Railway Company to perform, all had by this time been substantially carried out, either literally or by the use of satisfactory substitutes. There is no evidence that Mr. Thompson or the Commission ever objected by reason of these substitutions.

To the last letter the Signal Company made no reply until July 5th, and then its president, W. W. Salmon, wrote at great length (page 330, Ex. 30). He referred to the purchase, the previous July, by the General Railway Signal Company, of the assets of the Pneumatic Signal Company, including accounts receivable, which the latter company guaranteed. Some weeks after this purchase he ascertained that the Texas and Pacific claimed that the interlocking plant at Texarkana had not been properly installed, and he had sent Mr. Wuerpel to visit the plant. Mr. Wuerpel's "report indicated that in certain respects improvements could be made," and recommended that authority be given him to make them. Mr. Salmon had applied to the Pneumatic Company for authority, which was given on condition that Mr. J. T. Cade and Mr. Dodgson would support Wuerpel's recommendations. "I accordingly," the letter continues, "upon receiving from them a joint report to the effect that they deemed certain repairs" [note, no longer "improvements"] "necessary, and that the Railroad Company had agreed to put its tracks in proper condition, had the necessary repairs made."

He continued, that he was surprised to receive Major Wathen's letter, and had referred it to the Pneumatic Company, who had written a letter to him, which he quoted, making many charges against the Railway Company, viz : that the Cotton Belt had refrained from putting their tracks in good condition, believing that if the plant were thrown out the Railroad Commission would rescind its order compelling an interlocking plant here. [The undisputed evidence is that the work had been done the previous May.] They further charged that the original plan of signalling had been not well adapted for handling trains,

and that they hoped to have this plant thrown out and another installed under a better plan [obviously referring to the changes in the Cotton Belt yard which had long been talked about during the previous summer and fall, and had been agreed upon by both parties, and by this time had been made]. They further charged that the four items in the Commission's order which devolved upon the Railway Company to perform had not been done, for which reason the Commission had not accepted the plant. [The evidence, as has been seen, is that these had been substantially complied with by this time, and that Mr. Thompson had stood ready to condemn the plant because of its inherent defects, which he understood would be remedied by the Signal Company.]

In the conclusion of his letter, in assuring the Railway Company that they need have no fear that the Pneumatic type of interlocker would not continue to be manufactured and repair parts be always available, he stated that his company had within two weeks installed a machine of the Pneumatic type with 120 levers, and were then building another of 24 levers—a statement strangely at variance with the testimony of Mr. Dodgson, who said that only two others had ever been installed; that the Texarkana plant was not the first to be installed, though it was the first to go into service (fol. 157).

Major Wathen immediately (July 8, 1905) answered this letter with considerable fullness (page 390, Ex. 64). He pointed out that the disapproval of the Commission's engineers had been not because of track conditions but because of failures of the plant (fol. 1561). He averred that the track conditions on the Texas and Pacific and Kansas City Southern were as good as any in the southwest; and the St. Louis Southwestern, on complaint that this track was not as good as the others, had agreed to place heavier rail through their section of the yard covered by the interlocker; that whatever any of the St. Louis Southwestern officers had thought about the plant was immaterial, for everything relating thereto was controlled absolutely by the

Texas and Pacific, under an arrangement to which the St. Louis Southwestern was committed (fol. 1572); and that they had in fact raised no objection but went to work at the changes in their yard (fol. 1574). He rebutted the assertion that there had been any imperfect design of the layout; but showed that the changes which had been made in the yard had been by permit of the Commission's engineer, to change the derails from the standard distances laid down in the rules of the Commission (fol. 1562). He repeated the understanding with Mr. Cade: that if the Signal Company would agree to correct the defects in the plant, the Cotton Belt would put in heavier rail and make the changes in the yard; that as soon as the changes in the yard were made the Signal Company would install additional devices; and that then an inspection would be asked for, and if the plant worked satisfactorily it would be paid for in full, and the new work paid for in addition to the contract price of the plant (fols. 1563, 1564, 1569, 1576).

On July 17, 1905 (page 396, Ex. 65), Mr. Salmon replied to Major Wathen's letter. He repeated the assertion that the Commission could not have accepted the plant consistently, whatever the Signal Company had done, because, as he alleged, the Railway Company had not performed the requirements of the special order of 1904—in which assertion, as has been shown above, he was in error. He admitted that at the time of Mr. Cade's visit the apparatus was in poor condition, "this being in part due to original defects and in part due to poor maintenance or to its use on bad tracks." He repeated his assertion that the Signal Company had done all it agreed to do. He suggested a basis for changing the signaling to adapt the plant to the track changes—that the Signal Company furnish the material at the net selling price, and also men, who should be taken on the pay-roll of the Railway Company, which would furnish them the tools required, it being understood that material furnished would be paid for regardless of the acceptance or non-acceptance of the plant under the original contract.

In a postscript to his last letter, Major Wathen had said that he could not see why the agreement with Mr. Cade had not been complied with, as the payment of \$16,000 was contingent on its being carried out. He meant, of course, Mr. Cade's undertaking so to revamp the plant that it would be accepted by the Commission ; but Mr. Salmon retorted in heat that at the interview at Dallas it "was not even suggested that the acceptance of the plant was to be contingent upon the making of certain changes in track layout and the making of changes in signalling to suit such track changes"—a somewhat extraordinary misunderstanding. From what has gone before it appears that Major Wathen always regarded the alterations to conform to track changes as new work to be paid for separately and in addition to the original contract. The understanding had been, however, that no *re-inspection* would be asked for until the track changes were made, and the signals changed to conform ; because these changes were to be made to "help out the plant." It would seem hard to understand how Mr. Salmon could have so confounded Major Wathen's meaning.

On July 20, 1905 (page 338, Ex. 31), Major Wathen wrote to Mr. Salmon (apparently before the letter of the latter dated July 17 had arrived) replying further to the voluminous letter of the 5th. He took up the question of non-acceptance by the commission and showed that the installation of annunciators and telephones did not affect the merits or defects of the device, and that the delay in the laying of heavy rail on the Cotton Belt was beyond their control. He repeated the terms of his understanding with Cade precisely as before. He called attention to the letter from Mr. Wuerpel to Mr. Lang, dated April 21, 1905, in which the former said that no material for the changes would be furnished until an understanding was reached on the old contract, and said that was not the agreement. He concluded, "we will not ask for an inspection before the new work is installed, and the plant stand condemned to-day."

July 27, 1905, Mr. Salmon replied to this letter (page 341, Ex. 32). He expressed himself as satisfied with Major Wathen's terms of payment for the new material, for the assembly of which, he stated, he had issued orders. He asked whether the changes in the track in fact made were identical with the plan furnished by Mr. Lang in April, and whether the Railway Company preferred to furnish labor and tools.

The next day (before Mr. Salmon's letter from Buffalo could be received) Major Wathen wrote (page 343, Ex. 33) saying that he had again had inquiry from the engineer of the Railroad Commission as to the Texarkana plant; that the failures were too many. "If we ask for an inspection now he will condemn." He pointed out that the failures were largely due to the wiring; that even if there was some cause for complaint originally due to bad track or ballast on the Cotton Belt, there had been none for five months, for the Cotton Belt, when it made the changes, had laid heavy rail and ballasted with gravel, and the Texas and Pacific's line was new, with gravel ballast. He reminded the Signal Company that they had examined the conditions of the line before the bids were made. He asked what the Signal Company intended to do to make the plant good, and whether they would undertake this in the near future if the Railway Company asked for further time of the Engineer. Failure to reply promptly would, he said, lead to an inspection.

Mr. Salmon's response to this letter, dated August 1, 1905 (page 344, Ex. 34), was, in brief, that he had been advised that on the requirement of the Railway Company the wire had been laid in trunking, the top of which was placed in ballast about level with base of rail, and that the ballast on certain of the tracks was of cinder, under which conditions the rubber compound insulation would deteriorate and failures from that cause should not be charged to the Signal Company.

He argued, "The fact of the matter is that the specification is entirely wrong and the railroads should amend it on all work which they do in the future, and

should not seek to hold the Signal Companies responsible for the failures developing through the putting in of work in conformity with the existing bad specifications."

(It will be remembered in this connection that Mr. Dodgson had testified that the specifications were those of the Signal Company, who acted as consulting engineers to the Railway Companies "in this as in hundreds of other cases.")

Mr. Salmon declared himself, however, willing to "renew that portion of the wire which was originally defective or which was badly installed," and asked Major Wathen to give the matter further investigation, and advise him what in his judgment the Signal Company should be asked to do.

On August 4, 1905 (page 404, Ex. 66), Major Wathen sent a list of the material which would be required, and said he would advise whether or not to ship it.

On September 8, 1905, he wrote again (page 349, Ex. 36) saying that on account of the rigid [yellow fever] quarantine nothing had been done at the plant at Texarkana, and nothing would be done until restrictions were removed, which might not be until the first of November or later. He added :

"If you will forward the bill of material for making changes in this plant and arrange to remodel the wiring there in a satisfactory manner, as soon as the quarantine conditions will permit workmen to be sent there, we will have the changes on our part of the work done at the same time to comply with the agreement which has heretofore been made. Please advise if satisfactory."

Mr. Wuerpel answered this letter on October 6, 1905 (page 352, Ex. 38) :

"Referring to your favor of September 8th, in reference to work at Texarkana, we take pleasure in advising that orders have been entered in our

factory for the material as mentioned in your letter of August 4th, and we will be pleased to have you advise if the quarantine restrictions have been removed in the district around Texarkana so that we may proceed with the work."

On October 9th, 1905, Major Wathen replied (page 4, Ex. 67) that the quarantine was as rigid as ever, but would be lifted as soon as frost came, which would usually be about November 1. "Material sent forward now would not likely reach Texarkana before quarantine restrictions would be removed."

Not until February 7, 1906, did the Signal Company make reply to Major Wathen's letter of October 9. Then Mr. Wuerpel wrote to Mr. Lang (page 321, Ex. 22), saying that they had shipped the material to make the changes and were thinking of sending Mr. Walshe to do the work; and would like to know if the Railway Company was ready to proceed.

On February 20, 1906, Major Wathen replied (page 352, Ex. 39) to this letter, accounting for the delay by explaining that Mr. Lang had not been with the company since the previous August, and had delayed forwarding the letter to him. He continued:

"I wrote to Mr. Salmon under date of September 8, 1905, advising what would be satisfactory to us, stating that we would comply with the orders of the Engineers for the Railway Commission of Texas, and I suppose that this material has been shipped accordingly. We have no knowledge that material of any sort had been received at Texarkana \* \* \*

"I would like to know what has been done and what you propose to do."

February 23, 1906, Mr. Wuerpel replied (page 353, Ex. 40), saying that they had intended to send Mr. Walshe in December, but he was not released from other work until February. Not receiving a reply to the letter to Mr. Lang of February 7, he said

he had wired to Major Wathen, February 20, asking if he was ready to proceed, and had received his telegraphic reply stating that he was ready to have the plant remodeled. (These telegrams are not in evidence). He added that he had sent Walshe to Texarkana with instructions to report what shape the changes were in. "As soon as we receive a report from our Mr. Walshe we will advise you more fully."

On March 6, 1906, Mr. Wuerpel wrote again (page 355, Ex. 41), saying that Walshe had reported that the changes made did not correspond with their plan, which had been sent to Mr. Lang February 7; the difference being that the Cotton Belt people had added a switch and derail for a siding which connected with their main track south [*i. e.*, west, as directions have been referred to at this trial] of the Kansas City Southern crossing, and that the locking on the machine had not been changed to correspond. He asked for authority to change the plant in conformity with this layout.

On March 12, 1906, Major Wathen replied (page 357, Ex. 42) that the change referred to had nothing to do with the agreement between the Texas and Pacific and the Signal Company, which only contemplated changes east of the crossing, and that the turnout had not been authorized by the Commission's engineers and might have to be taken out. This would seem a definite instruction to disregard this siding.

March 15, 1906, Mr. Wuerpel answered (page 538, Ex. 43) that he did not agree that this siding had nothing to do with the agreement, "as it is our understanding that our latest agreement with you referred particularly to the changes to be made in the Cotton Belt track." He then reviewed the correspondence since July 27, 1905, at length. He went on: "We wish to advise that our man Walshe arrived at Texarkana on the 27th of February, prepared to do the work of making changes, and that, therefore, his time and expenses will be charged against the T. & P. Railway Company." He concluded by charging that

the Cotton Belt people had disarranged the locking on the machine so that conflicting routes could be set up. "Such being the case, we will not be responsible for any accident that might occur at this point, notwithstanding your contention that the plant has not been accepted."

That Mr. Wuerpel had been misinformed by Walshe, and was laboring under a misapprehension as to the whole matter is evident from the testimony. Atkinson, the maintainer, testified that the derail and switch for the siding (referred to in the testimony as the "Post Pipe Works spur") were not connected up with the tower (fol. 685); and Walshe himself, on cross-examination, said, "I don't know whether it was connected with the tower or not. I wouldn't have occasion to know" (fol. 226). Mr. Kane said that he found Walshe working near this spur, and asked him what he was doing. Walshe replied that he was connecting this siding up with the tower; whereupon Mr. Kane told him to leave it alone; "it is a different proposition entirely from the contract" (fols. 866, 867). Cullums testified that when Walshe arrived no change whatever had been made in the interlocking machine; that Walshe changed it after he arrived, to meet the requirements of the changes which had been made in the Cotton Belt yards, after which one conflicting route could be set up (fols. 967, 968).

On March 19, 1906, Major Wathen again wrote (page 368, Ex. 45) to Mr. Wuerpel that the siding referred to, *west* of the crossing, had nothing to do with the proposed changes, the subject of the agreement. "Therefore please arrange to carry out the original plans, and if the 'Cotton Belt' plans in any way conflict with the ideas of the engineer for the Commission or with your work, they will have to settle with you direct. I thought I had explained this fully in my previous letter."

The matter of Walshe's arrival at Texarkana, referred to in Mr. Wuerpel's last letter, caused further misunderstanding. Mr. Ayres, the Division Superintendent, testified that when Walshe came in to see

him, after his arrival, and said that he had been sent by his company, at the request of Major Wathen, to make repairs; that Ayres told Walshe that he had nothing to do with the Signal plant, and suggested that Walshe should wire to Major Wathen that he was there. Walshe refused, saying that his company had directed him, if there were no instructions for him at Texarkana, to notify them (fols. 381-383).

The same day (March 19, 1906) Major Wathen sent another letter to Mr. Wuerpel (page 364, Ex. 45). In answer to what the latter had said about Walshe's being at Texarkana, he stated he had heard nothing of his being there except from Mr. Wuerpel's letter; and he flatly refused to pay for Walshe's time up till then. He reminded Mr. Wuerpel that the Texas and Pacific had been waiting a long time to be notified that a representative of the Signal Company was at Texarkana prepared to do the work, and that they had been ready for months to send a man there to co-operate with him.

On March 23, 1906, Walshe both wired and wrote to Major Wathen that he was ready to proceed with the changes.

On March 24, Mr. Wuerpel wrote (page 367, Ex. 48) with considerable acerbity that the Signal Company was "under no obligation to do anything more than that agreed upon between you and Mr. Salmon in making changes in Cotton Belt tracks, and that we shall look to you to see that the Cotton Belt tracks are changed in accordance with this agreement." He finished by threatening to withdraw Walshe and the materials and to do nothing further in the matter unless Walshe were advised before April 1 that the Railway Company was ready to proceed.

March 28, 1906, Major Wathen wrote a letter (page 370, Ex. 49) containing the following:

"It would be entirely satisfactory to us for you to refuse to do anything more at the plant at Texarkana, as the plant now stands condemned by the State Engineer, and if this plant is removed, we

can have a good plant put in, that will pass the inspection, by somebody else. \* \* \*

“ I can see nothing left for us to do except to ask for new bids for the plant at Texarkana to conform to the ruling of Commission's Engineers.

“ Kindly advise how soon you can take all your stuff away from Texarkana, as it will be very much in our way getting the new plant installed.”

On April 7th, Mr. Wuerpel wrote (page 372, Ex. 52), regretting that “ the efforts of this company in your interest has not met with the appreciation which we feel they deserve, for we have no doubt that the Pneumatic Signal Company, through its attorneys, will be able to collect the entire amount of the original contract.”

On April 10, 1906, Major Wathen, replying to Mr. Wuerpel's letter of the 7th, said (page 376, Ex. 54), that they were asking for new bids :

“ You had notice from me not to remove the new material at Texarkana, but to remove all the material that had ever been sent there, if you felt disposed to do so.”

On April 17, 1906, Major Wathen wrote to Walshe (page 376, Ex. 55) :

“ We are very sure that the work as it now stands will not pass inspection by the State Engineer. Your verbal report and that of Mr. Kane that the failures on this plant were due almost entirely to the wiring—showing that the wiring is still defective and has never been completed in accordance with the agreement made between myself and Mr. Cade.”

On the same day (April 17) he wrote a letter to Mr. Wuerpel (page 377, Ex. 56) containing the following :

“ Rest assured that this plant will never be accepted until it is rewired in accordance with the

agreement that I made with Mr. Cade, and I am sure that the Commission's Engineer will never accept it until this is done."

On April 21 Mr. Salmon replied to this letter (page 378, Ex. 57) accusing the Major of misstatement of facts, and expressing resentment at the language used by him.

On April 23, 1906, Mr. Salmon, having recovered from his indignation, wrote further and at length in answer to Major Wathen's letter of the 17th (page 380, Ex. 59). He called attention to Mr. Cade's reference to the underground wiring in his letter to Mr. Lang of December 24, 1904—a letter which he says was written "in confirmation of the verbal understanding between Messrs. Lang and Cade" (this although there is not a word of evidence in the case that Mr. Lang had any authority to have any "understanding" with anybody on the subject of plants; and although the evidence is that Messrs. Cade, Dodgson and Wuerpel had gone to Dallas to have their "understanding" with Major Wathen).

Mr. Salmon alleged further that "following his return from Texarkana and his interview with you, Mr. Cade made a report to me, in which he stated that he fully set forth everything which it had been agreed to do at Texarkana, and requested that we at once proceed with the work which he had promised on our part to have done." Mr. Salmon asserted generally that this had been done. He invited Major Wathen to send a "copy of the agreement made with you by Mr. Cade as referred to in your letter"—though there was no reference to a written agreement in that letter or any other. He continued:

"In case such agreement was made we shall certainly live up to it, even though in making such agreement Mr. Cade exceeded his authority."

He went on to say that Texas roads required wiring to be run in trunking underground; that his company

had always objected to that method of construction, and had pointed out that where cinder ballast was used the life of the wires would be less ; that he had no doubt the Pneumatic Company were similarly requested to run the wires underground, and [his leap to a conclusion here is interesting] *such being the case*, I see no reason whatever for your expectation that this company will re-wire the plant ; that the Commission's engineer might refuse to accept the plant until the wiring was renewed, " but we do not understand that this will have any bearing whatever upon the question whether this plant shall or shall not be paid for by your company, unless you can furnish copy of agreement with some representative of this company or the Pneumatic Co., showing that agreement was made with you to make the change without cost to your company."

On April 23 Major Wathen wrote to the Signal Company saying :

" We have never been informed that any improvements have been done by the Signal Company to improve the plant. The agreement was that the entire plant should be rewired before we would ask for another inspection by the engineer for the Railway Commission of Texas. \* \* \* The plant having been condemned twice, it was wrong for this office to have considered any further tinkering with it. It should have been condemned and removed from the right of way of the Texas and Pacific and other lines, and a new plant ordered, but not wishing to make any unnecessary hard conditions with the Signal Company we were perfectly willing if they would make the plant acceptable to the engineer of the Railway Commission of Texas, to accept and pay for same.

" \* \* \* We have no knowledge of there being any rewiring done ; we know it wasn't done in accordance with the agreement."

On April 27 Major Wathen replied to Mr. Salmon's letter of April 23 (p. 383, Ex. 60) with a brief

summary of the Railway Company's position throughout the controversy. He showed how the law gave the Commission supreme authority over interlocking plants; that it was under orders of the Commission that this was put in; that this would have been accepted on the first inspection, if it had been put in in a satisfactory manner; that thereafter he had been willing to give every opportunity to the Signal Company to make the plant acceptable to the Commission, and that if the Signal Company had done so the Railway Company would have paid for it, whether it was all that could be desired or not; that the changes in the Cotton Belt yard were agreed upon with the consent of the Commission's Engineer; that the Railway Company was willing to pay for the new work made necessary by such changes, after acceptance by the Commission's Engineer; that when Mr. Wuerpel threatened to drop the matter that was satisfactory to the Railway Company, and he, the Major, had already prepared circulars asking for new bids, when he got an appeal from Walshe "to please let him go ahead and do what was wanted done"; that with the purpose of allowing whatever arrangement was made to be carried out in good faith he decided to let Walshe make the changes, re-wiring, &c.; that these were not done. He added:

"I repeat that it will be entirely satisfactory for you to remove the plant from our right-of-way, or you will be required to carry out all of the provisions of the agreement which I made with the Pneumatic Signal Company, and the plant will be accepted by the Railway Commission's Engineer, before we will accept it, and there is no need for further correspondence about the matter."

On July 31, 1907, the plant was again inspected by Mr. Thompson, at the request of the Railway Company, made June 20, 1907. In his report (page 293) on that inspection, in which he made it quite clear that the features of the order of July 7, 1904, which had

not been completed, would not be deemed material to the question of final approval or rejection of the plant (fol. 1180), he recommended its condemnation. An order was entered on this report, dated August 12, 1907 (page 301), finally disapproving the plant, ordering the construction of a new plant in its place, and giving the Railway Company permission to operate the old device until the new one should be completed and put into operation.

In July, 1907, before the condemnation was made, Major Wathen got out circulars asking bids for a new plant, and after he received the responses, submitted the plans to the Commission and obtained their approval, he let the contract, and the contractors "went ahead and put the plant in, in about as reasonable a time as they could assemble the material and put it in." Nothing was done with the old plant (fols. 928-931).

### **POINTS OF LAW.**

**I. The verdict of the jury should be sustained on the issue and evidence that there was here such failure of substantial performance by the plaintiff that it cannot recover on the contract.**

It is a fundamental principle of all the cases cited on plaintiff's brief, and of all cases where a vendor, not having performed all the conditions of his contract, is allowed to recover, that the vendor must, in his action, show two things; that he substantially performed, and that the defendant intended to and did waive the conditions or the defects, and accept the article.

The preliminary fact, therefore, which the vendor must establish, is that he has substantially performed, has given to the defendant to all intents the thing he

was bargaining for. This the Signal Company never did.

Let it be considered for a moment, what, stating the case most favorably to the plaintiff, the defendant would at least be entitled to receive, even if he waived acceptance by the Commission. In the first place it would certainly be implied that the plant constructed should be a good plant, not necessarily the best in design in the world, but a reasonably good, durable instrument, as the art then existed, to perform the functions for which it was installed; and, in the second place, the defendant would be entitled to a plant which he could continue to use without fear of being interrupted in that use by the authorities of the government.

What plaintiff did here fulfilled neither of these requisites to an action on the contract, and did not constitute the essentials of a substantial performance. The evidence produced by plaintiff on the first point is that of Mr. Dodgson, who testified that it operated properly in 1904,—he never saw it afterwards; and that of Walshe, who testified that it operated “very properly” in 1906. These are mere general statements of opinion of interested witnesses. That of Mr. Dodgson is not pertinent because it was confined to operation before March 1, 1905, the alleged date of completion. That of Walshe was a mere “working foreman,” as Mr. Wuerpel called him, and not qualified as an expert.

The opinion of another and disinterested expert, Mr. Thompson, was vastly different. He was ready to condemn the plant in November, 1904. He enumerated some of its defects in his letter to Major Wathen (p. 304). He enumerated more in his testimony (fols. 298-300, 301 *seq.*). He rendered a final report in which he recommended its condemnation on account of its inherent defects (p. 293). The opinion of Cullums, the towerman, a practical man with wide experience in operating interlocking systems, should be as valuable as that of Walshe—but he did not testify that it ever worked properly; instead his testimony (considered more at length later) is a long history of its failures

—not mere superficial defects, which could be easily remedied, but vital and fundamental flaws and faults of design, some, like the sticking of the signals in the clear position (fol. 749), being extremely dangerous. As has been seen, one of the most important purposes of the device was to prevent a train from running up to a crossing and colliding with a train already on it. The function of the detector bars was to prevent this. Instead of detector bars the Signal Company chose to use track circuits. They totally failed (fol. 306) and were taken out by the Company's own man, Walshe (fols. 682, 796), thus leaving the crossings quite without protection.

The summary of his testimony is that there were, in the three and a half years he worked on the plant, between twelve and thirteen hundred failures, to his knowledge (fol. 811). The testimony of Mr. Neff, a railroad expert and operating man of wide experience, is that this plant was always a source of serious delay, which at times were almost unbearable (fols. 617-619, 634, 635), that all-electric plants of other systems, in similar conditions as to weight of track, ballast, etc., worked satisfactorily, and that no delays have occurred since this plant was taken out, in 1908, and a new plant or another system installed (fol. 644).

As to the argument that this was a good plant because there were no collisions there, the fallacy is plain. The fact that no serious accident has occurred does not necessarily indicate a good signal system. For many years the New York, New Haven and Hartford Railroad was exempt from serious accident; but in its report on the recent Wallingford wreck, the Interstate Commerce Commission assigns as the first cause of the wreck the antiquated banjo signals covering only single blocks without giving distance warnings. About this plant Mr. Thompson said (fol. 1192):

“ Failure of the functions to properly operate are numerous and liable at any time to promote serious accident. While accidents in the past have been comparatively few on account of failure on

the part of some of the functions to operate properly, in my opinion this is due to the extreme care and vigilance exercised by the operator and repair men in charge of the device."

Many pages might be filled with excerpts from the evidence, all plainly pointing to the same conclusion—that the plant was not a reasonably good instrument to perform the work for which it was constructed.

As to the second point, that the defendant was not, by reason of the alleged performance by the plaintiff, put in a position where it could safely occupy the plant without danger of interference from the legal authorities, that, too, is plain. It never was. The Engineer of the Commission stood ready to condemn it if urged to do so in November, 1904, but of his own motion suggested to the management of the road that time for change and experiment be allowed. He made inquiry twice, in 1905, as to how those improvements were progressing, and that he was never satisfied with the reports, his testimony shows.

The plaintiff argues that the final condemnation was because telephones, &c., had not been installed, and because the maintenance had been poor. The difficulty with that argument is that it is not supported by the evidence. Before March 1, 1905, when the plaintiff claims to have completed the plant, who, in the nature of things, was responsible for the maintenance? The Signal Company had had its man on the ground continuously for a year. Mr. Cade admitted at least equal responsibility (fol. 1309). That after March 1, 1905, the maintenance of the plant was poor there is no evidence. On the contrary, Thompson points out that the plant had unusual attention; the company was obliged to maintain continuously a repairman and helper in addition to the usual operators in the tower; and he was engaged continuously in the repair of broken parts and the examination and repair of the functions that were continually failing (fols. 1182, 1183). It was simply an excuse trumped up by

the Signal Company to cover the shortcomings of the apparatus.

Even more important is the fact that all the evidence relating to the causes for condemnation establishes unequivocally that the condemnation was on the inherent defects of the plant. Commissioner Mayfield said so (fol. 333), and that is the whole tenor of Mr. Thompson's final report, in which, lenient as ever and fair to the Signal Company (he recommended that it be given the contract to reconstruct and that old parts be used in the new device, so that the money the plaintiff had already sunk should not prove a total loss), he nevertheless was obliged to recommend that in the reconstruction the Taylor system be used; that it was impracticable to reconstruct it on the present system (fols. 1196, 1200).

The rule as to substantial performance is well expressed by BRADLEY, J., in

*Crouch vs. Gutman*, 134 N. Y., 45, 51 :

“ \* \* \* That the builder must have in good faith intended to comply with the contract, and shall substantially have done so in the sense that the defects are not pervasive, do not constitute a deviation from the general plan contemplated for the work, and are not so essential that the object of the parties cannot, without difficulty, be accomplished by remedying them.”

The language of the above case exactly fits the case at bar. The defects here were pervasive, and were so essential that the object of the parties—to provide a good, practical, enduring plant, which could be permanently operated without danger of interference by the authorities—could not be accomplished.

The conclusion, therefore, seems irresistible that this is a clear case where the plaintiff did not substantially perform the *contract*, and so cannot recover *on the contract*. This does not, of course, mean that if the defendant enjoyed benefits from plaintiff's work, &c., the latter has no legal remedy. The proper action

was on *quantum valebat*—not an action or a contract which has not been performed. See  
*Wells vs. Selwood*, 61 Barb., 238.

It should be noticed that, performance being denied in the answer, this issue was before the jury on the pleadings, as the trial Justice pointed out (fol. 353); and since the jury found generally for the defendant, and since, if it had found specially for the defendant on this issue, such finding would have precluded its considering the issue of acceptance, the well-recognized principle should be applied that where there is evidence on an issue before it on which the jury could have reached the verdict it did reach, it will be presumed that it reached its verdict on that issue, and the sufficiency of evidence on other issues need not be considered. It follows that the verdict should be sustained.

**II. Use of the plant, under the circumstances disclosed by the evidence, did not constitute a waiver of conditions precedent and an acceptance of the plant by the defendant; and not only was the verdict of the jury not against the weight of evidence, but any other verdict would have been against the weight of the evidence and should have been set aside.**

A. CONCEDED FOR THE MOMENT, FOR PURPOSES OF ARGUMENT, THAT THIS WAS A CASE OF AN ORDINARY CONTRACT FOR SALE OF GOODS, THE PLAINTIFF WAS AT NO TIME IN A POSITION TO RECOVER ON THE GROUND OF WAIVER AND ACCEPTANCE, OR OTHERWISE.

1. *This contract contained five conditions precedent to recovery, viz.: (1) "that the materials and apparatus to be furnished and labor to be performed shall be in conformity with the attached specifications" (fol. 1088);*

(2) that they should be "acceptable to the Chief Engineer" of the Railway Company (*id.*); (3) that they should be acceptable to the Engineer of the Railroad Commission of Texas (*id.*); (4) that the plant should "work perfectly and satisfactorily in every particular" for sixty days (fols. 1100, 1101); (5) that it should be "accepted by the Railroad Commission of Texas" (*id.*).  
*Fogg vs. Suburban, &c., Co.*, 90 Hun, 274.

The law is so well established that conditions of this sort must be fulfilled before suit will lie, that argument of any length is necessary. A leading case is

*Weeks vs. O'Brien*, 141 N. Y., 199,

holding that performance of these conditions precedent must be pleaded or their non-performance excused. The complaint was obviously drawn with this doctrine in view, for it admits that one of the conditions was not performed, and alleges as an excuse prevention by defendant's default (Contract VI. and IX., at fols. 19, 20, 24, 25).

2. *Not one of these conditions precedent was ever performed.*

(1) The "material and apparatus furnished and labor performed" did not conform to the specifications.

a. Crossing bars. The specifications mention fouling bars at the crossings, under the heading of "Detector Bars" (fol. 117). The Railroad Company's engineers, Major Wathen and Mr. Lang, during the construction of the plant, reluctantly allowed, at the instance of the Signal Company, the substitution of track circuits in place of these (fols. 431, 432, 940-942, 1295). The track circuits caused a great deal of trouble, of which more will be said later. The Railway Company had no responsibility for this, for its engineers knew nothing of signal devices (fols. 425, 426) and the Signal Company acted as its consulting engineers (fols. 165, 166), and chose to assume responsibility for using, at that particular place, a delicate device that always requires more attention than crossing bars (fol. 583).

b. Junction boxes, which were contemplated by the

specifications (fol. 1124), were not used, with the result that the trunking or wooden conduits containing the wires had to be constantly ripped open, and in four months after the plant was put in service became so delapidated as to occasion remark by the Commission's Engineer (fols. 448-451) and ultimately became entirely wrecked (fols. 708-712). This condition, it will be noted, had developed to a marked degree before March 1, 1905, when, according to plaintiff's position, and as stated in the complaint, the plant was supposed to be completed.

c. Trunking. The specifications are vague on this point, providing merely for dimensions, and painting inside and outside (fols. 1123, 1124). This interpretation by the parties is therefore to be considered, in the light of the proviso (fol. 1131) that good material should be used (which, of course, means material suitable to the place where and purpose for which it was to be used) and good workmanship applied.

The history of the installation of the trunking is related by Major Wathen (fol. 918 *seq.*). When the plant was being installed Mr. Ellis, the Signal Company's representative, came to Dallas "to know if he couldn't get some modification of the specifications on that point. Major Wathen told him he would consent his using *bois d'oc*, a hard and durable timber. He complained he couldn't find good suitable timber; so Major Wathen finally told him (fol. 924) he might use, temporarily, well creosoted pine at least two inches thick. Subsequently he saw what was being used; the main *trunking* was of common "sap-pine" boards, an inch thick and six inches wide, nailed together "like a dry goods box" (fols. 446, 671, 695-698). Major Wathen then told Mr. Ellis that, since, if it was then taken out, that would occasion another delay of several months, with a possible imposition of the fine of \$500 per day, he would permit the trunking to remain until after inspection (June, 1904), with the understanding that it should subsequently be taken out and remodeled.

d. Wiring (fol. 1121). The constant trouble with the wiring, not merely underground, where the ruinous

condition of the trunking might be alleged as a reason, but all over the plant, where the trunking ran above ground as well (fol. 854), the constant fusing of wires and sometimes entire cables, leads to the natural and inevitable inference that the wires were not "of sufficient size to carry, without overheating, the current necessary for the work to be done".

e. "Dwarf signals are to be self-locking," was the specification (fol. 1119). These did not lock, and to the last could be cleared by person who might chance to wander into the yard—"a very serious thing" (fols. 305, 459).

f. High signal machines were to have one sixth horse power motors (fol. 118). The motors were, in fact, one-thirty-fifth horse power, and too weak to perform this function.

g. Wire joints in the trucking were forbidden (fol. 1128)—yet Mr. Dodgson himself made them (fol. 703).

(2) The "material and apparatus furnished and labor performed" were never acceptable to the Chief Engineer or the Railway Company.

The plaintiff argues that the meaning of this requirement was that the Chief Engineer was thereby appointed an inspector of material and labor; that he could only reject or accept them, but had nothing whatever to say about entire plant or any device or machine in it, no matter how poorly they might have worked. How untenable is this construction of the contract, is demonstrated by the fact that railway engineers in the southwest, at this time, as has been already shown, knew nothing about such devices, and, of course, had no technical knowledge of what sorts of material were suitable. But these plants were in their charge; they were intelligent and educated men, and they could very soon tell, after watching the workings of the plant during its probationary period, whether it as a whole, and the various devices comprising it, would work well or not. Moreover, this particular system was new and untried—in the nature of an experiment (fols. 299, 1194), and this was the first to go into service. There would

be no point or purpose in the provision except as a protection to the company—a means of relieving it from the risk of this untried device. It is a familiar principal of interpretation that a clause will never be construed so that it will be nugatory when another construction will give it force and effect. Moreover, throughout the contract, where allusion is made to the consideration moving from the plaintiff, it is almost invariably as “labor and materials;” and the plaintiff was to be paid, not for a plant, but for what it had “furnished and done.” The words used are, therefore, equivalent to “plant,” and the Chief Engineer was clearly, by the contract, a judge of the efficacy of the entire plant.

Specific references to Major Wathan’s objections to the plant both as a whole and in its various parts are unnecessary in this place. The record is full of them. Rather it is incumbent upon the plaintiff to establish affirmatively the fulfillment of this condition precedent—which, of course, it would be impossible to do in any particular.

(3) The “material and apparatus furnished and labor performed” were never acceptable to the Engineer of the Railroad Commission of Texas.

The arguments just advanced as to the interpretation of these provisions have even more force when applied to the Engineer of the Commission. He could not be expected to know anything of the materials as they were put in. He would not be on the ground, except at formal inspections, and a large part of the material would be buried in the ground or otherwise covered from view.

There was no lack, however, of his specific disapproval of various parts and pieces of apparatus, as well as of the plant as a whole. He called attention to the dwarf signals at his first inspection June, 1904 (at which Mr. Ellis was present), as well as the wiring and trunking (fols. 451-470); after the inspection of November, 1904, when he found conditions substantially the same, he wrote to Major Wathen calling attention to the “general bad character of the workmanship”;

“the fact that all dwarf signals can be cleared from danger position by hand”; “the practical failure and worthlessness of all track circuits”; “the failure of selector and other machinery of high signals to work properly”; “the failure of functions on account of wearing out of underground cables”; “burning out of contacts and arcing of current in indication boxes”; “rapid deterioration of all machinery and materials without the tower” (fols. 1221, 1222). This letter was shown to Mr. Cade by Major Wathen (fol. 892), so that the plaintiff cannot claim that Mr. Thompson’s objections were not brought home to it. Reference should also be made to his final report where he discusses the failings of the plant at considerable length (page 293, fol. 1172), and to his testimony (fol. 304 *seq.*), where he states them still more specifically.

(4) The plant did not for sixty days work perfectly and satisfactorily in every particular.

On this point the testimony of the tower man, Cullums, who arrived at the plant the day that Mr. Dodgson did, in February, 1904, and continued as first trick tower man, and practically tower foreman, until after the condemnation, in August, 1907, constitutes a brief which it seems hardly profitable to try to summarize. Reading it with the testimony of Atkinson, the maintainer (fols. 695-811; 647-686), one sees that the generating plant was ill adapted to the work it had to perform here—whether or not the engine was a Fairbanks-Morse four horse power motor, as specified, is not material; that it was impossible to maintain the storage battery at the voltage directed and that Mr. Cade advocated getting current from an outside source (fol. 1256); that wire trouble developed early in 1904, grew worse in the fall, and by winter the whole wiring system was badly demoralized (fols. 712 *seq.*)—this, it will be noted, months before March 1, 1905, when the plaintiff maintains the plant was completed and ready for delivery. Mr. Cullums’ testimony shows exactly the faults in design on account of which the dwarf signals would never lock (fols. 727 *seq.*); how the failure of these signals to lock and of other pieces of appa-

ratus to work properly, and the fusing of wires, caused the tower men to "force indication" (explained *supra*) (fols. 727 *seq.*). The mechanism of the high arm or semaphore signals were ill-designed and always worked badly; they cleared to safety position at first too slowly, and when the mechanism was changed the motors burned out in less than a year. As appears above, these motors were only one-thirty-fifth horse power, instead of one-sixth demanded by specifications (fols. 738 *seq.*).

When the semaphores had been cleared they would stick clear when they should have returned to danger--also from defects in design (fol. 745, *seq.*). For the same defect, in the two-arm signals, operation of one arm would frequently involve the other (fols. 771, *seq.*), and the slipping of the clutch prevented its being cleared. When the plant was first put in service there was a safety appliance on the interlocking machine to prevent forcing of indications; but Mr. Dodgson himself took out part of it, and Walshe did the rest (fol. 781, *seq.*). The switch motor boxes were so designed that moisture accumulated in them and the operating parts, though operating but little, became gummy and dirty, so that even frequent cleaning would not keep them clean. The drilling of a hole by the Railway Company's maintainer finally remedied this (fol. 785, *seq.*, 823); but this slight thing indicates how impractical the designer of the plant was.

The track circuits, which had operated badly, were cut out by Walshe in the spring of 1905; and, with this feature eliminated, it depended on the operator to see that there was nothing on the crossing (fol. 796, *seq.*).

In all, Cullums testified, the plant broke down twelve or thirteen hundred times to his knowledge (fol. 811).

(5) The plant was not accepted by the Railroad Commission of Texas.

a. Inasmuch as the plaintiff's brief make s considerable effort to prove that the Commission did ex-

cept the plant, that contention must receive a certain amount of consideration. In the first place, however, it should be pointed out that such an attempt on the part of the plaintiff is irrelevant and improper here, because

(a) Non-acceptance by the Commission is expressly admitted in the complaint, and an excuse therefore alleged—defendant's default (Amended Complaint VI. and IX. ; fols. 19, 20, 24, 25).

(b) This issue is expressly excluded by decision of the Court of Appeals.

In the original complaint, as stated above, there was no issue of acceptance by the Commission, or of waiver and acceptance by use by the defendant. After the direction of a verdict for the defendant at the first trial, plaintiff's counsel asked to go to the jury on those two issues, but the Court of Appeals held that such request was made on grounds which were not tenable. Thereupon plaintiff was permitted to amend his complaint, and did so, alleging use and acceptance by defendant (fol. 29), but added no allegation of acceptance by the Commission, so that that issue is as much excluded by the decision and on the pleadings as it ever was.

b. It was a positive and not a negative or passive acceptance that the Commission was to give.

(a) Such positive acceptance was clearly contemplated by the contract. Its provisions in this respect are these (fol. 1097) : if the plant is not, by January 1, 1904, " completed as to be accepted " by the Commission, plaintiff would pay any fines imposed " on account of the failure to have said plant completed and accepted " by the Commission (fol. 1098). If the plant " shall work perfectly and satisfactorily in every particular during " a period of sixty days, " and after being accepted by the Railroad Commission of Texas," then \$16,650 should be paid. " In the event, however, that said plant shall not \* \* \* be accepted " by the Commission, the Signal Company should not be entitled to any part of that sum, but the materials and labor should be forfeited. It is

submitted that in these provisions a positive act on the part of the Commission is contemplated ; that a question—acceptance of the plant—was to be submitted to it for decision as definitely as questions are submitted to a court of law. This action was to occur after a certain definite interval—sixty days—of operation, and before a certain fixed day—January 1, 1904. Payment was to be made, not at some indefinite time in the future, if no objection should be made to the plant by the Commission, but *after being accepted*. The manifest and only purpose of the Railway Company in inserting this provision was to protect itself against any difference of opinion between the two parties as to whether the plant should be paid for or not. The terms were the most drastic and severe possible, but they were agreed to because the Signal Company wanted a chance to demonstrate its new and untried devices ; to conduct its “experiment” under practical conditions. They believed themselves able to win the approval of the Commission before a certain day, and bound themselves to take the consequences, forfeiture, if they did not. Clearly a definite and positive approval was contemplated by the contract, before any liability to pay should arise.

(b) The practice of the Commission supports this contention that its acceptance could only be expressed by positive act. On the plaintiff's own evidence the various orders of the Commission, including that of July, 1904, “temporarily and conditionally” approving the plant and allowing its tentative operation, show that the Commission, like any other public body, could disapprove, or otherwise act, only by orders duly made and entered. Throughout the litigation plaintiff's counsel seems not clearly to have kept in mind the distinction between a public functionary, like a commission or the head of a bureau, and a private corporation. For example, on the previous appeal the argument was advanced that the Commission was the agent of the defendant ; but this Court refused to consider that contention. It is apparently due to the same fallacy

that it is still urged that there could be acceptance by the Commission except by a definite act or order.

(c) The order of July 7, 1904, also contemplated a subsequent act by the Commission of acceptance or rejection, and held the whole matter in suspense until such action should be taken. It provides that after the improvements ordered have been made the commission would "after further inspection," "issue its order approving finally and authorizing permanently the operation of said device" (fol. 1145).

(d) The plaintiff itself so interpreted the contract. Twice it asked for inspection, once in June, 1904, and again by Mr. Wuerpel's letter of October 22, 1904. After the second inspection, on November 12, 1904, wherein it became evident that radical improvements would have to be made in order to satisfy Mr. Thompson, and after he had written his letter to Major Wathen, dated November 14, 1904, which Mr. Cade saw (and the statements of which, unlike those in the other letters in evidence, are evidence of fact; for Mr. Thompson testified that they were in all things true—fol. 416), the Signal Company representatives still professed themselves ready to put the plant into shape to pass inspection and win the approval of the Commission. That was the substance of the understanding with Mr. Cade. It was not until Mr. Salmon's letter of July 5, 1905, was received that the defendant had any intimation that anybody took any other or different view. Even then the threat to sue if payment was not made, whether the plant had been accepted or not, did not purport to be the attitude of Mr. Salmon or his company (the General Railway Signal Company) which had taken over the assets of the Pneumatic Company, and had been conducting negotiations with the Railway Company for over a year; it was merely a quotation from a letter of the Pneumatic Company, which contained such an amount of misstatement and was so obviously based on misinformation that the Railway Company could not regard it seriously. And, indeed, throughout the period of correspondence and controversy there

was virtual acquiescence in the position of the Railway Company that no inspection, under the agreement with Mr. Cade, would be asked for until both the improvements to make the plant passable had been installed, and the new work at the Cotton Belt yard completed; and that payment was conditioned on acceptance by the Commission. That acquiescence comes out with particular clearness in Major Wathen's letter to Mr. Wuerpel, September 8, 1905 (page 349), and Mr. Wuerpel's reply, October 6, 1905 (page 352). The Major wrote:

"If you will forward the bill of material for making changes in this plant" (which means, of course, in business parlance, the materials themselves) "and *arrange to remodel the wiring there in a satisfactory manner*, as soon as quarantine conditions will permit workmen to be sent there we will have the changes in our part of the work done at the same time, to comply with the agreement which has heretofore been made."

Inasmuch as the subject of the wiring had been a subject of controversy in the voluminous correspondence in the weeks just preceding this, the Major having claimed that by the agreement with Mr. Cade the wiring was to be renewed over the entire plant, there could be no ambiguity in this language. He was clearly standing consistently on his position, and laying down a condition for going on with the work.

Mr. Wuerpel's letter, stating that the order for the material had been entered in their factory, and asking to be advised if the quarantine restrictions had been removed so that they might proceed with the work. Obviously Major Wathen, in view of the previous correspondence, could not interpret this as other than a complete acquiescence in the position he had all along maintained—that the wiring was to be put in order.

3. *On March 1, 1905, the plaintiff could not have recovered.*

The position of the plaintiff that the plant was

completed on March 1, 1905, is inconsistent with its contention that there was here a waiver of performance and an acceptance of the plant by use thereof. Considering the position, however, on its merits, it will be seen to be unsound.

(1) As just shown, neither on March 1, 1905, nor at any other time, had it fulfilled any of the conditions precedent.

(2) It had not carried out the agreement with Mr. Cade.

a. It is proper here to call attention again to the agreement or understanding with Mr. Cade which Major Wathen arrived at with him at their conference at Dallas, about December 18, 1904. It contained these elements:

(a) That the whole plant should be so reconstructed or "remodeled"—to use a word frequently employed by Major Wathen—that it would fulfill the conditions of the contract and particularly that it should work perfectly and satisfactorily, be accepted by the Engineer of the Railroad Commission and approved by the Commission.

(b) That if Mr. Thompson's approval should be secured, the Cotton Belt would make the suggested changes in its yard, and that if the Signal Company would make the plant acceptable to the Commission he would pay for the work of adapting the plant to the track changes in the Cotton Belt yard, as an extra to the original contract.

(c) That inspection was not to be asked for until the changes had been made.

This is the understanding that Major Wathen consistently adhered to. It is stated in his testimony (fols. 889-896; 954, 955) (in the last point the testimony should for clearness, be read in the light of the correspondence). He reiterated it, in part or in whole, time and again in his letters—especially in those of April 24, 1905 (page 329); of July 8, 1905) page 390; of July 20, 1905 (page 338); and in his letter of April 27, 1906, the final letter of what developed into a rather acrimonious controversy. The plaintiff's charges

that Major Wathen was inconsistent in his assertions of this agreement with be dealt with subsequently.

b. There is no dispute on the evidence as to what that agreement was—for the simple reason that there were only two persons in the world who knew what that agreement was, Major Wathen and Mr. Cade himself (for Mr. Lang corroborates Major Wathen in his statement that the latter and Mr. Cade had a private conference in the Major's office at Dallas, in the afternoon of the day he spent there, after he had gone over the plant at Texarkana) (fol. 499). It is a significant fact that although the final undertaking was with Mr. Cade alone, that gentleman has never been produced by the plaintiff to controvert Major Wathen's statement. That statement, however, does not, as the plaintiff claims, stand uncorroborated. Every circumstance at the time goes to confirm it—Mr. Wuerpel's often-voiced opinion, to Major Wathen, to Mr. Lang, and to Mr. Thompson, that Taylor devices should be substituted for those of the Pneumatic Company; the dissatisfaction of Mr. Thompson with the whole affair, expressed to Mr. Wuerpel at the inspection, November 12, 1904, and reiterated in his letter to Major Wathen, November 14, 1904—which letter Mr. Cade saw; Mr. Thompson's understanding with Mr. Wuerpel that he would recommend to his company complete revision of the plant, with the substitution of the devices where necessary; Mr. Thompson's intercession with the management of the Railway Company on behalf of the Signal Company, because he understood that they wanted time to experiment with this untried device, and intended to make it satisfactory—to which course there was no objection that he could see, since, as he said, the failures were on the side of safety. He did not then know about the signals sometimes sticking in the "clear" position; the worthlessness of the track circuits, and the many other faults which to the towermen were manifesting themselves, and which, except for their extreme vigilance, would have made the plant a source of danger and a cause of disaster—faults which, it is fair to

infer, were carefully concealed by the Signal Company's man, Walshe, who was at Texarkana in charge of this job from May, 1904, to April, 1905.

c. The agreement with Mr. Cade had not, on March 1, 1905, been carried out. It is a strange fact that there is nowhere in the plaintiff's case evidence of a single thing being done to improve the plant, or make it different from what it was in November, 1904, when Mr. Thompson was only prevented from condemning it by the assurance that it would be made right. True, Walshe was the only one of plaintiff's witness who saw the plant after December, 1904 ; but why was he not asked to tell what had been done ?

Plaintiff tries to construe Mr. Lang's omission to deny the truth of Mr. Wuerpel's assertion that the work had been completed, in his letter of February 14, 1905, in an admission of the truth of that assertion. The answer is obvious. Mr. Lang was at his headquarters, Dallas, hundreds of miles from Texarkana, and did not know at that time whether the work had been completed satisfactorily or not ; nor would any inquiry have been pertinent just then, because by the agreement with Mr. Cade the question of the sufficiency of the plant was deferred until the changes simplifying the plant should be made in the Cotton Belt yard ; and those changes were held up for want of rails.

d. Even if the plant had been improved by the necessary reconstruction, substitution of Taylor or other devices in place of certain of the appliances which had proved faulty, &c., the plaintiff could not have recovered in March, 1905, because it could not under the Cade agreement apply for an inspection until the plant had been changed to adapt it to the proposed changes in the Cotton Belt yard. Major Wathen was clearly tired of the succession of inspections which came to nothing, and which only resulted in appeals for leniency and time for experiment. He wanted to make sure that the plant should be relieved of all the yard complications, and that the condi-

tions for a test should be most favorable, before that final trial which should decide the fate of the plant.

4. *No default or neglect of the defendant at any time prevented acceptance by the Commission.*

It has been shown above that on March 1, 1905, the date alleged in the complaint as the one on which the plant had been completed, not only had the plant, both as a whole and in its parts, material and workmanship, not been made acceptable to the Engineers of the Railway Company and of the Commission, nor had it been approved by the Commission; but that nothing whatever had been done with it to make it satisfactory, or to remedy its patent defects. That nothing occurred subsequently to improve that position, or establish in the plaintiff a right to recover, should be equally clear.

(1) Its failure to carry out in all respects the order of the Commission, dated July 7, 1904, did not prevent acceptance by the Commission.

There is no dispute that it was incumbent on the defendant and not on the plaintiff to perform the 4th, 5th, 6th, 7th and 8th requirements of that order. First the extent to which they had been carried out should be examined.

a. The requirements above specified were virtually complied with by the Railway Company.

The 4th was that electric indicators should be provided, giving warning of the approach of trains from the west on the Texas and Pacific, and the Cotton Belt; and from the south on the Texas and Pacific, and the Texarkana and Ft. Smith; but that the last two need not be installed if a telephone connection should be established between this tower and that of the interlocker of the two last-mentioned roads. The evidence is that two of the four indicators were in, and that a telegraph wire with key was placed in the tower, so that the same lines were covered and the same information could be obtained as by the suggested indicators and telephone service (fols. 503, 686, 803, 804, 182, 183).

The 5th requirement, that telephone connection

should be established with all depots and yard offices, was not fulfilled; but its practical utility seems to have been doubted by the towerman, who regarded a system of whistle signals adopted by all the roads using the plant, together with the telegraph service just mentioned, as more effective (fols. 803, 804).

The 6th requirement, that guard rails should be provided, was carried out (fols. 184, 482).

The 7th requirement, that railroad crossings should be maintained in first-class condition, and placed on permanent foundations, was carried out. This, however, was not completed until the spring of 1905, when the relaying of track with heavy rail was completed (fols. 483, 484, 628, 629, 641). Both Mr. Lang and Mr. Neff, experts on railroad construction, testified to the good condition into which the crossings were put, whereas the only evidence to the contrary was that of Walshe, the Signal Company's man, who testified that bolts were loose, etc., when he was there. He does not specify at what date the conditions described existed. It might have been at any time during his acquaintance with the plant, which extended over a period of two years, off and on; nor is any evidence introduced by the plaintiff to rebut the testimony of Mr. Neff and Mr. Lang that the crossings were put in good condition. As to what Walshe said of them—"bolts were loose," etc. Mr. Neff said: "No doubt there were some loose bolts in those crossings. \* \* \* I have never seen one that was absolutely tight or free from vibration, and I doubt whether I ever will see one" (fol. 630).

The 8th requirement, filing reports, was performed. Of this no question was raised.

The Railway Company, therefore, had substantially performed all of the requirements of the Commissioner's order devolving upon it, or had provided a practical and effective substitute, to question the value of which no evidence was produced.

b. Even if these requirements had not been virtually carried out, such omission would furnish no ground,

on the facts of the case, for a presumption that the Commission refused to accept for that cause.

(a) The circumstances all negative such an idea. Everyone was well disposed to the Signal people. Major Wathen was lenient, and, though insisting on his rights, was willing to give them every opportunity to bring the plant up to standard. Mr. Lang was friendly—almost too friendly, perhaps—because he seems to have created in the minds of the Signal people an idea that they could make an ell out of the inch of leeway given them. As for Mr. Thompson, whose kindness is now repaid by the covert innuendo that he was a former railroad engineer himself, and colluding with the railroad people to cheat the plaintiff (how, it might be asked, could he have fitted himself for his position except by practical railroad experience?)—Mr. Thompson was, as we have seen, interceding with the railroad management in behalf of plaintiff, and to avoid the forfeiture. It was from kindness to the Signal Company that Mr. Thompson did not report adversely in November, 1904,—a report which would have resulted in condemnation of the device for its own defects.

(b) The nature of these requirements that fell upon the Railway Company, go to prove the same thing. Their object was not to improve the interlocking or to assist its workings as a device, but merely to improve the general conditions at the locality, in the interest of traffic in general, and of public safety. As Major Wathen said, in one of his letters to Mr. Salmon (page 338), “Telephones do not belong to interlockers”; and as the Court said at the trial, on the objection of counsel for plaintiff to the question by counsel for defendant, “Did it (the telephone) make the interlocking plant work any differently?”

“THE COURT: \* \* \* It is competent if they show what the defects of the plant were and while this was ordered *it did not affect the integrity of the plant at all*” (fols. 479, 480).

Mr. Lang's answer explains the purpose of the order :

“The effect it had was just to give the towerman a little bit of notice ahead of the approach of a train. The towerman could see a train a good ways off, but if he had direct information that a train is going through a signal, it helped him a little bit to keep another switching crew or somebody else out of the yard, but otherwise it didn't affect the plant at all.”

(c) The positive evidence in the case also negatives the contention that it was because the telephones, &c., had not been installed that the plant was not accepted by the Commission. Mr. Thompson, in his letter to Major Wathen of November 14, 1904 (page 304), the statements of which were sworn to, makes no protest whatever, nor even mentions that the Railway Company was preventing his recommending acceptance ; but he clearly shows that the demerits of the plant were such as to require complete revision before the idea of approval could be entertained. The same is true of his talk with Mr. Everman, asking for more time for the Signal Company to experiment. His report of August 9, 1907 (page 293), recommending final condemnation, positively states (page 295, fol. 1180) :

“The conditions imposed by your order of July 7, 1904, have only been partially carried out, but the features of your order which have not been completed would not now be considered material to the question of final approval or rejection of the plant.”

And again (page 300, fol. 1200) :

“I don't believe that it is practicable to reconstruct the present device upon the system now used in its operation so as to secure what

might be considered a first class plant, entirely safe for the operation of trains."

Nor may the plaintiff argue that this does not express the reason of the Commission. Two of the three gentlemen then commissioners have deposed in the action, and their testimony makes it quite evident that with respect to technical matters, Mr. Thompson was the Commission, so to speak; and that in this case they acted on his opinion and recommendation. Governor Colquitt, formerly Commissioner, said (fol. 348):

"My action as a member of the Railroad Commission was based upon the report of our engineer, who, under the direction of the Commission had investigated the interlocking device at Texarkana, and conditions surrounding same, and reported to the Commission his findings. Under a different state of facts, he being an expert, I would have been influenced by his recommendation, for I had full confidence in him."

And the Hon. Allison Mayfield, Chairman of the Commission said (fols. 333, 337):

"We accepted as true the report of the engineer, Mr. Thompson.

"The engineer's reports speak for themselves, and the Commission's action was based thereon."

There can be no doubt, therefore, that the opinion which Mr. Thompson constantly entertained, that the plant contained inherent defects which prohibited his making a favorable report, was the reason why the Commission never accepted it, and finally condemned it. It never passed the experimental stage, or demonstrated that it had any real or practical value.

(2) The defendant did not, by any other act or default, prevent the plaintiff from complying with the conditions of the contract, and making the plant such as to be accepted by the Commission.

It has been seen that the plaintiff's contention that

the reason for the plant's not being accepted was non-performance by the defendant of certain requirements in the order of July 7, 1904, is entirely without foundation. But the plaintiff also adheres to the old assertion of Mr. Salmon that the defective condition of the track and the fact that the wiring was underground, were reasons for the failure, and relieved the Signal Company of the necessity of procuring the approval of the Commission. How unsound is this contention will be seen by a brief glance at the evidence and its bearing on the obligations of the parties.

The condition of the track and the presence of cinder ballast in nowise excused the failure and defects of the plant.

It is an elementary principle of law, too well established to require more than mere mention, that when a man contracts to produce a certain result, the fact that surrounding circumstances make that result unexpectedly difficult or expensive in nowise relieves him of the obligation of full performance of all promises and conditions. Here the express conditions were drastic and onerous—particularly that it should “work perfectly and satisfactorily in every respect.” But that was the plaintiff's undertaking assumed with full knowledge of the situation at Texarkana. It knew that the line of the Texarkana and Ft. Smith was constructed of light rail, and that the second and third tracks of the Cotton Belt were also of 56-pound rail. It knew that the only gravel ballast was on the Texas and Pacific, and that there was much cinder ballast, for Mr. Ellis went upon the ground, and the company was furnished with sections of the rail, to which they had to adapt certain parts (fols. 880, 1390).

But, of course, to examine conditions was only the part of common prudence, neglect of which would not excuse. If it is true, as Mr. Dodgson testified, that in cinder ballast and some kinds of ground sulphuric acid forms, which rots insulation on wires buried in such ballast, Mr. Dodgson also testified that he knew those facts at the time. And the Signal Company was the

author of the specifications, which contemplated underground wiring, and provided that it should be run in wooden trunking. The intimation in Mr. Cade's letter of December 15, 1904 (there is no evidence on the point), is that the State law required underground wiring. Why the wiring was underground has nothing to do with this case. The simple fact remains that the plaintiff contracted to build a plant with underground wiring, and a plant that would work perfectly and satisfactorily; and yet, on March 1, 1905, when the plaintiff claims that the plant was completed, the wiring was torn up and exposed over the entire plant (fol. 712), and there had been fusing of wires and other wire troubles, beginning the preceding June and marked by increasing frequency to that day.

There is not a shred of evidence that those troubles were unavoidable, with proper construction. It is a matter of common knowledge that wires and cables have been run under ground and under water for many years before this contract; and this life has been reasonably long. They do not re-lay the ocean cables every year; nor is the vast underground system of New York City frequently re-wired. The Signal Company could have used pipe conduits or other means to protect the wiring, if it had chosen. Mr. Thompson required such conduits on the new plant (fol. 1191). The real situation, however, was obviously this. The company made a very low price in order to get this new system, still in the experimental stage, installed. It planned for cheap work, which would pass inspection and last a year. That would give it opportunity to test out its devices under practical conditions, which it needed. As Mr. Thompson said (fols. 400, 401):

“ The construction of the device in general had not at this time had the advantage of practical operation in other situations, and its weaknesses had not been discussed. As a whole, it was an experiment, and naturally failed in many places, which, however, might have been strengthened had the benefit of experience in other situations

been secured. The successful construction and operation of such devices of this character is necessarily the outcome of experience, which affords opportunity to re-design, rearrangement, and the strengthening of many parts entering into the construction of signals, switch movements, etc., to meet the needs of practical operation."

No more blame attaches to the defendant on account of track conditions than on account of the cinder ballast. The track conditions here were, as Mr. Neff pointed out, rather better than the ordinary in the Southwest. The Texas and Pacific line was of heavy rail, and so was the Cotton Belt's main line. Other all-electric interlockers were working under similar or less favorable conditions. And they were all known to plaintiff before the contract. They were accepted. No protest was entered, no objection made, no condition that they were to be improved was inserted in the contract, nor was defendant requested to alter them until Mr. Thompson had, for the second time, refused to accept the plant. Then the plaintiff began to cast about for some excuse for the ill workings of the plant.

Track conditions were, however, only connected with the interlocker's failure in respect the operation of the track circuits protecting the crossings. These, it will be remembered, had been substituted at the request of the Signal Company for the original detector bars. No responsibility could attach to the defendant for them. They were a more delicate device than the detector bars. As Mr. Lang put it, "The least little thing throws them out." They required a perfectly insulated section of track. It might work very well under such conditions as prevail on New York Central main line, for example; but obviously, prudence and good judgment would indicate that such a device should not be installed in the usual yard in the Southwest, when a mechanical contrivance like the cross-bar would have fulfilled the same function.

The whole position of the plaintiff may be summed up very succinctly; since it had not been able to carry

out its contract and build an interlocking device that would be adopted to conditions on defendant's railroad, it devolved on defendant to rebuilt its railroad to adapt it to the plaintiff's device—a modest and reasonable proposition!

5. *Defendant never waived the conditions precedent nor accepted the plant.*

In the case of a chattel sold (the argument has heretofore proceeded on that assumption by the plaintiff, though it will subsequently be shown to be wrong) not less than in the case of improvement to realty, the question of acceptance is one of intention, and that is a question for the jury. The general principle is well expressed by SCOTT, J., in

*Harrison vs. Scott*, 120 N. Y. Suppl., 377 :

“Acceptance, however, where no element of estoppel intervenes, is a question of intent. Frequently the acts indicating acceptance are so unmistakable and unequivocal that the acceptance follows as a matter of law; but when it is sought to infer acceptance from the manner in which the vendee has dealt with the property, the question is generally one for the jury.”

It is to be noticed that the leading cases were all before the court, and the opinion is a well considered one; and it is believed that no case will be found where this doctrine has not been followed, and, where the issue was submitted under proper charges, the verdict was not upheld.

The defendant at no time, by utterance or act, gave plaintiff the slightest reason to believe that it had waived performance of all conditions or had accepted the plant; but on the contrary gave repeated and unequivocal notice that it would insist on all conditions being fulfilled and the plant being made good. Everything that happened goes to prove non-acceptance. On July 14, 1904, when Major Wathen wrote to Mr. Ellis, enclosing a copy of the report of the Commission of

July 7, and warning him that all matters requiring correction must be done promptly or the plant would be condemned (page 325). On September 29, 1904, replying to a letter containing a statement of account (the only bill that was ever sent), Major Wathen pointed out that the plant had not been accepted, and would not be paid for until acceptance; that another inspection of the plant would soon be made, and "if it is rejected it devolves on the Pneumatic Signal Company or its successors to make it good or remove it" (page 350).

Then occurred Mr. Wuerpel's examination and recommendation for improvements, his request for another inspection, which occurred November 12, 1904, when the plant was very unsatisfactory to Mr. Thompson that he was ready to condemn it "right now," but suggested that a considerable time be given for further experiment and reconstruction. Mr. Wuerpel assured them that he would recommend Taylor devices (fols. 1301, 273, 175, 522, 590, 534, 388, *passim*).

Two days later, Mr. Thompson wrote to Major Wathen describing the defects in the plant (fol. 1213) and saying that if required to report at that time he would have to recommend condemnation. He suggested compromise.

In December Mr. Cade's visit, with the meeting at Dallas, and the understanding that the plant was to be made good; the Cotton Belt yard changes to be made; the plant to be adapted to these changes and the work and materials for doing so to be paid for as an extra; no inspection to be asked for until all these things were completed, and payment to be made after inspection—conclusively estopped plaintiff from claiming that defendant's use of the plant implied acceptance, until, at least, plaintiff had performed everything agreed upon and had demanded an inspection.

The whole period from December, 1904, to February, 1906, was taken up in getting the Cotton Belt tracks relaid with heavier rail and the changes in the yard made. The Cotton Belt acted without delay as soon as it could get the rail, and had completely

finished in May, 1905; but nothing was done by the Signal Company toward bringing the plant to an acceptable condition.

It is incredible that the Signal Company could have supposed that the plant could be made to pass without radical improvement, in view of Mr. Thompson's outspoken criticism, based not on the condition of the plant, which "toning up" would remedy, but on its inherent defects, which required drastic revision; and when the Signal Company refused to go on and complete the changes in the Cotton Belt yards, "until some definite understanding has been reached in regard to settlement of the original contract" (fol. 1625) it was natural that Major Wathen should remind them, in his letter of April 24, 1905, that the inspection, on which payment depended, was being deferred for them to correct the defects; and that if this was not satisfactory they could consider the plant as theirs (page 329).

It took until July 5, 1905, to concoct a reply to this plain statement of alternatives. Then Mr. Salmon wrote, quoting a letter to him from the Pneumatic Company, which was an elaborately prepared case, based, however, on misinformation and misstatement, and on the theory, shown above to be fallacious, that the Railway Company was responsible for non-acceptance, because of the tracks, ballast and failure to comply fully with the order of July 7, 1904 (page 330).

Major Wathen, in reply (on July 8, 1905), pointed out the errors of fact in Mr. Salmon's letter, and repeated the agreement with Mr. Cade, repeating that the plant would not be paid for until accepted; and further answered, on July 20, taking exactly the same position (pp. 396, 338). Referring to Mr. Wuerpel's letter of August 21, that new material would not be furnished until an understanding was reached as to the payment on the old contract; he denied that that was the understanding. He concluded:

"We will not ask for inspection before the new work is installed, and the plant stands condemned to-day."

Whatever doubt there might be as to the attitude of the Signal Company before this, Mr. Salmon's letter in reply (July 27, at page 341) unquestionably is an acquiescence with the stand taken by the Railway Company, and especially with the last clause in the Major's letter. He was ready to go ahead and complete the work on those terms.

Meantime a letter from the Major (July 28, p. 343) stating that Mr. Thompson was dissatisfied with the plant, and inquiring what the Signal Company intended to do, brought from Mr. Salmon a repetition of his attempt to throw the blame of the specifications for underground wiring on the Railway Company, but declared himself willing to renew that portion of the wire which was badly installed.

The quarantine delayed progress until late in the autumn; then Walshe could not be sent until February, 1906; then there was some misunderstanding about his arrival which caused several more weeks of delay. Then there was the misunderstanding about the Post Pipe Works spur (explained in the introductory statement) which had no real bearing on the relations of the parties, but greatly exacerbated them, and led to Mr. Wuerpel's threatening to withdraw Walshe (March 24, 1906, p. 367) to which Major Wathen replied that it would be entirely satisfactory for the Signal Company to do nothing more; for the plant stood condemned, and if removed a good one could be put in by some one else (March 26, 1906; page 370). "Kindly advise me how soon you can take all your stuff away." On April 10 he repeated his notice to remove the plant (page 326). On April 17, alluding to the defective wiring, he said the plant would never be approved until rewired (page 377); to which Mr. Salmon replied (April 21) accusing Major Wathen of misstating facts (page 378), and again (April 23) in a cooler mood, casting the responsibility on the Railway Company for the underground trunking and consequent condition of the wiring (page 380). The same day Major Wathen wrote that nothing had been done to improve the plant, and on April 27 (page 383) he

reviewed the whole affair, the reasons why clemency had been shown, and the failure of the Signal Company to take advantage of their opportunity to make the plant acceptable. He concluded with the alternative he had so consistently offered throughout the controversy—that the Signal Company should either remove the plant or make it to conform to the agreement. He ended :

“ The plant will be accepted by the Railroad Commission’s Engineers before we will accept it, and there is no need for further correspondence about the matter.”

It is submitted that in this evidence there is not the faintest shadow of a suggestion that the plaintiff had waived any condition, or had displayed the slightest intention of accepting, or had done anything from which acceptance could be implied, or by which an estoppel to assert non-acceptance could arise. As EARLE, C., said in

*Underwood vs. Farmers’ &c. Co.*, 57 N. Y., 500, 505 :

“ Unless there is some consideration for a waiver, or some valid modification of the agreement between the parties which contains the condition, I think there can be no waiver of a condition precedent, except there be in the case an element of estoppel.”

The defendant’s position had been absolutely clear, unequivocal and definite throughout. *Make good or remove. The condition of acceptance by the Commission will be strictly enforced.* That position was reiterated time and again. If the plaintiff did not act on either of those alternatives could the defendant be held responsible? If the plaintiff was not sufficiently interested in the plant to take it away, certainly it must be deemed to have abandoned it. The burden of

removing it should not be placed on the Railway Company. That would be true even though there were no forfeiture provision in the contract.

*Fisher vs. Goodrich*, 70 N. Y. Suppl., 38.

With that provision (fol. 1101) that, failing acceptance, the work done and materials furnished should be forfeited to the Railway Company as liquidated damages, the right of the defendant to retain the plant and do with it as it saw fit cannot be impugned.

It is believed that the case nearest to this to be found in the New York reports is that of

*Cooke vs. Underhill*, 64 Hun, 407; *Affid.* 138, N. Y., 610,

which, except for the forfeiture provision, almost exactly parallels the case at bar. The plaintiff had put in an engine with guaranties of satisfaction, etc. After using it several months, the defendant, having made tests, wrote that it was not giving satisfaction, and asked plaintiff to remove it and three months later repeated the request. The plaintiff replied: "There are two reasons why the engine does not satisfy you, and for neither of these should we be held responsible" (exactly as Mr. Salmon, in his letters of August, 1905, disavowed responsibility for the wiring failures on account of the wires having been laid underground in cinder ballast, and the other failures which he laid to poor roadbed, light rails, etc.) The defendant replied that it did not comply with the contract and was not satisfactory, and later wrote that it was subject to plaintiff's order and risk.

The trial judge refused to charge the jury that "if they proved that the defendant never intended to and did not, in fact, accept the engine, the verdict should be for the defendant." He left it to the jury to say whether this use was of such a character as to constitute acceptance of the engine. On an appeal

from a judgment for the plaintiff, this was held error. VAN BRUNT, P. J., said (p. 109) :

“ There was no pretense that the defendant had no right to claim that it could be taken out, because they had accepted it. \* \* \*

“ In view of this correspondence it is difficult to see how the mere uses of the engine during this period could be or was looked upon by either of these parties as an acceptance thereof.”

It was held that there was no evidence of acceptance, and that compliance with the contract and the obligation of defendant to accept was the only question which should have been submitted. The judgment was accordingly reversed, and the reversal sustained by the Court of Appeals.

It will be seen that the reasoning of the Court exactly fits the case at bar. In all this correspondence there is no word suggesting that defendant had accepted Mr. Salmon alleged performance, or excuses for not performing. He impliedly admitted that if the Signal Company had not fulfilled its contract, or if its excuses for the plant's not working well were not valid, no payment would be done. Not a word was written implying that there was any waiver on the part of the defendant of the conditions of the contract, or any acceptance through its use of the plant. As far as any definite attitude of plaintiff (or of its agent, the General Railway Signal Company) can be discerned from the correspondence, they stood to the last on defendant's having prevented performance by failure to comply with the requirements of the Commission's order of July 7, 1904, and also by not having abolished the cinder ballast, &c. Nor does any suggestion of this contention that defendant had accepted the plant appear anywhere in the case until the plaintiff's request to be allowed to go to the jury on that issue, after the direction of a verdict at the first trial. Up to that moment the idea had never occurred to any one that the

defendant had accepted and was liable on that count. It was clearly an afterthought; a desperate attempt of resourceful counsel to save an apparently hopeless situation; and the refusal of the request was sustained by the Court of Appeals. Only by subsequent amendment of the complaint did the issue enter the pleadings. Surely if the doctrine of estoppel is to be invoked in this case, it can properly be invoked to bar the plaintiff from taking a position so inconsistent with all it had said and done up to the end of the first trial.

Every circumstance negatives the plaintiff's contention that use of the plant was an acceptance. It was not a case of use merely, or use with objections against nonfulfillment of conditions, as in the case of *Brown vs. Foster*, 108 N. Y., 387, cited by plaintiff. Here defendant did not confine himself to objections. Its declarations were positive and frequently reiterated that defendant did not accept; and would insist on the Commission's approval before payment. The plaintiff had the alternative of removing the plant if it did not chose to carry out its contract. To give it the notice to remove or make good was all that could be required of defendant; for certainly it could not be required to assume the expense of removing the plant from the right of way with the doubtful chance of being able to recover in an action against the plaintiff—a foreign corporation with its domicile two thousand miles away; and, moreover, a corporation which had confessedly divested itself of all its assets. When it did not act on this notice to remove the plant (and in this connection it should be remembered that this system had been commercially abandoned; the evidence is that only two other such plants were ever constructed, and the General Railway Signal Company supplied Taylor devices exclusively, because they were cheaper (fols. 983, 984); and, further, that the Railroad Company found no use for the parts when they took the plant out)—the necessary and inevitable inference is that plaintiff abandoned what it itself regarded as worthless junk, and the theory of abandonment is strengthened by the forfeiture clause in the

contract, by which it could not have removed the plant except with the consent of the defendant.

B. THE CONTRACT HERE WAS FOR AN IMPROVEMENT OR ADDITION TO REALTY, AND SUBJECT TO THE RULE THAT USE THEREOF BY THE OWNER DOES NOT IN LAW IMPLY WAIVER OF CONDITIONS PRECEDENT AND ACCEPTANCE BY HIM.

1. *The rule that where the contract is for improvements to the realty, use and occupation of the premises and the improvements do not imply waiver and acceptance by the owner, is well established.*

The leading case in New York is that of

*Smith vs. Brady*, 17 N. Y., 173,

where Judge COMSTOCK laid down the rule which has never been questioned :

(p. 189) "The law does not adjudge that a mere silent occupation by the owner himself amounts to a waiver, nor does it deny to him the right so to occupy and still insist upon the contract. The question of waiver of the condition precedent will always be *one of intention*, to be arrived at from all the circumstances, including the occupancy."

(p. 185) "I am confident 'that no case can be found in which the building contractor's right to recover has been maintained on the ground that the owner by the mere possession and occupancy of the building has waived the condition of performance."

See, also,

*Mack vs. Snell*, 140 N. Y., 193, 198.

*Spence vs. Ham*, 27 App. Div., 379, 383.

*Logan vs. Consolidated Gas Co.*, 107 App. Div., 385.

*Vanderzee vs. Herman*, 13 N. Y. Supp., 164.

*Wells vs. Selwood*, 61 Barb., 238.

*Underwood vs. Farmers', &c. Co.*, 57 N. Y., 500, 505.

*Bozarth vs. Dudley*, 15 Vroom, 304, 308.

In the last-mentioned case it was said :

“ Mere naked occupation of a building erected on land of the owner does not, of itself, waive the special contract *unless the possession be coupled with some act or some language* from which acceptance and acquiescence may be reasonably inferred.” (Italics supplied.)

2. *The rule that use does not imply waiver, covers mechanical appliances which on installation become fixtures.*

The leading case exemplifying this rule is

*Hartupee vs. Pittsburg*, 97 Pa. St., 107,

where the plaintiff had contracted to build and install pumping engines in connection with the defendant's water works, to the satisfaction of defendant's engineer. After delays, extensions of time, and an accident to one of the engines due, apparently, to the fault of both parties, the city took forcible possession of one of the engines, and used it as part of the water works. The court held that this act did not constitute acceptance or the waiver of any right of the defendant, the distinguished Judge MERCUR saying (p. 118) :

“ An engine erected on the land of the city is not like a portable article that might have been thrown back on the hands of the manufacturers. Having become attached to the land of the former, it became the property of the city.”

The principle has been widely recognized. Thus, in

*Williams vs. Thrall*, 101 Wis., 337,

where defendant retained and used a furnace in his house which failed to produce the specified degree of heat, CASSODAY, C. J., said :

Counsel contends that when defendant ascertained that the furnace failed to perform, as

stipulated, he should have rescinded the contract, or requested plaintiff to remove it himself and replace it by another. But there is nothing in the contract requiring the defendant to do any of those things, nor to do anything else except to pay as agreed, upon complete performance. It does not appear that defendant ever waived its right to such full performance."

In the case of

*Manitowoc, etc., Works vs. Manitowoc Glue Co.*, 120 Wis., 1,

plaintiff had contracted to furnish and install a boiler having 150 per cent. of the capacity of defendant's old one. After it had been installed and connected, it proved to have a capacity less than the old one. Defendant continued to use it. It was held that such use did not constitute acceptance,

DODGE, J., said (p. 8):

"Doubtless the fact, unexplained, that defendant made use of the boiler, which had been built into its boiler house and connected with the steam pipes in its factory, is an evidentiary circumstance having some tendency to show acceptance, but such conduct is by no means conclusive when a party cannot forego use of the appliance without at the same time giving up the use of his own premises."

See, also,

*Payne et al. vs. Amos & Co.*, 110 La., 750.

*Levy vs. Schwartz*, 34 La. Am., 209, 214.

*New York, &c., Co. vs. Springfield Elevator Co.*, 56 App. Div., 294.

3. *The interlocking plant became a part of the realty on installation, and so subject to the rule that use does not imply acceptance.*

(a) The language used by the parties in the contract and by the plaintiff in the complaint shows that the plaintiff has always regarded this as a contract for an

improvement in real estate, and not as a contract of sale.

It is very significant that in this contract there is nowhere a word implying the sale of a chattel. The whole instrument is one for labor and materials—precisely the same provisions as in a contract to build a house. In the preamble it contracts to “*perform all the labor and furnish all the material necessary to install the Pneumatic Signal Company’s interlocking system on the railroad of the party of the second part at Texarkana, Texas, for the control and operation of numbered derails, switches and signals*” (fol. 1086). It agrees “to provide all necessary fixtures and appliances” (fol. 1087) (just as builders would, for a house), and that “the materials and apparatus to be furnished and labor to be performed” shall be in conformity with specifications, &c. (fol. 1088); to replace “any part or parts of the apparatus and material furnished” which should prove defective within a year (fol. 1091). Payment is to be made “for all that the party of the first part shall have furnished or done” (fol. 1100); and finally, if the plant is not accepted by the Commission, the “work done and material furnished” are to be forfeited as liquidated damages. It is submitted that this in every respect exhibits the characteristics of a building contract, and none of those of a contract for the sale of chattels, and should be so regarded by the Court.

The complaint shows that counsel for the plaintiff took the same view, until, on the first appeal, that theory of the nature of the transaction was found to seriously endanger the plaintiff’s case. The complaint alleges that defendant’s plans “for *changes, alterations and additions* in and to the defendant’s said railroad” were approved by the Commission (fol. 13); that by the contract “plaintiff undertook and agreed to make a *portion of said changes and additions*” (fol. 14); that “plaintiff made the *changes, alterations and additions* to said railroad (fol. 16); that “defendant agreed to pay the said plaintiff for the *work, labor and materials performed and furnished*”; that *payment was*

“ conditional upon the *work* and *materials* so furnished and performed by the plaintiff and the *alterations, changes* and *additions* made by the plaintiff being accepted ” (fol. 20). And so the complaint continues, using the same phrases continually, in folios 21, 22, 23, 24 and 26.

These phrases, it is submitted, aptly and exactly describe the object of the contract—by furnishing labor and materials to make alterations, changes and additions in realty—to wit, a railroad; and that plaintiff cannot now be heard to say that it was a contract for sale of a chattel.

f. An interlocking plant fulfills every requisite of a fixture.

What those requisites are may, perhaps, since the Texas law would apply in a case involving fixtures in that state, be best ascertained by quotation from the opinion of the leading case on the subject in that state. In

*Keating & Co. vs. Marshall Electric & Co.,* 74 Texas, 605,

it was found “ impractical to separate poles, wires, lamps, and other attachments from the lot and improvements thereon ” and were held to be realty. HENRY, J., said :

“ The weight of modern authorities establishes the doctrine that the true criterion for determining whether a chattel has become an immovable fixture consists in the united application of the following tests :

“ 1. Has there been a real or constructive annexation of the article in question to the realty ?

“ 2. Was there a fitness or adaptation of such article to the uses or purposes of the realty with which it is connected ?

“ 3. Whether or not it was the intention of the party making the annexation that the chattel

should become a permanent accession to the freehold, this intention being inferable from the nature of the article, the relation and situation of the parties interested, the policy of the law in respect thereto, the mode of annexation, the purposes or uses for which the annexation was made.

“ And of these three tests pre-eminence is to be given to the question of intention to make the article a permanent accession to the freehold, while the others are chiefly of value as evidences as to this intention.”

Tested by these criteria, the case at bar is clearly a permanent fixture. (1) It had a real annexation to the realty : switch machines were firmly bolted to ties : signal poles were set in permanent, concrete foundations ; wiring and trunking were in the ground ; the engine was bolted to a concrete foundation in the tower. (2) There was (or, rather, it was intended that there should be) a fitness or adaptation of the plant to the uses and purposes of the realty to which it was connected—the improved operation of a railroad. (3) It was undoubtedly the intention of the Railway Company to make the plant a permanent accession to the freehold. It was not an article of furniture or merchandise, to be moved about at will. It was constructed with relation to functions to be performed in this one place. As a whole it could not be removed. Some of its disconnected parts might conceivably have been used elsewhere, if another plant on this system could have been found ; but so, when a house is wrecked, the plumbing, bathroom fixtures, even its very bricks, are often used over again ; but that does not negative the intention to make them permanent when they were installed.

Moreover, it was not only adapted to use with this particular piece of realty, but it was itself changed to receive the plant. Special long and heavy ties were inserted to carry the switch machines. Rails were cut to admit derails. The old appliances for throwing the switches were removed. Grading was done, ditches

dug for the trunking, and the tower was built to house the interlocking machine and the power plant. All these were substantial changes in the realty itself.

Many cases are found in the books, where machines, though firmly attached, were held not to be permanent fixtures, and with good reason; for there was no intention in installing them, of attaching them permanently, nor have they any special adaptation to the realty. A tenant, for example, may remove almost anything he puts in, if getting it out does no serious damage to the property. The reason is, of course, lack of intention to affix permanently.

It will be observed in the Keating case that the fixtures were of a nature very similar to those in the case at bar—though the case at bar is stronger. There were wires in each case, but here they were under ground, making more permanent attachment. The poles correspond to the signal poles—except that the latter were more solidly attached, having concrete foundations; and the lamps, to the various appliances—switch machines, for example; except, again, that the switch machines here were more solidly attached and more intimately connected with the realty than were the lamps in the Keating case; for the machines were bolted to special long ties which were put into the railroad as a foundation for them, and were attached to and moved switch points—part of the realty. The analogy seems unescapable, and that alone should make the Keating case an unanswerable authority for defendant's legal proposition, that in Texas this plant was part of the railroad, and hence real property.

See, also,

*Ice &c. Co. vs. Lone Star Boiler Works*, 15  
Tex. Civ. App., 694.

With respect to attachments to the property of a railroad company the rule is well settled, and is applied broadly: all such attachments become real property. Indeed, rolling stock was once in this state held to be

realty, and still is in many states. The law of railway fixtures was settled on this state by the case of

*Bement vs. Plattsburg & Montreal R. Co.*,  
47 Barb., 106,

where Judge SUTHERLAND, in holding that rolling stock was not a fixture, applied this test :

“They cannot properly be said to be fixed to the track ; they can be lifted off the track and put on again, by simply overcoming the law of gravitation, and without any injury to the track or rails. They are not stationary and are not intended to be.”

Hence, whatever is attached to the roadbed with the idea of its permanently remaining there, becomes a part thereof.

The test applied in

*People vs. Commissioners*, 101 N. Y., 323,

was that a “ structure adapted to sustain ” the railroad or to “ facilitate or protect its use ” was a part thereof.

In

*Porter vs. Pittsburg Steel Co.*, 122 U. S.,  
267,

a bridge which, by contract with the builders was to belong to them until paid for (an attempt at constructive severance) was held to become a part of the realty and the prior mortgagee's lien to cover it. In the same relations of the parties, rails were held to become part of the realty in

*Galveston, &c., Co. v. Cowdray*, 11 Wall.,  
459,

which would seem to establish for Texas, the *locus* of that cause, the doctrine that attachments to the realty of a railroad company for the purposes of “ facilitating or protecting its use ”, become real property.

**III. The Court made no error in charging that the reports of the good condition of the apparatus, made by Mr. Ayres, was no evidence of acceptance and waiver of the condition of the contract.**

The plaintiff's argument against this charge (fol. 1058) is that these statements constituted an admission that the plant was working properly, and also that it was approved by the plaintiff's agents and servants. The flaw in this argument is in the assumption that in characterizing the condition as "good," the defendant admitted that the *operation* was good. If this Court will examine these reports, it will be seen that the formal report on a printed blank furnished by the Commission tells but a small part of the story. To many, if not to all of these filled-out forms, was attached one or more, and generally several, pages of supplemental report, which tells the story of the operation, its failures and defects as they manifested themselves during the month. The reports thus on their face show that the word "good" was not a characterization of the operation. It did not mean that it was a good plant or that it was working well. It simply referred to the *condition*, in the strict sense of the word. The plant was being maintained in the best possible condition. To illustrate: suppose a man in narrow circumstances but with good mechanical ability should purchase an antiquated automobile, of inferior design and workmanship. The machine might never operate well. He might never go to ride in it without suffering minor annoyances—missing explosions, pre-ignitions, carbon deposits from imperfect carburetion and combustion. Frequently he might be stalled and the machine might break down, on account of defective parts and weakness from poor designing. Yet if he was a painstaking man and gave the machine much care, kept it clean, and well oiled, and saw to it that every break was im-

mediately repaired, he would be entitled to describe its condition as "good;" and if there was a government officer to whom he was responsible for the *condition*—that is, keeping the thing up as well as possible, considering the device with which he had to do—he would be pretty likely, in a report to such officer, to take a favorable view rather than otherwise of the results of his own efforts. It is significant that the entries "good" begin about the time when Walshe, the Signal Company's man, who had been in charge for nearly a year, was leaving and turning the plant over to the Railroad Company under the theory that it was completed; and the natural inference, in view of the hard and faithful work of the Railroad Company's maintainer, and the other men, would be that they were all doing their utmost to keep the impossible affair in the best possible shape.

The charge is to be considered, of course, in the light of all the evidence, and the reports themselves with their supplemental sheets. Interpretation of language and its effect, in its context and setting, is clearly a function of the Court; and the trial Justice correctly interpreted this word in this place not as an admission of good operation or of approbation of the device by the employees and minor officials of defendant; but as referring to just what it purports to refer to, the condition of the plant; its good maintenance, proper repairs of broken wires and parts, &c. Hence these entries had no relation to the issue of acceptance, and the charge was correct.

It might be added, in further justification of the ruling—if any were needed—that what minor employees said or thought about the plant would not constitute an admission that could be introduced in evidence against the defendant, in the well recognized principle that admissions can only come from authorized agents.

**IV. The rulings of the trial Court on the objections mentioned in Plaintiff's brief, Point III., were proper and correct.**

1. *The admission of the testimony by Mr. Neff that there were no delays since the new plant had been installed, was proper.*

By the contract the plant was to work "perfectly and satisfactorily." By necessary implication, as shown above, the plant was to be a good, practical plant. If there were delays of a serious nature, as Mr. Neff had testified, they go to demonstrate the non-fulfillment of those conditions. But it might be argued that delays were inherently unavoidable in that situation. The fact that another plant did avoid them disposes of such argument. The question of merit, moreover, is always comparative. This plant could not be judged by itself alone, but in relation to the standard fixed by plants, generally.

The plaintiff introduced no evidence of poor maintenance after it had "completed" the plant. The evidence, on the contrary, shows the *maintenance* to have been good—though, of course, the defendant did not pretend to correct defects for which plaintiff was responsible.

The testimony, taken in its setting, was clearly admissible on the issues.

2. *The admission of Mr. Thompson's testimony (fols. 395-402) was proper.*

The subsequent admission of the reports cures the inadvertence of not putting them in before—an inadvertence arising from the fact that they were attached to the very deposition being read.

These reports belong to a class of evidence well recognized as an exception to the hearsay rule—statements made in the course of duty, which are admissible where it is not possible to procure direct testimony, the witness having died, being out of the jurisdiction, &c. No case is known where the point has been covered by the higher courts of this state;

but in other jurisdictions the point has been well considered and the evidence admitted.

*Nelson vs. Bank*, 69 Fed., 805 (C. C. A.).  
*Northern Pac. R. Co. vs. Keyes*, 91 Fed., 47.  
*U. S. vs. Venable Co.*, 124 Fed., 267.  
*Mayer vs. Brown*, 130 Mich., 449.  
*Chisholm vs. Machine Co.*, 160 Ill., 101.

In any event they have sufficient probative value to serve as a basis for the opinion of an expert, the opinion to be taken for what it was worth.

In view of the fact that the very reports objected to were used by the plaintiff as the basis of elaborate deduction by its own expert, as to maintenance, cause of failure, &c. (fols. 999-1004), objection thereto would seem to have been waived.

3. *It was not error for the Court to permit the witness Thompson to testify that the design of the plant and its functions was imperfect and in an experimental stage.*

Mr. Thompson's testimony on this point was admissible for at least two reasons :

As pointed out in Point I. *supra*, it is an implied condition in every contract that the thing furnished shall be a reasonably good thing of its kind, adapted to the purpose for which it was supplied. Here the plaintiff impliedly agreed to put in a good, workable plant which would last a reasonable length of time and give good service, and the use of which would not be prohibited by the Commission. Mr. Thompson's opinion as an expert that it did not fulfill these conditions, was clearly admissible on this issue.

His opinion was also communicated to the Railway Company, and had a very material bearing on the attitude it would adopt toward the plant. It also corroborates the judgment of the Company that the plant was of slight value. It was admissible, therefore, on the question of intention and the issue of acceptance.

4. *The testimony of Mr. Thompson in folios 279-281 was properly admitted.*

His saying that the device was never approved by him was only a general statement serving as an intro-

duction to much specific testimony of his dissatisfaction. It is simply a general denial of the performance of a condition precedent, which it was incumbent on plaintiff to prove affirmatively.

The same is true of his testifying that the Commission never approved. It was in evidence that the Commission acted with respect to this plant only on the reports and recommendations of Thompson. This condemnation was put in evidence. It might have been argued that the Commission had previously accepted. He simply negatives that idea.

5. *The testimony of Mr. Thompson beginning at folio 301 in which he described the defects of each machine, was competent and properly admitted.*

The position of plaintiff here is extraordinary. In plaintiff's opening case evidence was introduced tending to prove that this was a good plant, and operated well. Mr. Thompson, an acknowledged expert, who had inspected the plant three times, and watched its operation through reports duly filed, was put on the stand to controvert the plaintiff's evidence, and testified as to specific defects in specific machines. He did not pretend to testify as to his opinion at that moment, but told what the trouble had been all along—showing convincingly that the plaintiff's had not substantially performed—an issue on which it was clearly admissible.

6. *The explanation by the members of the Commission that they based their final order on the report of Mr. Thompson, their engineer, and that they were guided by him, was competent and its admission proper.*

One of the issues in the case is that the Commission's refusal to approve the device was because the Railway Company had not fully carried out the order of July 7, 1904. Mr. Thompson stated that those features of the order which had not been carried out would not be deemed material (fol. 1180). It might be argued that the Commission took another point of view. This testimony shows that in this matter they were simply registering Mr. Thompson's opinion, and rebuts the argument by inference, that because these

items were not literally complied with, it follows that that was the ground on which the plant was condemned. True the Commission could only *act* as a body; the question is not what they did, but why they did it. The plaintiff does not rest on what they did—for doing so he would be out of court on this issue. It goes behind the order that condemned the device, and draws an inference as to why they did it. This inquiry being opened, it was surely open to defendant to rebut the inference by the testimony of a majority of the Commissioners, showing that the condemnation was solely for inherent defects in the plant, which they found on Mr. Thompson's report.

8. *The ruling of the Court at folio 1019 was proper.*

The plaintiff's counsel asked Mr. Wuerpel if the trunking was different at Texarkana from that at Fort Worth. The answer was "not materially." The testimony was clearly inadmissible. The issue was not what kind of trunking was used, but whether it was adapted to place where it was laid. There is no evidence that conditions were the same. The undisputed fact is that it was a wreck in a few months—long before March 1, 1905, when the plaintiff says it "completed" the plant. The testimony was not relevant to any issue.

There is no comparison with the admission of Mr. Neff's testimony that all-electric interlocking plants of other makers worked well on light rail in other yards. The claim was distinctly made by plaintiff, and the issue tendered, that the light rail was the cause of the failures, and the Railroad Company therefore to blame. It is a legitimate way of rebutting this argument to show that light rail where traffic conditions were as heavy or heavier, did not cause failures in other plants, and thus create the inference that this plant was at fault.

9. *The testimony following folio 700, to which plaintiff's counsel objected, was competent and proper.*

It is a little difficult to ascertain just where the first year after installation, provided by the contract, began

to run. Plaintiff seems to take the position that it began in February, 1904, although it does not allege that the plant was completed until more than a year later. It would seem that the time of acceptance should be the proper date. Defendant could hardly be benefitted by replacements of defective parts before the plant was delivered and the contract completed! The testimony of Atkinson and Cullums, however, to which plaintiff objected, was not directed to show a breach of the provision in the contract, to supply parts which proved to be defective within a year; but to show that the plant would not stand reasonable wear and tear, and how its operation was constantly faulty to the end, on account of defects and design and poor workmanship and material not well chosen with reference to the work it had to do.

**V. The judgment and order appealed from should be affirmed, and the appeal dismissed.**

Respectfully submitted,  
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STATE OF NEW YORK.

# Supreme Court

APPELLATE DIVISION—FOURTH DEPARTMENT.

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PNEUMATIC SIGNAL COMPANY,  
*Appellant,*

against

TEXAS AND PACIFIC RAILWAY  
COMPANY,  
*Respondent.*

## REPLY BRIEF FOR APPELLANT.

MEDCALF, AVERILL & TOMPKINS,  
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### I.

The respondent's first point (P.42) is that the verdict should be sustained upon the issue that there was a failure of substantial performance.

It is true that such issue is raised by the answer. That, however, was not the issue which was submitted to the jury, the court not only

did not submit the issue of performance, but charged that there was a failure of performance; and then submitted to the jury the question as to whether there was an **acceptance** of the plant by the defendant. (Fol. 1048). Appellant is not urging on this appeal that there was a performance of all the conditions precedent, but takes the position unqualifiedly that there was such an *acceptance* of the plant that waived these conditions.

## II.

Respondent's Point II contains the following propositions: 1. (P.47). The contract contained five conditions precedent to recovery. 2. (P. 48). None of these conditions precedent was performed. 4. (P.61). No default of plaintiff's prevented acceptance by the commission.

None of these propositions are pertinent to this appeal. They are neither affirmed or negated by appellant. The one issue submitted to the jury being, that of acceptance of this plant by the defendant. The only question on appeal (so far as the weight of evidence is concerned) is, was the verdict of the jury against the weight of evidence upon this one question of acceptance?

## III.

Respondent's third proposition under Point II, A, (P. 57) is that on March 1st, 1905, plaintiff could not have recovered.

Plaintiff does not claim that it could have recovered on that day. Respondent apparently misunderstands appellant's position, which is this: On March 1st, 1905, plaintiff claimed that it had fully performed its contract and the supplemental Dallas agreement and was on that day entitled to pay; that it repeatedly notified defendant that it had fully performed its contract on March 1st, 1905; that the use of said plant after March 1st, 1905, by defendant in view of repeated notifications that plaintiff claimed full performance, was an acceptance.

#### IV.

Respondent's Fifth proposition, (P. 69) under Point II, is that defendant never waived the conditions precedent, nor accepted the plant.

It says that the question of acceptance is one of intention and that it is a question for the jury, quoting *Harrison v. Scott*, 121 N. Y., Supp., 377, in support of the proposition. It is true that acceptance is generally a question for the jury as decided in this case. Appellant's position is not that the court erred in submitting the question of acceptance to the jury, but that the verdict of the jury was against the weight of evidence.

Respondent then asserts, (page 69) "that defendant at no time by utterance or act gave plaintiff the slightest reason to believe that it had waived all conditions or accepted the plant." The answer to this is found in the language of Judge Danforth in *Brown v. Foster*, 108 N. Y., at page 392, where he says,

~~"It is true the vendee said, 'I will not accept,' but this was of no consequence, when~~

“It is true the vendee said, ‘I will not accept,’ but this was of no consequence, when after an opportunity to inspect, and with full knowledge of its quality, he still not only retained the machinery, but enjoyed the benefit of its use. That act was one of ownership and completed the transaction.”

On page 73, respondent quotes from Major Wathen’s letter of April 27th., “that the plant “will be accepted by the Railroad Commissions’ “Engineer before we will accept it, and there is “no need of further correspondence about the “matter,” and then argues that this evidence shows there was not the faintest suggestion that defendant had waived any condition or done anything from which acceptance could be implied. Major Wathen’s letter was in reply to Mr. Salmon’s letter of April 23rd, (Ex. 59) in which he says (page 382) that although the State Engineer might refuse to accept the plant until the wiring is renewed, that his refusal would have no bearing on the question as to whether the plant should be paid for. This shows conclusively that defendant was using the plant and continued to use the same with full knowledge that it was expected to pay therefore, whether accepted by the commissions’ engineer or not. Under these circumstances that the vendee said “I will not accept” was of no consequence, it still not only retained the machine but enjoyed its use. It was an unequivocal act of acceptance which no word of defendant’s own could qualify.

Respondent cites (P. 74) *Cook v. Underhill*, 64 Hun 407, affirmed 138 N. Y., 610, in support of

this Fifth proposition that defendant did not accept the plant, as being nearest like the case at bar found in the New York reports. The respondent, however, has overlooked several facts which show that the case was materially and vitally different from the case at bar. The plaintiff's contract to install an engine provided, "We guarantee to give satisfaction, or to take it out at our expense." After the engine had been installed some time, defendants claiming dissatisfaction on November 30th asked plaintiff to remove it; and again on February 28th absolutely rejected it. Between these dates there had been correspondence between the parties as to the engine, and the defendant had continued to use the same to some extent. The Trial Court submitted to the jury the question whether this user constituted an acceptance of the engine, but refused to charge that if they found the defendant never intended and did not in fact accept the engine, the verdict should be for the defendant. The General Term held that upon the *conceded* facts of the case the question of acceptance should not have been submitted to the jury, saying;

"In fact, up to the very time when the correspondence ceased and the user of the engine ceased, it was conceded upon the part of the plaintiffs in their letter that there had been no acceptance, and they were negotiating with the defendants for the purpose of getting them to accept."

The two features which distinguish this case from the case at bar are as follows: First, the contract provided that the vendor, if the engine did not give satisfaction, should take it out at its

own expense. Second, the court found that up to the time of the final rejection and user of the engine, that the plaintiff *conceded* there had been no acceptance. These features distinguish the case absolutely from the one at bar.

## V.

The respondent urges, Point Two, B, page 77, that the contract in question being for an improvement to realty, it is subject to the rule that the use thereof by the owner does not imply acceptance by him.

On this Point three propositions are urged in support of the same. The first proposition, (P. 77) is, that where a contract is for the improvement to realty, use and occupation of the premises and the improvements do not imply waiver and acceptance by the owner. Several cases are cited in support of this proposition, but no case goes further than to hold that the "mere "silent occupation" of a dwelling by the owner is not an acceptance of such dwelling or of any integral part thereof.

*Smith v. Brady*, 17 N. Y., 173, the leading case, was an action brought on a contract to erect three cottages which the owner claimed did not conform to the plans and specifications and the court held that the "mere use and occupation" of the buildings unattended by other circumstances was not a voluntary waiver of the conditions precedent.

*Mack v. Snell*, 140 N. Y., 193, does not apply at all, as that was the case of a contract of bail-

ment, where material was furnished by the defendant to the plaintiff to be made into pruning shears.

*Spence v. Hamm*, 23 A. D. 379, was a case of a house, like *Smith v. Brady*.

*Logan v. Consolidated Gas Co.*, 107 A. D. 385, has no application whatever, as the action was brought to recover for the erection of a gas tank which while being subjected to a thirty day water test exploded; and the contract contained the provision that the builder should repair all loss by accident.

*Vanderzee v. Herman*, 13 N. Y., Supp., 164, is an action brought to recover for window sash, which did not conform to the specifications. They formed a part of the building, use of which it was held was not a waiver or acceptance of the window sash.

*Wells v. Selwood*, 61 Barber, 238, was an action upon a breach of express warranty, and does not apply.

*Underwood v. Farmers, etc. Co.*, 57 N. Y., 500, was an action upon a life insurance policy and has no application.

*Bozarth v. Dudley*, 15 Vroom, 304, the last case cited, holds, that, "Mere naked occupation of a building erected on land of the owner does not, of itself, waive the special contract."

## VI.

Respondent's second proposition on this point is that the rule that use does not imply waiver,

covers mechanical appliances which on installment become fixtures. (P. 78).

Several cases are cited in support of the proposition, none of which supports there same, except possibly the Louisiana case. *Hartupee v. Pittsburg*, 97 Penn, 107, is cited as the leading case and the quotation given apparently supports the rule. The quotation, however standing alone does not show correctly what was held. Plaintiff had agreed to erect an engine for defendant under a contract which provided that "All materials furnished by the plaintiff upon which advances had been made, should thereupon become the property of the defendant city." The defendant finally took possession of this engine under a claim of forfeiture; and the court held that under the contract it had a right to take possession as owner and that a limited use of the engine did not waive its rights, saying:

"An engine erected on the land of the city is not like a portable article that might have been thrown back on the hands of the manufacturer. Having become attached to the lands of the former it became the property of the City. No right was waived by taking possession and using them to a *limited extent*. This conclusion is strengthened by the terms of the contract. They substantially declare that all materials on which advances may have been made shall thereby become, as far as acceptable in other respects, the exclusive property of the City \* \* \* \*. Thus in view of the large advances made by the city it had a right of property and of

possession which it might assert without waiving any of its rights, and without any presumption that it thereby released the plaintiff from the fulfillment of his obligations specified in this contract.”

*Williams v. Thrall*, 101 Wis., 377, does not support the proposition. The question of implied acceptance by use was not in the case. Nor does *Manitowoc etc., Works v. Manitowoc Glue Co.*, 120 Wis., 1, support the proposition. The boiler installed by the plaintiff had less than the contracted capacity. The court did not hold that user of this boiler was not acceptance, but merely that it was not *conclusive* evidence of acceptance, saying that user “is by no means conclusive when “the party cannot forego use of the appliance “without at the same time giving up the use of its “own premises.” The case at bar certainly would not come under this rule as the defendant railroad in order to use its tracks at Texarkana, was not obliged to continue to use the interlocking plant installed by plaintiff from March 1st, 1905, to June 1st, 1907. If it could get an order to take out the plant in 1907, it certainly could have done so prior to that time.

The case of *Levy v. Swartz*, 37 La., A. 209, apparently supports the proposition. The court held that the use of a cotton press on brick foundations did not imply acceptance thereof, although the vendee had actually expressly accepted and paid for the same. The rule as laid down by this Louisiana Court is certainly in direct conflict to the rule as stated and applied in the courts of this State, the Federal Court, and also

the courts of the other States. The rule, that the continued use of machinery with a knowledge of its defective condition is an unequivocal act of acceptance, has been applied repeatedly to large and ponderous machines which have necessarily been attached to the freehold and became a part of the real property.

In *Chambers v. Lancaster*, 3 App. Div., 215, the machinery was a stone crushing plant.

In *Hospital Supply Co. v. O'Neil*, 51 Supp. 792, the machinery was a laundry plant.

In *Callahan v. O'Rourke*, 110 A. D. 799, the machinery was an immense ice plant erected at the cost of about \$100,000.

In *Hercules Iron Co. v. Dodgworth*, 57 Fed. Rep. 556, the machinery was an ice plant.

In *Otis Elevator Company v. Headley*, 81 N. J. L. R. 173, the machinery was an elevator.

In *Dennis v. Stroughton*, 55 Vt. 371, the machinery was a cider press.

Unquestionably an ice plant, a laundry plant, an elevator become as much a part of the real property to which they are affixed as did the switch machines, the signal machines and the controlling machine that were installed by the plaintiff and used by the defendant for the purpose of actively operating the switches and signals at the railroad crossings in Texarkana.

Should it be argued that this machinery upon being affixed to the freehold, thus became the property of the vendee; and *that* therefore its use does not imply acceptance; the answer is that the contract itself negatives the idea that the machinery was to become the property of the defendant upon its being affixed to the roadbed, for the reason that the contract specifically provides (Fol. 1101) that in the event that the plant did not work satisfactorily the materials should be forfeited to the defendant. If the parties had contemplated that the machines upon installation should become a part of the defendant's real property, and thereby its property absolutely, this forfeiture clause would have been wholly unnecessary.

## VII.

In view of the foregoing, respondent's third proposition (P.79) that the interlocking plant became a part of the realty upon its installation, is immaterial and any discussion as to the legal nomenclature applicable to the interlocking plant is futile and unnecessary. Machinery affixed to the freehold is still machinery and not a building, irrespective of whether its legal status is personal property or real property.

The whole difficulty and weakness of respondent's defense to this action is, that it is attempting to evade the legal results of its continuous use and operation of this plant, by finding fault with the quality of the material and the labor, instead of standing upon the express warranties in the contract of good workmanship

and good material and the agreement to replace defective parts, and making this alleged breach of these warranties the subject of a counterclaim in this action. As was stated in *Callahan v. O'Rourke*, 3 A. D. 779, a case brought to recover for the construction of an ice making plant, in which the court held that use constituted acceptance, that "Acceptance however, did not waive "any defense based upon specific warranties." Also in the case of *Hercules Iron Co. v. Dodge-worth*, 57 Fed. Rep., 556, former President Taft says:

"The court \* \* \* charged the jury that the course of the defendants was an acceptance of the machine under the contract, which made the defendants liable for the contract price, but that they could recoup from that price damages of two kinds. 1st, the equivalent of the sum required to cure defects in the machine as described by parts in the contract, and 2nd, the differences between the value of the machine producing the amount of ice per day it could produce and its value if it had been a twenty-five ton machine."

The defendants having overlooked and mistaken their remedy, are now simply trying to dodge the issue of acceptance; and apply the rule which uniformly has been limited to the *silent occupation* of a dwelling, and never applied to the *active operation* of machinery.

### VIII.

Respondent's third Point (P. 85) is not an answer to appellant's Point II that the court erred

in admitting the bunch of reports made by defendant's employees, (Ex. 74), and also erred in refusing to let the jury consider portions of these reports as evidence of acceptance.

Instead of justifying the competency of these reports as a whole, on behalf of defendant, and the incompetency of the division engineer's characterization of the plant as against it, respondent merely discusses whether the word "Good" applied to the condition of the plant, or its operation. This goes merely to the probative weight of the testimony, which was for the jury. The reports were offered by defendant upon the express ground that they showed its intent in using the plant. They were admitted by the court, over plaintiff's objection and exception, for the express purpose of showing "What the company "was doing and what intention it had." The court, after charging the jury that acceptance was a question of intent, to determine which the jury could consider what the defendant *said* and *did*, and also the probabilities, then, upon the request of respondent's counsel absolutely precluded the jury from considering how the defendant's own division engineer had, during the three years and more that this plant was being used, characterized the general condition of the plant in his reports, which were forwarded to the Railroad Commission of Texas, as being one of the things which the defendant said and did, from which the jury might infer an intent to accept the plant. In other words, as the case was submitted to the jury, they could find that these reports evidenced an intention to reject the plant, but they could not consider them as the slightest

evidence of an intention to accept! This had the practical effect of directing a verdict against plaintiff.

Respectfully submitted,

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