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PROCEEDINGS

ARBITRATION

BETWEEN THE

WESTERN RAILROADS

AND THE

**BROTHERHOOD OF LOCOMOTIVE
ENGINEERS**

AND THE

**BROTHERHOOD OF LOCOMOTIVE
FIREMEN AND ENGINEMEN**

Submitted to Arbitration, under the Act of July 15, 1913
By Agreement Dated August 3, 1914

CHICAGO, ILLINOIS

March 10-March 18, 1915
Testimony Nos. 65-72 Pages 6537-7391

Vol. 8

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IN THE MATTER OF THE
ARBITRATION
between the
WESTERN RAILWAYS
and
BROTHERHOOD OF LOCOMOTIVE
ENGINEERS
and
BROTHERHOOD OF LOCOMOTIVE FIRE-
MEN AND ENGINEMEN
under the Act approved July 15, 1913, by agree-
ment dated August 3, 1914.

Chicago, Illinois, March 10, 1915.

Met pursuant to adjournment at 10:07 o'clock A. M.

Present: Arbitrators and parties as before.

Mr. Stone: Mr. Chairman, I desire to make a correction. On page 6527, near the middle of the page, I am quoted as saying: "But with these men on the O. W. R. & N. Co., and these men in San Francisco, I think you will find that this is fairly representative of the lay-overs of the men." It should read "with the exception of these men."

The Chairman: Are there any other corrections? If not, proceed.

Mr. Stone: Are you through with the cross-examination of Exhibit 80, Mr. Sheean?

Mr. Sheean: There are one or two questions I would like to ask about that, Mr. Stone: I think I jumped in and asked some questions before you were through with the direct.

Mr. Stone: You were asking questions when we closed last night.

W. JETT LAUCK was recalled for further examination, and having been previously sworn, testified as follows:

Mr. Sheean: I just wanted to ask you, Mr. Lauck, about your conclusion with reference to these lines you speak of on page 2 and page 3, in which you point out that a large number

of miles have been built in Arkansas and Oklahoma and Texas, where traffic must, of necessity, develop gradually, over several years, and where the returns, of necessity, will be small for quite a number of years; where the productivity of these new lines will be less than established lines for a number of years; is it your thought that here should be any difference in the wages of the men on those lines?

Mr. Lauck: No, sir: I think you would have to take a different attitude there, not base it upon their present productive efficiency, but upon the idea that they were working on lines now unprofitable, but which in the future would be profitable. It would be something like the man on the extra board, with irregular employment.

Mr. Sheean: Well, as to those lines you refer to, which were built under the mistaken ideas as to the economic justification for them, where there is neither present nor future prospect of productivity, based on any sound economic law, did you make any difference as to the wages of the men there?

Mr. Lauck: No, sir. The point we would hold there would be that the man was not responsible for the mistake in the location of the line. So long as it was a going concern, or the public thought it should be operated, the man should be paid commensurately with his services.

Mr. Sheean: Well, in fixing his wages on that line which had neither present nor potential productivity, would the wage fixed on that line be influenced or affected at all by the productivity on other lines which have neither present nor potential productivity?

Mr. Lauck: You mean from the standpoint of the arbitration, or the standpoint of general consideration?

Mr. Sheean: I suppose the arbitrators will have to act on general considerations.

Mr. Lauck: Well, I think he should receive the going wage, but he would not have any ground, from the standpoint of productive efficiency, for participation or an increase, because there would not be any productive efficiency to participate in. He should receive what would be considered a going wage for like services on other lines for the work he performed, I should think. He would not have any ground, according to the principles of productivity, to participate further than that.

Mr. Sheean: I think you say the wages on those lines should not be less than on other lines?

Mr. Lauck: They should not be less.

Mr. Sheean: Should the wages on the other lines be greater? That is just putting it the other way.

Mr. Lauck: In a case of this kind, it seems to me we are hampered in considering that, on the ground that we have a great number of lines, and have to consider them as a whole. Therefore, I would have to say that the men on such a line should have equal consideration with other men. If it was just a question as to a man's productivity, as compared with another line, of course he would not have a claim for the same wages.

Mr. Sheean: Then as to these lines possessing neither present nor future productivity, you think the wage should be fixed entirely irrespective of any question of productivity?

Mr. Lauck: It would have to be, yes.

Mr. Sheean: Merely measured by the work performed?

Mr. Lauck: The work performed, as compared with similar work on other lines; but in a concerted movement of this kind, under the conditions imposed, I suppose we should have to give the men the same consideration as any other men.

Mr. Sheean: But, as to that line, the question of productivity cannot enter into the fixing of a man's wage.

Mr. Lauck: Not in the line by itself, no, sir—or it could not enter in, because—I think the assumption there would be that if that man was on another line that was built in a fore-sighted way, he would earn so much. Therefore, he is entitled to that much on the unproductive line. From the standpoint of the line itself, of course, his services would always be unproductive.

Mr. Sheean: And being always unproductive, without either present productivity or the hope of future productivity, his wage must be measured merely by the work performed.

Mr. Lauck: As compared with other lines, yes, with what he could do elsewhere; in view of the fact that capital would also be unproductive probably on the same line. The same considerations would apply, that is, if you give capital a return.

Mr. Sheean: I do not follow you as to giving capital a return.

Mr. Lauck: Capital on this same line would be unproductive presumably. If the design could be accomplished, the capital would be given a return—it should be given a return in the same amount that it could secure elsewhere.

Mr. Sheean: Is it your view that capital should be given a return on lines which were built under mistaken ideas as to the economic justification for such lines?

Mr. Lauck: I should think that if the line was built through mistaken judgment, but was properly built and properly managed, if the public required that line to be operated, the public should pay for a return on the capital investment. Otherwise the line could be abandoned, could it not? Of course, I do not think that would work out, but—

Mr. Sheean: If it would not work out, I think I will not pursue it any further, Mr. Lauck. That is all.

Mr. Stone: Mr. Lauck, would it not be possible to have a line through a certain part of the country that never did pay operating expenses, which yet might be a splendid investment from the viewpoint of some great trunk line that wished to keep out a competitor?

Mr. Lauck: Yes.

Mr. Stone: Is it not a fact that a number of these subsidiary lines are held, not because of their great earning productivity, but because of the strategic position that they occupy, preventing the invasion of territory by some competitor?

Mr. Lauck: I think that is true in certain cases.

Mr. Stone: Now, regarding this second and third tracking, it might be possible for a road to have so much business that they could not handle it economically on a single track, and yet when they built this second track it would not be anywhere near the normal capacity of the two of them, might it not?

Mr. Lauck: Yes, sir, that is the idea that I am attempting to put forward.

Mr. Stone: Back of all that, should the wage earner be taxed for all the sins of omission and commission, when he has nothing to say about the expenditures that are made for the road?

Mr. Lauck: No, sir, he is not responsible for the capital outlay, of course.

Mr. Stone: And he has nothing to say about how it shall be laid out or paid out?

Mr. Lauck: No, sir.

Mr. Stone: Then it should be unfair to hold him responsible or make him pay the losses incurred by any mistakes of capital, would it not?

Mr. Lauck: Yes, sir.

Mr. Stone: If there is nothing further on this, we desire to offer Exhibit No. 81, Mr. Chairman. "Expenditures for Additions, Extensions and Improvements of Property."

(The document so offered and identified was received in evidence and thereupon marked "Employees' Exhibit No. 81, March 10, 1915.")

Mr. Stone: This is an analysis of Exhibit No. 6, presented by the Conference Committee of Managers of the Western Territory.

Mr. Lauck: This Exhibit No. 81 is a critical analysis of the Exhibit No. 6, prepared by the Bureau of Railway Economics, relative to additional capital investment during the period 1910 to 1913, I think.

Mr. Burgess: Before proceeding, Mr. Lauck, may I ask the question if the facts that this exhibit contains are not set forth on page 1 of your exhibit?

Mr. Lauck: Yes, sir.

Mr. Burgess: Page 1 of your exhibit exemplifies the following data, contained in this exhibit, is that right?

Mr. Lauck: Yes, sir. That gives a brief review. It is not my intention to go into the detail of the exhibit, because it is largely a matter of technical accounting, but to point out briefly the points of difference that we noted in our examination of the exhibit.

Mr. Stone: Well, Mr. Lauck, I think it is hardly necessary that you state what you have found.

Mr. Lauck: In other words, I could not present the exhibit in detail without reading all the text. It is a matter of technical accounting, and I will point out briefly what the points are that we wish to make, and submit the detail so that it can be checked.

Mr. Burgess: The only purpose of the question, Mr. Lauck, was to get an idea of what the exhibit contained.

Mr. Lauck: Well, briefly stated, we found after an examination of this Exhibit, going over it carefully, that we have not been able to make the figures of the Bureau of Railway Economics check with the reports of the railroads to the Interstate Commerce Commission in many instances. And in the second place, that quite a number of errors seem to have been made, which are innocent errors, that is, they have been made both favorable to our side of the contention as well as favorable to the railroads' side of the contention, but these errors seem to reflect upon the general credit of the exhibit, and should be corrected, if our analysis is correct, and for that reason the detail is exhibited so that it may be ascertained whether the analysis made by our man is correct.

Mr. Stone: Mr. Lauck, isn't it conceded by all that the figures here in Exhibit 6 should correspond with the figures filed with the Interstate Commerce Commission?

Mr. Lauck: That is the statement of the exhibit, yes. Based upon those figures. We find, as the result of our analysis, that there has been a net increase in the property investment, or additional property investment, of about from forty to sixty million dollars. Offsetting increases by decreases growing out of what seemed to be errors to us, and the net result of that would be that if revenues would be compared with the annual property investment during this period, it would require from two million to three million more dollars, annually, to meet the additional capital requirements of the railroads. I do not mean to create the impression that any attempt has been made to inflate the capital investment, or additional capital investment, but simply the errors have been made which result in that inflation.

Referring to page 2, the detail there shows that for the Chicago, Milwaukee & St. Paul Railroad, there is an evident overstatement of \$40,000,000 growing out of the acquisition of the Chicago, St. Paul & Puget Sound Lines, in 1913.

In other words, the Bureau of Railway Economics seems, in allowing for the cost of roads purchased by the St. Paul from the Puget Sound, not to have taken into consideration that the improvements made by the Puget Sound prior to its acquisition by the St. Paul were included in the cost price to the St. Paul, and also that the equipment which had been owned by the Puget

Sound lines should have been deducted, along with the cost of road purchased.

If these two points of criticism are correct, it would make a difference of about \$65,000,000 more shown in capital investment than would be justified.

In the case of the International & Great Northern, on page 3, there seems to have been an overstatement of \$2,000,000, due to the fact that allowance was not made for the acquisition of the equipment of the old company by the new company.

In the case of the Colorado & Southern, on page 4, there is an evident error of over \$1,000,000, growing out of the fact that \$1,077,000 of discounts on securities were counted as part of the additional capital investment during this period. That is plainly shown by the note of the auditor of the Colorado & Southern in reporting to the Interstate Commerce Commission. It should be counted as additional capital investment.

In the case of the Chicago Junction Railway, on page 5, there is an evident error of \$2,428,000, due to the fact that the Bureau of Railway Economics counted as additional investment on this road the entire cost of the road and equipment up to June 30, 1913. The investment since June 30, 1907 to June 30, 1913 was only \$213,000, while they counted as additional investment on this road \$2,641,000, which was the entire cost of the road and equipment up to June 30, 1913.

In the case of the San Pedro, Los Angeles & Salt Lake R. R. it would seem that the Bureau of Railway Economics understated the additional capital investment \$1,375,000, as shown by the note at the bottom of the page, taken from the annual report of this railroad, which the Bureau, it would appear, did not take into account. On page 6, in the case of the Chicago Great Western, \$451,000 which was set forth by the bureau as additional capital investment during the period of 1910 to 1913, was in reality a part payment on the old road, as shown by the notes in that report.

In the case of the Soo line, shown in Section 7—

Mr. Stone: Before going to the Soo, that \$451,000 is simply deferred payments on the payment of the old property, is it not?

Mr. Lauck: Yes, sir. Therefore it could not be counted as additional capital investment, but part of the old debts that

were acquired when they acquired the old property at the time of the reorganization.

In the case of the Soo line, the Bureau, in preparing a table, seems, according to our analysis, to have shown \$7,000,000 understatement, which would appear against themselves. That is, there was a credit of \$7,000,000 of additional capital investment which should have been stated in favor of the railroads, but was not.

In section 8, on the Spokane, Portland & Seattle Railway, there is an evident overstatement of \$624,000, due to the failure to take into consideration the equipment acquired when this railroad acquired the Astoria and Columbia River Railway.

In the case of the Illinois Central, there seems to be an overstatement of \$665,000, for the same reason.

Conservatively stated, therefore, and balancing net overstatement against net understatements, and giving the benefit of the equipment on the St. Paul to the other side of the contention, there would seem to be a net overstatement growing out of these errors, of about \$39,000,000, according to our analysis of the annual reports of the Interstate Commerce Commission. And if the revenues in 1910 and 1914 were compared with the additional capital investment, it would place us at a disadvantage of about \$2,000,000 annually, according to our analyses.

It is not, of course, my intention to claim anything but that these were innocent errors, if they are errors, according to our analyses (which we believe they are), and we submit **them** in detail so they may be checked, and because it would be a very significant point, if the revenues are compared with the additional capital investment.

Mr. Shecan: Well, Mr. Lanck, the statement as shown here simply deducted the item 36 in the Interstate Commerce Commission accounting?

Mr. Lanck: Yes.

Mr. Shecan: And your analysis would tend to indicate that in some instances the roads had included as a cost of road purchased, in their item 36, certain items of equipment that should not go in.

Mr. Lanck: No. I think it is perfectly proper to deduct item 36, cost of road purchased; but it seems in a great many instances the Bureau did not also deduct cost of equipment.

Mr. Sheean: Cost of equipment?

Mr. Lauck: Yes.

Mr. Sheean: But the item which we have deducted, which the Bureau shows to be simply item No. 66 in the Interstate Commerce Commission's form of accounting, is in accordance with the reports.

Mr. Lauck: Oh, yes. My criticism is that they did not go far enough and take out the equipment also. That is the main thing.

Mr. Sheean: That is the main point?

Mr. Lauck: Yes.

Mr. Sheean: That, having deducted from their entire capital account the entire item of cost of road purchased, they should also have made deductions of cost of equipment purchased?

Mr. Lauck: Yes. You see, the new road would acquire the old equipment, and in the forms of the Interstate Commerce Commission where item 36 appears, it also shows another item cost of new equipment which had been acquired through security issues, like on the St. Paul; and the Bureau seems to have omitted a number of those, which would amount to about \$40,000,000; and then there were one or two smaller amounts, one or two millions more, growing out of notes from the annual reports, like the Colorado & Southern, which were not taken account of.

Mr. Sheean: This exhibit 6, simply carrying the additional amounts which were expended in these three years, under the uniform accounting methods of the Interstate Commerce Commission, shows this total of over one billion dollars?

Mr. Lauck: That is, for purchased and additional.

Mr. Sheean: Purchased?

Mr. Lauck: Yes.

Mr. Sheean: Now, on our Exhibit 6, deduction was made of the entire item of cost of roads purchased.

Mr. Lauck: Yes.

Mr. Sheean: And your suggestion is substantially that there should also be deducted the cost of equipment?

Mr. Lauck: Yes.

Mr. Sheean: And if the cost of equipment was also deducted, it would reduce the \$666,000,000 which had been put

into the properties in the three years, to \$627,000,000 substantially?

Mr. Lauck: Yes. That is, we want the advantage of the \$40,000,000, if the revenues are compared to show whether or not you have an adequate return on your property investment.

Mr. Sheean: Of course, if the contention be correct, that none of this \$600,000,000 has received returns upon it, it would not make much difference whether it was \$666,000,000 or \$627,000,000?

Mr. Lauck: No.

Mr. Sheean: If the new money put in in the last three years has not received returns.

Mr. Stone: But we do have a right to expect, have we not, that when a high class bureau like the Bureau of Economics puts out an exhibit, it will at least take pains to see that it is accurate? We have a right to expect that, have we not?

Mr. Lauck: Yes. Of course, these compilations are exceedingly difficult, and I do not think we should be too stringent upon the Bureau of Railway Economics.

Mr. Sheean: Because you happen to be a statistician yourself, and know some of the difficulties.

Mr. Lauck: Well, it is exceedingly difficult to make a compilation of this kind. I think errors would naturally creep in.

Mr. Sheean: Substantially, the difference between you is whether or not in getting at the additional investment, there should be deducted merely the cost of road, or in addition to the cost of road there should also be deducted the cost of equipment?

Mr. Lauck: Yes. I think there would not be any dispute about that, that it should be done, and the Bureau has not done it. In addition to that, the Bureau has not taken into account items like securities discounts, which were plainly stated in the report as matters to be taken into consideration.

Mr. Sheean: Of course, it is true, is it not, that taking this extremely liberal way that we did, of deducting the entire cost of road purchased, we do exclude from the consideration certain money items that have actually gone into the property in three years, by adopting the extremely drastic method of wiping out the entire cost of road purchased.

Mr. Lauck: Money items—what would they be? I do not know what money items.

Mr. Sheean: A road built and operated and then sold to another road for an amount of money in excess of the investment carried. The capital account of the smaller road might represent actual money going into the property, and would represent it, would it not?

Mr. Lauck: I do not exactly get that. Do you mean improvements made before the acquisition? I do not exactly understand that.

Mr. Sheean: Supposing a road was purchased whose capital charge as shown here was \$1,000,000. I think you said that the capital of the Southern Pacific, for instance, did not at all represent what its actual capital was.

Mr. Lauck: Yes.

Mr. Sheean: Supposing some other road bought the Southern Pacific Company.

Mr. Stone: You mean the San Pedro instead of the Southern Pacific?

Mr. Sheean: No, I am taking a hypothetical case to illustrate the point I am trying to make with Mr. Lauck. Supposing some other company bought the Southern Pacific Company, and paid its present value as you figure its value. That amount, cost of road purchased in item 36, based on its actual present value, might be a sum very largely in excess of what the predecessor company had as its capital account, might it not?

Mr. Lauck: Yes, it might be.

Mr. Sheean: And that would represent money going into the actual railroad property, would it not?

Mr. Lauck: That would represent a valuation over the original cost, or an increased valuation going into the railroad property.

Mr. Sheean: I thought you had shown some time ago that mere capital had no necessary relationship either to cost or to value.

Mr. Lauck: That is just what I meant to state. If I caught your point, you would have an increased market valuation going into the new property which was not covered by new security issues, or by the consideration paid for it. Which might be true.

Mr. Sheean: Which might be true.

Mr. Lauck: Which might be true.

Mr. Sheean: And in order to eliminate all possibility of that, we have simply taken out all of item 36, the entire cost of road purchased.

Mr. Lauck: Yes. I think that was very proper to do that. But to carry that to its logical conclusion, there should also be taken out, if the revenues of the two companies before the acquisition are compared with the revenues after, there should also be taken out the equipment which was acquired in some way on the roads. Considerable amounts, like \$25,000,000 on the St. Paul.

Mr. Sheean: That is if it was equipment which was reported in some previous carrier's report?

Mr. Lauck: Yes.

Mr. Sheean: If it was a purchase of an interstate carrier?

Mr. Lauck: Yes, sir.

Mr. Sheean: Now, if there was in any of these purchases included any items either to road or equipment which had not previously been reported to the Interstate Commerce Commission by the road bought out, then this method of eliminating all of item 36, excluded items on which actual investment had been made.

Mr. Lauck: Yes, sir. I don't think that would be true of any of these carriers, though. They were all reported beforehand. Of course, the grossest error is including the entire cost of the Chicago Junction Railway as additional investment. That seems to have grown out of the fact that this railroad only made a report, I think, for three years, about the time that some of the stockyard cases were on, and it was evidently, in the preparation of the exhibit, considered an additional capital investment in some way. I don't know how that arose.

Mr. Sheean: Well, Mr. Lauck, why wouldn't that be true as a matter of fact if the Chicago Junction Railway considered itself not an interstate carrier, and did not report to the Interstate Commerce Commission, and during the last three years puts this value of property—

Mr. Lauck: It did not put on that value in the last three years.

Mr. Sheean: What is it?

Mr. Lauck: Oh, you mean it reported it in the last three years?

Mr. Sheean: Reported it; yes.

Mr. Lauck: Well, I don't think you could justify that for the reason that it would not be entitled to return for the last three years on that property which had been accumulating for quite a number of years, would it? I mean there could not be any ground, owing to the fact that it had just begun to report to the Interstate Commerce Commission, that it should have for a period of three years an adequate return on the whole cost of the road, of which it would be considered as additional investment. There would not be any basis to start from to consider.

Mr. Sheean: Well, but I thought that this suggestion that you made here was on the transfer of the Chicago Junction property?

Mr. Lauck: No, sir. That is a different case. They had been simply reporting the total cost of road and equipment. That is different from these other cases. That is, reporting total cost of road and equipment as an additional investment. You see they only spent, between June 30, 1907, and June 30, 1913, about \$200,000, and some way the total cost of road and equipment appears in the exhibit as additional capital investment.

Mr. Stone: It would naturally be supposed, would it not, Mr. Lauck, that when a road like the Milwaukee paid the fancy price they did for the Puget Sound, that the equipment went with it; that it had already been paid for, and it should have been deducted.

Mr. Lauck: Well, they bought the whole thing, but the equipment appears in one item, and the cost of road appears in another.

Mr. Stone: As I recall it, the road cost somewhere between \$29,000,000 and \$30,000,000 and they issued bonds for \$179,000,000 to buy it.

Mr. Lauck: It had a \$100,000,000 stock issue too, I think.

Mr. Stone: The whole thing you aim to bring out by this, if I get your exhibit correctly, is that as you state here on page 6 it would appear "that little attempt had been made to make the table either accurate or reliable?"

Mr. Lauck: Yes, sir.

Mr. Stone: Anything further on this?

Mr. Lauck: No, sir.

Mr. Stone: Mr. Chairman, we desire to introduce Exhibit No. 82, "Analysis of Trade and Industry of the Period 1909-1914 and Outlook for the Year 1915." And I am sure that you will welcome the announcement that this is the last exhibit by Mr. Lauck.

Mr. Lauck: I do not think it is necessary to spend much time on this exhibit. We present it on account of the fact that there has been a great deal of discussion about lean years and fat years during the period 1909 to 1914, and there is a brief analysis in part 1 of the exhibit submitted, taken from the Commercial and Financial Chronicle and other financial publications, showing what the characteristics of the period 1909-1914 were by years, showing the factors that were at work in each year. And during this period 1909-1914 we seem to have had only two really good years, the years 1909 and 1912. Calendar years, I am speaking of now. Other years would be affected by one factor or another, either the European situation or the conditions at home growing out of legislation, or other causes which affected industrial and business conditions, and considering the conditions as a whole, our conclusions there would be that the railroads, in the light of conditions, have done remarkably well to show a net gain in revenue during this period. And if conditions get better, as it is pointed out that there seems to be hope that they will, that revenue gains ought to be much greater than in the previous four years. That analysis is made in sections 1 and 2, and section 3, pages 6 to 8, shows the statistics of trade and commerce from 1909 to 1914, that is, taking up the usual factors or barometries of trades and industries, the banking industry, the production of pig iron and steel, railroad construction, and agricultural crops, and the imports and exports, etc. Then, in sections 4 and 5 are shown the fluctuations in railroad earnings during this period. That extends from pages 9 to 18, and has already been presented in identically the same form in another exhibit. Section 6 shows the earnings of the Steel Corporation and other factors, which would indicate that industries other than railroads had suffered more from recurring periods of depression than the railroads, or, rather, there had

been the same fluctuations in past years. Of course, railroad prosperity or depression is largely a reflection of industrial conditions.

Mr. Byram: Cannot an industry like the United States Steel Corporation offset its losses by adding more profit to its product in good years? The railroad has to charge the same for its products all the time.

Mr. Lauck: Yes, the railroads are at the disadvantage of having fixed rates which they cannot change, except by authority of the Interstate Commerce Commission. Still, the railroads have one advantage as compared with the steel industry—and I don't know that it would not obtain in the steel industry too, for the railroad business is an uncompetitive business, practically, as compared with other industries. While the steel industry may be a noncompetitive industry from the standpoint of the Steel Corporation.

Mr. Byram: You think the railroad business is noncompetitive?

Mr. Lauck: Theoretically it is. Of course there is competition for traffic, but I mean noncompetition from the standpoint of rates. There is no price cutting on railroads.

Of course, there is keen competition for traffic, and I believe we had a discussion in the past about the needless duplication of passenger trains, which added to an element of cost.

Section 7 is a review of public opinion toward the railroads. The first part of that contains comment of a general nature, by representative railroad officials and financial authorities. The second part indicates the change in the attitude of the Federal Government, and the third part shows the changing attitude of state governments to more favorable attitudes. And 4 is the altered trend of public opinion recently. And 5 and 6 have to do with the relations of the investing public to the railroads, which seems to be growing more favorable.

Section 1 I would call particular attention to, because there we have attempted, as I stated at the bottom of page 20: "In order to avoid the possibility of placing too favorable or optimistic interpretation upon these indications, care has been taken in the following pages, to quote the expressions of opinion given by railroad officials, and recognized pro railroad and financial authorities. This exhibit, therefore, reproduces without com-

ment the picture of the altered attitude of the public and of Federal and State governments toward the railroads, as drawn by the railroads themselves."

It is not an expression of opinion from business boomers or persons who want to create optimism, but a great many comments, like those I read yesterday from Mr. Willard and Mr. Rea, showing that they think a change in public attitude and change in conditions has come about, or like Mr. Ivy L. Lee, of the Pennsylvania, which appears on page 22.

Then the next section is Section 8, showing the trend in industrial activities in 1915, as compared with the period of 1909-1914.

Mr. Stone: What page is that on, Mr. Lauck?

Mr. Lauck: Page 37. Pages 37 to 43 are a series of diagrams showing that the trend is now upward. That is, the diagram on page 37 shows the trend of unfilled orders of the United States Steel Corporation, by months, from June, 1913, to January, 1915. That shows a decline up to November, 1914, and a steady upturn since that time.

Mr. Byram: The end of the line, in December, though, was very much below the line in June. It has a long journey to go, hasn't it?

Mr. Lauck: Yes, it is not back to normal by any means, but the downward tendency has been arrested, and we are going up now.

Mr. Park: Mr. Lauck, I heard the highest operating official of the Pennsylvania Railroad say yesterday that they had 90,000 idle cars. How would you reconcile that with the singing of the lark in the East?

Mr. Lauck: I think that would be true, but they probably had 125,000 three months ago.

Mr. Park: No, he states that this is the largest number of cars they ever had idle.

Mr. Lauck: Oh, ever had. My idea is that things are not normal, but that we are beginning to go on and make an upward movement toward normal conditions.

Mr. Park: Do you think past conditions have been rather psychological, or actual.

Mr. Lauck: Oh, actual, yes.

Mr. Park: You don't agree with the President on that?

Mr. Lauck: No, sir. They have been stern realities.

Mr. Stone: If this line on page 37 could have been drawn complete up to date, it would have shown a much higher upward tendency for January, wouldn't it—page 37?

Mr. Lauck: The upward tendency is continuing, yes, sir, I think. We have no figures from February.

Mr. Stone: Well, is it not also shown by your diagram on page 16? Turn to that just a minute. Is not the present season of the year always the low spot, January and February of each year?

Mr. Lauck: Yes, sir. That is clearly shown.

Mr. Stone: That is shown in the diagram for each year?

Mr. Lauck: Yes, sir, along in the fall the business becomes active, and especially in October.

Mr. Stone: October appears to be the highest peak of each time of the year. That is due to the grain movement. And January, February and March are the low spots?

Mr. Lauck: Yes, sir. Those are current. The seasonal variations come in that way; down in the winter; up in the summer.

Mr. Burgess: Well, on page 45, we have a very hopeful statement from Mr. Julius Kruttschnitt. I don't suppose we can dispute his statements, can we, Mr. Lauck?

Mr. Lauck: No. Mr. Kruttschnitt of the Southern Pacific?

Mr. Burgess: Yes. It says Chairman of the Executive Committee of the Southern Pacific.

Mr. Park: I think we are all hopeful.

Mr. Lauck: Well, there seems to be some reason for the hope that is in these men. They express that reason.

Mr. Burgess: Well, Mr. Lauck, Mr. Kruttschnitt would really know more about the situation than some other gentlemen, wouldn't he? And I am speaking now, looking at it from a personal standpoint.

Mr. Park: Yes, he ought to have a very good knowledge of business conditions. I don't know whether he can look into the future very clearly or not.

Mr. Burgess: No, I wouldn't put it that way. But he has a general knowledge of the situation. He would be almost an authority, wouldn't he, in your opinion?

Mr. Park: He would have a very influential opinion, I think.

Mr. Lauck: I have not read any of these quotations, because I did not want to take up the time doing that; but Mr. Farrell, of the United States Steel Corporation, also makes similar statements; and Mr. Vanderlip, on page 48, after a return through the West, saw, according to an interview in the New York Journal of Commerce, signs of returning prosperity, and felt optimistic about the year 1915.

Mr. Farrell, of the United States Steel Corporation, states that "Industrial conditions are fast improving."

Returning to the diagram, on page 38 there is shown the commercial failures, in the same way that the production of unfilled orders of the United States Steel Corporation was shown on the preceding page. There you have an upward trend in the amount of liabilities, which has been due to the heavy failure, I think, of Rumely & Company, during the last month, amounting to about \$30,000,000, which was something unusual, and therefore makes the line go up much more than would be expected, or would under normal conditions.

Then, on page 39, the trend of bank clearings is upward, indicating increased activities in trade, and increased clearances.

Of course, the most remarkable increase is the exports, which is shown on page 40. If the line for January were continued there, it would go over the top of the page. The exports are higher than ever before now, because of the abnormal conditions growing out of the European war.

Mr. Sheean: How about March, if they would continue them in March?

Mr. Lauck: I couldn't say. I don't know what effect the embargo would have on that. It might lead to very serious complications, it was first thought, but it does not seem to be looked upon in that light now.

Mr. Stone: It is very evident from this diagram that the greatest decrease took place between July and the first of August. That was about the time they declared war.

Mr. Lauck: Yes. That is evident from all these statistics and figures, that the real industrial depression began after June, so far as the railroads are concerned, and extended through

July and August and on up through September and October. I hope to show that later by some tables.

Mr. Stone: They dropped right off in July.

Mr. Lauck: Yes. There was an immediate contraction of trade and business.

Mr. Stone: And it is gradually recovering again?

Mr. Lauck: Yes, going up, showing increased activity.

Mr. Park: Mr. Lauck, what does your statistical research indicate as to the conditions following a war. Is it followed by an era of prosperity or by an era of depression?

Mr. Lauck: Of course, there is always an immense destruction of capital in the war. It will be more difficult to get capital after this war is over, and consequently there will not be the activity in the way of new projects and new undertakings that probably would have occurred if the war had not taken place.

Mr. Park: Is it not a fact that immediately after the Civil War there was a very critical business depression covering a somewhat extended period before we began to go ahead again?

Mr. Lauck: After the Civil War, if I remember correctly, there was a kind of boom until 1873, when there was a terrific panic, from which we did not recover until 1879, or somewhere along there. It seems to me there should be great trade activity in this country after the war.

Mr. Park: Along what lines?

Mr. Lauck: To the extent that European countries can borrow capital it seems to me they will come to us, and they will make purchases through the credits established here, to rehabilitate themselves.

Mr. Park: Will they not ask a return from us of the \$6,000,000,000 or \$10,000,000,000 that we have borrowed from them, and use that to rebuild what has been destroyed?

Mr. Lauck: They have already asked for the return of a considerable portion of that, yes. That will be another tendency, of course. We will probably have to liquidate further.

Mr. Park: If we are required to return our borrowed money to Europe, is not that quite likely to restrict us in our progressiveness—particularly the railroads?

Mr. Lauck: I should say it will be harder to get capital. Of course, they will want to establish credits here and will want

also a return of capital, and they will also be bidding for capital, to rebuild and put their countries into order again. There is no doubt that capital will be higher in cost.

Mr. Stone: Suppose they do that, and demand the return of all of it, taking a broad, general view, we might pass a law prohibiting international marriages, and in that way save the constant flow of gold from this country. They have had about \$700,000,000 in the last ten years.

Mr. Lauck: I have never looked into that.

Mr. Stone: I do not know whether that would stand the test of the Supreme Court or not, but as an act of reprisal it might be tried.

But coming back to history, is it not a fact that after the Franco-Prussian war both Germany and France rapidly recovered and had an era of prosperity?

Mr. Lauck: Of course there was a recovery after that, and the indemnity was paid by France quite rapidly.

Mr. Stone: And the history of Germany shows one of the greatest eras of prosperity that the country had ever known after the close of that war, does it not?

Mr. Lauck: Since the close of that war.

Mr. Stone: Since the close of that war.

Mr. Lauck: But, of course, we cannot blink the fact that there never has been a war like this war and never has been such a destruction of capital as is being destroyed in this war. Capital is going to cost more; but it is not going to be as serious as we might be led to suppose.

Mr. Stone: And the natural inferences that labor will have to work harder, to produce more?

Mr. Lauck: I think the thing that will fall upon labor and the average man is that he will have to save more or restrict his expenditures more.

Mr. Stone: He will have to cut down his standard of living, perhaps.

Mr. Nagel: Mr. Lauck, you do not believe that a war such as the foreign war now being carried on can result in economic advantage to us, do you?

Mr. Lauck: No, sir, I do not. I think we will have to pay the price.

Mr. Nagel: The civilized nations are too closely related for any advantage to result to us.

Mr. Lauck: Yes.

Mr. Nagel: We may have an advantage in this or that particular point, but it cannot be made the foundation of a permanent and wholesome commercial development?

Mr. Lauck: No, sir.

Mr. Nagel: And if these foreign countries do make peace, they will not have the resources to draw their supplies from us, and if they succeed it will be by virtue of their own internal national efforts to rebuild what has been destroyed.

Mr. Lauck: Yes. Of course they will also probably ask us to liquidate so far as we owe them.

Mr. Nagel: That is no advantage.

Mr. Lauck: No, sir, that is no advantage. I do not think there is anything in these palliatives for the war. Of course, as you say, there is such a close interrelationship that the burden of it will fall upon us and will have to be worked out principally in the way of capital requirements.

Mr. Nagel: In other words, it is a mistake to indulge the hope that we can build our fortune upon the misfortune of another nation?

Mr. Lauck: Yes, we cannot do that.

Mr. Stone: It will probably have the effect of reducing imports from foreign countries; will it not?

Mr. Nagel: Yes, we may come back to the protective system in another way.

Mr. Stone: The diagram on page 40 of Exhibit 82, shows that our exports are still holding up pretty well.

Mr. Lauck: Of course, at the present time, the European nations are looking to us for all kinds of supplies and food stuffs, and that leads to a great inflation of exports; while the curtailment of trade and industry through their inability to produce leads to a decline of imports to this country.

Mr. Stone: Along with our exports, we are furnishing them with a lot of ammunition and appliances of war with which to kill off one another?

Mr. Lauck: Yes.

Mr. Nagel: That is not a foundation for permanent advantage, is it?

Mr. Lauck: No, sir, that is a destruction of capital.

Mr. Stone: It is a destruction of labor, too, is it not, or of the laboring man who produces labor?

Mr. Lauck: Yes.

Mr. Stone: The laboring men have no quarrel with one another?

Mr. Lauck: No, sir. You may say it is unproductive production and consumption.

Mr. Park: But we are compelled to ship those things or be charged with unneutrality, and possibly get into a war ourselves and spend more.

Mr. Lauck: I hope not.

Of course, so far as increased production in exports takes place, that leads, for the present at least, to increased traffic by the railroads and increased revenue to that extent.

The other two diagrams there, on pages 41 and 42, show a trend toward an upward production of pig iron, both on a daily capacity and on a monthly capacity.

The supporting statistics for those diagrams, in addition to other items indicating the condition of trade and industry, such as the anthracite coal shipments, bituminous coal shipments, dividends and interest payments, and so forth, are found on page 43.

Section IX is referred to by Mr. Burgess, incidentally. That is the outlook for the restoration of prosperity in 1915 as viewed by financiers and others. The general tendency exhibited by these interviews is that the worst has passed in the way of depression of trade and industry and financial dislocations, and that conditions will grow better and better during the coming year.

Section X has to do with the increase in traffic on western railroads, in which it is indicated that western railroads are already feeling the effects of returning prosperity, or an upward turn toward normal conditions.

Mr. Stone: On what page is that?

Mr. Lauck: Page 49, section X.

Mr. Stone: I think you had better read that opening statement.

Mr. Lauck: A brief reference to these statements is as follows:

“President Mudge of the Rock Island, according to the Wall Street Journal of December 12, 1914, predicts that the present winter will be the best his company has ever had, provided there is some improvement in general traffic; and reports that earnings for November were ahead of those a year ago, train loadings for October, November and December being about 100 tons above the average for 1913. The Commercial and Financial Chronicle of December 26, 1914 quotes President Newman Erb of the Minneapolis & St. Louis as saying that the earnings of this railroad for the fiscal year 1914-1915 are the greatest in its history.”

Then in the case of the Salt Lake:

“Financial America of January 19, 1915, reports the present earnings of the Denver & Salt Lake Railroad at \$7,000 per mile with promise of reaching \$10,000 per mile within three years. President J. M. Hanna of the Northern Pacific states that fall plowing was done on a larger scale than usual and predicts that the spring months will bring improved business and better earnings for railroads in the Northwest. Burlington's January loading, according to the Wall Street Journal of January 21, 1915, increased 17 per cent during the first half of January—”

Mr. Byram: You have not got anything about February and March, have you?

Mr. Lauck: No, sir, except in gross operating revenues, which I am going to take up.

It further states that:

“The North Western's revenue loadings during the same period increased nearly 12,000 cars, more than one-third of which was freight from connecting lines. The Union Pacific, while showing a decrease in gross earnings during the last month of 1914, showed an increase in net, according to the Wall Street Journal, of \$259,575. Officials of the Atchison, Topeka and Santa Fe estimated the December increase in gross at \$800,000 and an increase in net of over \$300,000. The loadings of this company for the week ended January 29, 1915, according to Financial America, showed 21,674 cars on system rails, a gain of 2,331 over the same week last year.”

In the same way:

“St. Paul's January loadings, according to the Wall Street

Journal of February 8th, increased 7½ per cent, the most encouraging feature of which was a relatively large gain in miscellaneous traffic. Other railroads reporting encouraging gains are the Missouri Pacific, Colorado & Southern, Denver & Salt Lake, and Mineral Range. Steel rail buying and other equipment purchases by western railroads are developing," as indicated by the Illinois Central purchases, the Burlington, and one or two other roads that I do not recall.

President Hanna of the Northern Pacific, is reported in a New York interview in the Wall Street Journal as saying:

"While I do not look for any boom, I think that the spring months will bring improved business and better earnings for the railroads in the northwest."

Mr. Park: Are these conditions reflected in the reemployment of enginemen and other men out of work?

Mr. Lauck: So far as they affected traffic conditions, I should think so, although I do not know. I should think there were more men employed now than there were in July or August.

Mr. Park: Then there is less cause for complaint on that score?

Mr. Lauck: I should think so; yes, sir. I do not know.

Section XII appears on page 81 and following pages, and consists of a series of quotations and reports showing the resumption of factory operations, the opening of mills and an increase generally in business in the South and West, or in the textile, steel and other industries.

Mr. Stone: How do you reconcile the fact that the First National Bank made such a wonderful showing on that page—81—when business was dull and the bottom was out of everything?

Mr. Lauck: Of course, it might be that in times of depression a bank might very well make abnormally large returns. I think that was characteristic of the situation in 1907; that although there was a panic, and the bankers were under great strain, yet, due to the demand for capital and loans and the increase in commission charges and interest rates, some of the banks made more money that year than ever before in their history.

Mr. Stone: So, if the railroads themselves did not make

as much as usual, the banks which owned the railroads did? Would that be a logical conclusion?

Mr. Lauck: So far as they own the railroads, yes.

Mr. Park: Well, do they own the railroads?

Mr. Stone: They practically control them, do they not?

Mr. Lauck: They control them, I think, but do not own them. They would profit so far as security issues were made by the railroads, which would be a detriment to the operation of the railroads, and to the stockholders.

The significant thing about the steel and textile and other industries is that in the iron and steel industry, which is generally recognized as a fair index of general business conditions, operations have increased from about 40 per cent of capacity in the closing months of 1914 to more than 60 per cent of capacity in February, 1915, with a few of the larger mills being operated at 75 per cent of their capacity.

Mr. Stone: And the automobile factories are working two shifts?

Mr. Lauck: There does not seem to be any decrease in the demand for automobiles, so far as I know.

Mr. Park: There are orders for war trucks to go to Europe.

Mr. Lauck: There have been a great many orders of that kind, yes.

Mr. Park: The Ford people had an order for 15,000, I think, in one order.

Mr. Lauck: It seems to be for war motor trucks and aeroplanes.

Mr. Park: Page 99 of your exhibit shows that the Ford Motor Company has an order of 40,000 motor cars from one of the allied nations?

Mr. Lauck: Yes, sir.

The Chairman: Well, in that instance, as well as in the sale of horses, we have profited from the war, have we not?

Mr. Lauck: We have profited; yes, sir.

The Chairman: We have profited; that is, I say the American people have.

Mr. Lauck: Yes, we have profited in the increased employment of labor and increased earnings of the railroads. Of course, ultimately, it means at the world's loss.

The Chairman: I understand that; but for the time being the farmers have profited very largely, have they not?

Mr. Lauck: Yes, sir.

The Chairman: They have, more so than anyone else.

Mr. Lauck: Yes, and probably will continue to do so.

Mr. Sheean: I see times are good in London, too. According to this, Mr. Lauck, on page 97, according to Sir Felix Schuster, the "financial situation is very satisfactory and money so easy that gold reserve may be endangered by position of foreign exchange. Money is so plentiful that another issue of treasury bills would be welcome."

Mr. Lauck: That indicates that there will not be another financial cataclysm like we had in June, which is a very important influence from the standpoint of this controversy.

Mr. Sheean: There is such a thing as whistling to keep up courage, in very many circles, isn't there?

Mr. Lauck: Well, do you mean that this interview is optimistic?

Mr. Sheean: Well, don't you find ordinarily more optimistic interviews, or interviews about business being good, or looking better, when there is a pretty general complaint of bad times? If times are good, there ordinarily isn't very much appearing in the public prints about the question of times being good or bad, is there?

Mr. Lauck: That is probably true.

Mr. Sheean: The very fact that people are discussing the question of prosperity ordinarily is indicative of the fact that times are not as people would like to see them, is it not?

Mr. Lauck: Oh, times are subnormal now, yes, sir. For instance, like some of the Chicago papers seem to be crying prosperity, when there is no prosperity. But we have attempted to confine these references to representative railroad men or bankers who would not lend themselves to those practices.

Mr. Stone: But, Mr. Lauck, as a rule, the railroads have not been talking prosperity for the last few years, have they? All we have heard of is hard times and hard luck, so that they could get an increase in rates.

Mr. Lauck: The railroads seem to be perpetually up against bad financial conditions.

Mr. Stone: Always have been. They have been ever since I have been making wage schedules.

Mr. Nagel: You have just been quoting a little bit of evidence introduced by railroad men to show that they took an optimistic view of the situation.

Mr. Lauck: Yes, sir, as to trades and revenues and conditions.

Mr. Nagel: So they have not been pessimists altogether.

Mr. Lauck: Well, I meant with the general financial status of the railroads themselves.

Mr. Nagel: You still believe that stock quotations are a true indication of general conditions?

Mr. Lauck: Yes.

Mr. Nagel: Then, why isn't it enough to read the quotations of the Chicago papers today to get a true picture of the situation?

Mr. Lauck: Well, I think that would be correct.

Mr. Nagel: And if we read them at the time the argument is made, we will have still more and later information?

Mr. Stone: Suppose, Mr. Lauck, you read it to them. You have the morning paper there. Read it to them.

Mr. Lauck: You mean as to the railroads' earnings going up?

Mr. Stone: Yes.

Mr. Lauck: The Chicago Record-Herald says that, as the result of a combined statement from the Interstate Commerce Commission showing the results of operation for January, the railroad earnings are going up; it shows that the roads' earnings are growing, after a period of depression, and now compare favorably with those of the year before.

Mr. Park: Does that say anything about the net or gross earnings?

Mr. Lauck: The net revenue per mile in January, 1915, as compared with January, 1914, is \$220 against \$228 in 1914. It is within \$8 of normality, as compared with January of last year.

Mr. Shecan: Well, was January, 1914, normal? I thought that we had concluded, Mr. Lauck, that that year ending June 30, 1914, was an extremely subnormal year.

Mr. Lauck: There was a tendency from the first of the

calendar year to the end, of decline in business and trade, and would be below normal. The seven months from July to January inclusive, show that the revenues per mile gross were \$7,484, the seven months ending January last, as compared with \$8,170 for the previous seven months. And the net revenue per mile, \$2,271 as compared with \$2,415 of the previous year.

Mr. Sheean: And that previous year was an extremely low year, wasn't it?

Mr. Lauck: It was below normal, yes.

Mr. Stone: But, Mr. Lauck, in these statements here that you show on pages 84 and 85, where these different railroads have opened up their shops and put hundreds of thousands of men at work, that is an indication of something more than whistling to keep up courage, is it not?

Mr. Lauck: Yes sir; that is an indication of facts as to increased industrial activity. As far as possible, I have attempted to eliminate simply booming statements, or optimistic comments on what may be done, except from railroad presidents or railroad officials.

Mr. Byram. Isn't the opening of shops to repair locomotives and cars, perhaps an indication that cars and locomotives need to be repaired, rather than any hopeful signs of the future?

Mr. Lauck: Well, of course, there has been a neglect of equipment through the depression, but it indicates an increasing employment of workmen, an increasing growth of purchase.

Mr. Byram: You speak, many times, of a tendency to defer repair to equipment in times of depression, and do you believe that such a condition can be deferred indefinitely? It has to be resumed some time, does it not?

Mr. Lauck: Yes, sir.

Mr. Byram: And may not this resumption that you speak of, be in line with the necessity, rather than with any particular optimism as to the future?

Mr. Lauck: Well, it may be effected by the necessities of the situation. Even in that condition, however, it increases the field of employment and activity.

Mr. Byram: Yes. I was not speaking of that fact as much as I was your construction of the reason for doing it.

Mr. Lauck: Well, it is not confined to repairs. Companies like the International Harvester are re-opening their plants.

Mr. Byram: I am speaking of railroads now. Of course, that is the only industry I know anything about.

Mr. Lauck: Yes, it might be in the case of railroads, an indication that they had to repair their equipment.

Mr. Stone: Mr. Lauck, do you think that a railroad that is proverbially hard up, and lives on a hand to mouth policy from one year's end to another, would spend a lot of money repairing equipment if it does not expect to use it in the near future? Would they put in a lot of money and leave the equipment lie idle?

Mr. Lauck: No, it would be, of course, conditioned on the fact that they were either using it and had to repair it, or expected to use it, and therefore repaired it.

Mr. Park: Mr. Lauck, is not the approaching termination of the standardizing of freight equipment a factor? Railroads that have deferred standardizing their equipment must now do that work before July 1st, or suffer very serious penalties?

Mr. Lauck: I don't know about that, Mr. Park.

Mr. Park: Well, that is one of the laws that the employes have been very active in promoting, changing the brake wheels on cars, and clearances, to the extent of some \$60,000,000, it is estimated.

Mr. Lauck: Is that a national law, or a state law?

Mr. Park: The roads have been struggling under that, and a good many have deferred it just as long as they could, but the termination of the time limit is approaching, and they have got to put on the men to do that work, although many of them consider it unnecessary—a part of it.

Mr. Stone: Are we to understand, Mr. Chairman, from the statement of Mr. Park, that the mere changing of brake wheels to comply with the government standard has cost \$60,000,000?

Mr. Park: I think, Mr. Stone, it is very conservatively estimated that changes in the old cars in the way of clearances and brake staffs and brake wheels, and hand holds, and grab irons, will cost the railroads about \$60,000,000.

Mr. Stone: That is everything, automatic couplers, and air brake equipment?

Mr. Park: No; I think they have the automatic couplers and air brakes. I think that is just the standardization of

freight equipment, freight and passenger equipment, and locomotives, to comply with the laws and rulings of the Commission. A good many railroad men have thought that if that law had been applicable to new cars only, and it had not been necessary to almost rebuild a great many of them, it would not have been such a serious thing. Unquestionably there has been a great expenditure there beyond necessity, from a manager's point of view. That is, he could have taken that \$60,000,000 and put it in automatic signals, or other safety devices, and conserved human life to a much greater extent than he can by making these changes in the equipment.

Mr. Stone: As a practical man, Mr. Park, do you wish to be understood as making the claim that automatic signals will conserve more life than the adoption of safety devices and standard equipment on our railroads?

Mr. Park: No; but I think the putting of a ladder on both ends of a car is rather a luxury. I base that on my experience as a brakeman. If a car came along and I was going to get onto it, and the ladder was not on one end, I would wait for the other end to come along. It seems now you have to have a ladder on all four corners, and all of these refinements, and I doubt very much whether they are going to save many lives.

Mr. Stone: But the fact remains that if these different master car builders could have gotten together and agreed upon some standard years ago, and as the new equipment came out, this heavy expense would not have come at one time on the railroads, would it?

Mr. Park: Well, I think that they did agree, and that it would have been very proper that that agreement should have been applied to new cars as they were purchased. That would have been a condition that would not have imposed a very serious burden on the railroads. But, to go over their old equipment and rebuild it to make these changes, was a very serious expense.

Mr. Burgess: Mr. Park, are you referring now to the laws that have been passed in Congress?

Mr. Park: Passed in Congress, emanating from the Safety Branch of the Commission, as to the changes in equipment.

Mr. Burgess: Well, we can in no way change those laws, and we are not here to pass on their acts, are we?

Mr. Park: No; but Mr. Lauck said the shops were open-

ing up and putting on men, and I called attention to the fact that that might be due to the fact that the limit of the time within which the railroads had to do this work was very rapidly approaching. I know personally a great many of them have not done that. They are behind on it. Now, they must either get an extension, or put on a great many men in the next two or three months, to comply with the law.

Mr. Stone: If you were cutting off cars, Mr. Park, like you used to years and years ago, when you reached in for a grab iron, you would want it there, wouldn't you? You would want something to catch hold of, when you were cutting cars?

Mr. Park: I think that applies more to the prior laws relating to safety appliances. In the restandardization and rebuilding of these cars, I believe they have gone to an extreme.

The Chairman: Was that a law that passed since the adoption of the Safety Law?

Mr. Park: Yes, since the original law.

The Chairman: Well, now, do I understand that in addition to the amount of money expended by virtue of the Safety Appliance Act, that you are still required to make changes that will involve the expenditure of \$60,000,000?

Mr. Park: Yes. Every car that does not have a specified clearance, by reason of its construction, as between the cars, and based on an old and obsolete practice of going between the cars to make couplings, all cars that have not that clearance now, must be rebuilt, a majority, I think it is 24 inches between each car; the brake staffs must be without a weld; the brake wheels must be of wrought iron, instead of cast iron, although it is very rarely that anybody uses the brake wheel. They have got the air to use, to control the trains.

Mr. Burgess: Well, what brought that law around, Mr. Park? Was it not the great number of casualties to trainmen?

Mr. Park: Oh, I don't think so. I think it was rather an ill-considered and ill-advised mixing in with things that might be promoted in Congress and the Legislatures, by the men without consulting with the managers and arriving at a proper and reasonable adjustment of such matters.

Mr. Burgess: Mr. Park, were not the actual figures given to the law makers, as to how many trainmen were maimed and killed?

Mr. Park: I don't think the figures were given to them as to what a like amount of money may have accomplished in the way of steel bridges, instead of wooden bridges, and automatic signals, and interlocking, and such devices as the general managers know full well do prevent accidents and injuries to both the employees and the passengers.

Mr. Burgess: Perhaps not, but the figures were given as to how many trainmen were maimed and killed, and that did have an influence upon the enactment of that law, did it not?

Mr. Park: I think so. I saw one statement where 125 employes were injured during one of these periods, and injured by falling off cars or locomotives standing still.

Mr. Burgess: Yes, but, Mr. Park, you are a very well known operating official, all over the United States, and you don't want to be understood as advocating a position before this Board of Arbitration, I hope, to go back to the old standard of killing and maiming trainmen to save a few dollars for the railroad companies?

Mr. Park: No, but I think the money available in that direction should be spent where it will do the most good, where it will save the most lives, prevent the greatest number of injuries.

Mr. Burgess: Then you are not finding fault with the acts of Congress, but rather as to the wisdom displayed in choosing the channel by which they would expend this money?

Mr. Park: Oh, I think it is quite universally conceded by railroad managers and mechanical officials, that they went to an extreme in this particular thing, and the limit set to do the work was a very serious burden on the railroads during this time of their inability to take on such a burden.

Mr. Stone: As far as the standard equipment is concerned, Mr. Chairman, the only thing the Interstate Commerce Commission did was, after a series of conferences, they made all master car builders build their cars alike in the future, and after a certain date they fixed a certain standard as to grab irons and hand holds, and ladders, etc.

But, coming back to the question—it is a big question, I realize, yet I think we have shown to this Board by our financial exhibits that enough money has been looted from these Western Railroads, and enough money has been obtained from innocent

purchasers for securities that were worse than worthless to have put in block signals and automatic couplers throughout this whole western territory and still have some left.

Mr. Burgess: Mr. Stone, I perhaps may be mistaken, and I wish you would clear this up in my mind: I understood that a representative of the Locomotive Engineers in Washington, together with the executives of the train organizations, did have a conference with the Managers' Committee here in Chicago, or some other point, as to what legislation they would endorse. Am I right on that?

Mr. Stone: Some two or three years ago I attended such a meeting, yes.

Mr. Burgess: Well, who represented the railroads?

Mr. Stone: Mr. Jackson at that time, I believe, now the Receiver of the C. & E. I., was the chairman on the Committee on Legislation affecting the railroads, and before that was Mr. Melchoir, of the Rock Island, who was killed in a wreck.

Mr. Burgess: Well, did those two committees agree on certain legislation that they would recommend to Congress?

Mr. Stone: Yes.

Mr. Burgess: Relative to safety devices?

Mr. Stone: Yes. And before the present safety standard of equipment was decided on, there was a series of hearings held in Washington by the Interstate Commerce Commission, and nearly all the master carbuilders and the representatives of these great railroad systems, were there, as well as the representatives of the men.

Mr. Burgess: So when the petition came to the Congress of the United States, it was endorsed by the railways and the employes as well, in train service, is that right?

Mr. Stone: It was the Interstate Commerce Commission that really brought this about. But these bills affecting legislation along that line, were endorsed by both the railroads and the representatives of the men.

Mr. Burgess: And, because there was no opposition from either side, was probably the real factor that made the bill become the law. Is that right?

Mr. Stone: I think that is probably true. Now, Mr. Lauck, will you proceed?

Mr. Lauck: Page 110 I would like to refer to briefly. Sec-

tion XIII shows the operating capacity of Western Railroads from June, 1914 to January, 1915, as compared with corresponding months of previous years.

Referring to this section, it is shown that in June, 1914, for instance, the operating capacity of the Santa Fe, as compared with June, 1913, was 107, and in July it went down to 102, and in August was 103, in September 110, October 103, November 101, December 99, and January 99; indicating that the Atchison did not suffer along with the other Western Railroads in the depression, and it is now—

Mr. Sheean: That is, in comparison with the operations of 1913, they were no worse off.

Mr. Lauck: Well, June, 1913, you see was a good month. This is comparing June, 1914, with June, 1913.

Mr. Stone: 1913 included October, where they had the high peak of the last five years, did it not?

Mr. Lauck: Yes, sir.

Mr. Stone: So it must have been taken from one of the off years all the time.

Mr. Lauck: June, 1913, was a good deal lower than '12, of course, about the same as '11, a little lower than '10. Then it went up, and up, to the peak in October, which was the highest point that they ever reached in the four years. So, in comparing from say, July to October, 1914, with 1913, you are comparing 1914 with the largest showing that has ever been made with the Western Railroads.

Mr. Sheean: Well, Mr. Lauck, notwithstanding that October, 1913, was large in gross revenue, the fiscal year of which it was a part, was an abnormally low year, was it not?

Mr. Lauck: Yes. That came in the latter half, however. You get it when you come over in January and come down the other side of the year. The months from July to January, were above, or equal to anything that had occurred in the past.

Mr. Sheean: Well, these months that you give here, except the first one of them, all the months are in the fiscal year 1914, under the classification of the Commerce Commission?

Mr. Lauck: Yes, but compared with the corresponding month of the last year, which I have done, you have some months in the past year—

Mr. Sheean: I think you misunderstood me. Your first column, Mr. Lauck, is headed 1913. All of the months in that column, except the first month, are in the fiscal year 1914, while they are in the calendar year 1913. They are in the fiscal year 1914, or the Interstate Commerce Commission.

Mr. Stone: Is not October, 1914, in the fiscal year 1915?

Mr. Lauck: February, 1913, would be in the fiscal year 1913.

Mr. Sheean: Yes. And all of the other months under that other column, 1913, are in the fiscal year 1914.

Mr. Lauck: Yes, that would be true, but that would not affect the comparison, except so far as the year must be taken into consideration.

Mr. Sheean: Yes, but what I was getting at, Mr. Lauck, was, whether or not you do not agree with the Interstate Commerce Commission's conclusion, that the year ending June 30, 1914, seems to us to have been an abnormal one in railroading.

Mr. Lauck: Oh, undoubtedly, yes, sir.

Mr. Sheean: Abnormally low?

Mr. Lauck: Yes.

Mr. Stone: But, Mr. Lauck, take your Santa Fe there, you show under October, 1913, that was in the year after, the high peak in the last four years.

Mr. Lauck: The fiscal year would not carry this compilation.

Mr. Stone: And then you compare October, 1914, with October, 1913?

Mr. Lauck: Yes.

Mr. Stone: That goes over into another fiscal year, doesn't it?

Mr. Lauck: Yes, sir.

Mr. Stone: And the Santa Fe showed 103.71 per cent above the high peak of the year before?

Mr. Lauck: Yes.

Mr. Stone: And that is the present fiscal year, is it not? October, 1914, would be the present fiscal year?

Mr. Lauck: Yes, part of the year 1915.

Mr. Stone: You are really comparing one year with the other?

Mr. Lauck: You are comparing month by month, how

certain months may stand in one fiscal year as compared with the other; but it is a monthly comparison.

Then take the Burlington, you have a different showing for the Burlington. The Santa Fe is unique. It shows a state of 100 per cent capacity all through the depression, almost. But that stands alone.

Mr. Byram: How is that, Mr. Lauck? Explain that.

Mr. Lauck: The Santa Fe is unique, I think.

Mr. Byram: Oh, I thought you were speaking of the Burlington.

Mr. Lauck: No. In its showing as to operating revenues during the past six or seven months. The Burlington is just the opposite. It maintained about 100 per cent until about August, when the effect of the slump seemed to have been felt by the Burlington radically for the first time. That is, in August, they went off to 96, dropped off about five points operating revenue. In September, it went down to 95; October, 94; then, in November, it came up to 95 again; and December was the highest month. December it came up to 103. And now, in January, it is 100.

Mr. Byram: Does that show an improvement or decline, as compared to December? The trend of January compared with the rest of it, is that upward or downward?

Mr. Lauck: It is downward in January as compared with December.

Mr. Stone: But it is higher than January a year ago?

Mr. Lauck: It is three-quarters of one point higher than January of last year.

Mr. Stone: And December was higher than December a year ago?

Mr. Lauck: Yes. I think—

Mr. Byram: What is the trend on the Milwaukee?

Mr. Lauck: The Milwaukee was running a little above par or a little above 100 in July. Then it went to 104 in August, and 106 in September. Then it had a rapid fall of 11 points, to 95, in October; 90 in November. Then it jumped to 95 in December, and has gained one more point during the last month. It has gone to 96 at the present time, almost 97.

The North Western went down hill right after September, but now has climbed to 102 in January.

The Great Northern had even a worse slump. There is about 12 points off now. The Great Northern is 88 per cent of normal capacity.

The Illinois Central fell off 8 points in September; 5 more in October, 2 more in November, gained 2 back in December, and 6 more in January, and is now about 3 points below normal for January.

The Northern Pacific is improving since December, but it is still 10 points off. In December it was 82, and in January it advanced to 90, showing an upward trend.

The Southern Pacific, at the bottom of page 112, shows 3 per cent above January of last year.

The Union Pacific, in December, showed 105, but fell off in January to 96, or practically 97.

But the tendency exhibited by all the roads, of course, with some exceptions, is that they are coming up out of the depression and approaching a period of normal conditions as compared with the previous year. Some of them make a quite remarkable showing. That is all I have.

The point I wished to call attention to was in this last section, which shows a general tendency toward improvement and even operating income, and the tendency to approach nearer to normal conditions each month reports are received.

Mr. Stone: Any questions, Mr. Sheean?

Mr. Sheean: Well, Mr. Lauck, if they get back to 100 per cent here, by comparison with a year ago, how far below normal conditions would they then be, January, 1914?

Mr. Lauck: They would be off about 6 per cent for the whole year.

Mr. Sheean: That is, 1914 was about 6 per cent below normal?

Mr. Lauck: Yes.

Mr. Sheean: And we are gradually getting up to be somewhere nearer—only 6 per cent below normal?

Mr. Stone: What is normal, Mr. Sheean?

Mr. Sheean: Mr. Lauck has been talking about normal conditions. I want to find out from him just what he means by normal.

Mr. Lauck: There is no such thing as normal, I guess, in comparison of railroad revenues. The comparison is usually

based on the preceding year, and the estimate of 1914 was that it was 6 per cent, as I recall, off of 1913, and 1915, then, would be 6 per cent or 7 per cent off of 1913.

Mr. Stone: Well, is it not characteristic of the railroads to want to compare with the highest point in their operation, to take that and the normal to scale by?

Mr. Lauck: Comparison is usually made this year with past years. That is the usual method of comparison.

Mr. Sheean: Well, then, this last exhibit, Mr. Lauck, in the percentages getting them—or carried out to a percentage basis of what they were a year ago.

Mr. Lauck: The same month.

Mr. Sheean: And if they do keep on improving there is reasonable hope they may get back some time to 6 per cent less than they were in 1913?

Mr. Lauck: Some of them are even better than 1914. Some of them show more than 100 per cent, and others show a very decided difference. Some of them are running as low as 80 in the South. But so far as they were equal to par with 1914, they would be 6 per cent below 1913.

Mr. Stone: Take, for example, the Missouri Pacific on page 126, they are up to 106.46 in January. Are they up to normal?

Mr. Lauck: Well, they theoretically would be up to 1913, the high year.

Mr. Stone: Well, they are above 1913, are they not?

Mr. Lauck: No. January, 1915, as compared with January, 1914, which theoretically is 6 per cent lower than January, 1913. Therefore, the Missouri Pacific would now be about equivalent to January, 1913. You can tell by looking at the diagram on page 16 how the tendencies run for the ten roads.

Mr. Sheean: And in 1913 they were not able to pay any dividends on what they were doing at that high peak.

Mr. Lauck: Not the Missouri Pacific, no.

Mr. Sheean: Mr. Lauck, there is just one matter pertaining to a previous exhibit that I want to call your attention to, because of the statement that you made when you and I were discussing the difference in capital requirements in the East and West. You said "that the amount of revenue to meet capital charges is therefore less in the West than in the East." I was under the impression then that the greater mileage of the

West, notwithstanding its lower capitalization per mile, imposed in the West less opportunity for the dollar to earn money than was given to it in the East. Now, I verified that fact by the 1913 report. What is the fact as to the total capitalization in the West?

Mr. Lauck: I think this is correct. I have looked over this page in the exhibit. My statement at that time was made on the general impression I had that in view of the fact that as the property investment per mile was greater, therefore the interest return would be less. But taking each dollar of investment, it shows that it earned 29.49 cents in the East and only 15.51 cents in the West. So the West would be at a relative disadvantage, so far as capital investment was concerned.

Mr. Sheean: That is, for each dollar of investment in the East there is produced in gross revenue 23½ cents which may be distributed to labor, capital and others.

Mr. Lauck: Yes, sir.

Mr. Sheean: While in the West, for each dollar, there is only 15.51 cents produced?

Mr. Lauck: 15.51 cents.

Mr. Sheean: 15.51 cents produced that must be distributed to labor and capital.

Mr. Lauck: Yes.

Mr. Sheean: That is arrived at by what figures? What are the gross investments shown there, east and west, and gross returns?

Mr. Lauck: The gross property investment in the east is \$5,800,000,000 in round numbers, and in the west \$8,150,000,000.

Mr. Sheean: And the gross revenue of the east and west?

Mr. Lauck: The gross operating revenue is \$1,384,000,000 in the east, and \$2,265,000,000 in the west, which, as compared with the greater capital investment in the west, or property investment, would yield a smaller return of 15.51 cents as compared with 23.49 cents for each dollar of investment. I am glad to make that correction.

Mr. Stone: Is that the capitalized investment or the real investment?

Mr. Lauck: That is the real property investment as reported to the Interstate Commerce Commission.

Mr. Sheean: I don't think there is anything more that I

want to ask Mr. Lauck, but to prevent any misunderstanding, I do not want the assumption to be made that because of my not cross examining on some of the exhibits that have been introduced here that we are going to consent either to the premises or to the opinions expressed by Mr. Lauck, but that some of the matters about which I have not cross examined do not seem to us relative or pertinent to the issues here. Of course, as to the others, I have cross examined in part on some of them.

Mr. Stone: Of course I did not think for a moment that you did give assent to it, so we will accept the explanation of course. That will be all, Mr. Lauck.

Mr. Lauck: Mr. Chairman, before I go, I wish to say that I have the feeling that I created the wrong impression yesterday in speaking of the earnings. That is, with reference to exhibit 28. I did not mean to dispute the fact that these men were explained on certain bases, but the only point that I wanted to make was that these men were earning less than \$100. I do not know how they happened to earn it, except as Mr. Sheean and Mr. Keefe stated in their exhibit, that they did secure these explanations. I have no reason to doubt that those explanations were correct. I did not mean to cast any reflection on those.

Mr. Sheean: Well, while you have reverted to that, Mr. Lauck, just a question or two more on that. You considered it difficult to understand why there should be so many men—

Mr. Lauck: Yes, that is why I made the statement.

Mr. Sheean: —so many men used in the emergency service who were not regular or extra firemen. On some of the details shown in Exhibit 28 where, for instance, ten men might make ten emergency trips during the month as emergency firemen, the ten trips a month would not afford employment for one fireman working through the month. Now do you think it would be proper to count the ten men there who happened to make ten segregated trips, as being equivalent to ten employees?

Mr. Lauck: No. Are these men duplicated, or are they ten different men making one trip?

Mr. Sheean: Ten different men making different trips. There are a great many men making single trips in emergency service.

Mr. Lauck: Well, of course, that would not represent anything normal at all. Still, I should hate to say that they were

part of the operating force, but it would not be of much significance in any comparison.

Mr. Sheean: It would be perfectly proper, would it not, Mr. Lauck, in the necessarily elastic service of a railroad company, to fill out of other branches of employment, the occasional trips, until those occasional trips become sufficiently regular to justify their assignment to one individual?

Mr. Lauck: Oh, yes, that would be the most economical way to do it.

Mr. Sheean: Yes, and the fairest way to the men, too, would it not?

Mr. Lauck: Yes, otherwise you would employ a man who could not make any time.

Mr. Sheean: And when you have created an extra board, and on that extra board the men there are not able to get, with regularity, more than ten, twelve or fifteen runs a month, you ought not to increase the number there to take care of the odds and ends, that would not furnish steady employment to any man, should you?

Mr. Lauck: No, sir, I do not think so.

Mr. Sheean: So that this occasional overlapping would be, in your judgment, a perfectly proper and justifiable thing to have?

Mr. Lauck: Oh, yes.

Mr. Sheean: And the occasional trip thus made would not reflect the earnings of those who had attained a permanent position in the work?

Mr. Lauck: No, sir. What would be the normal number of extra men? According to that there are 12,000. I cannot understand that 12,000.

Mr. Sheean: Well, you have not examined it to see whether you could understand it or not.

Mr. Lauck: Yes, I went through that, yes, sir. Of course, they are all part-time men, but that would be a condition of operation, I suppose.

Mr. Sheean: And the names themselves you have gone through hurriedly since yesterday?

Mr. Lauck: I just glanced through them.

Mr. Sheean: You just glanced through them. Well, there

is nothing incomprehensible about the explanation? It simply is that you do not understand why there should be so many?

Mr. Lauck: I can't see why there should be one man out of five that worked a couple of days a month.

Mr. Sheean: Well, Mr. Lauck, that is what I tried to explain. Just to illustrate, if you have two engineers and two firemen assigned to certain work, doing it regularly, and if during one month's time one of the regular firemen lays off and five men in the shop at different times make single trips in his place, it is not one-fifth of that force, or anything else, is it, if you count each of those men taking the emergency work as one man?

Mr. Nagel: Well, it is not 12,000 men, but 12,000 separate employments?

Mr. Sheean: That is the whole thing.

Mr. Lauck: Well, they are 12,000 men, but they are not part of the regular operating force, as I understand.

Mr. Sheean: Sheet 2 shows all extra men, Mr. Lauck.

Mr. Lauck: That shows about 1,700 extra men, something like that. And then there are 12,000 men who work part time, or who are like the men you say, men who go out on a trip, or something of that kind.

Mr. Sheean: Well, your criticism Mr. Lauck—

Mr. Lauck: I am not criticising, Mr. Sheean.

Mr. Sheean: Well, pardon me, I will take the word away—your suggestion here is not based upon your inability to understand the explanation of Exhibit 28?

Mr. Lauck: No, sir.

Mr. Sheean: But your inability to understand operating conditions?

Mr. Lauck: Yes, sir. Now, for instance, say in the Alabama coal and iron district, or in the southern cotton mill, the tendency is for men operatives, after they work four days a week, to lay off, and they think they have earned sufficient money. Well, now, that requires 25 per cent, say, of more employes than the normal working force. Now, here you have a condition where, in addition to the extra men, you have a great number of men who seem to fill temporary places, and I cannot understand why there would be that lack of tendency to work

on the part of firemen or engineers. But of course I am not so familiar with operating conditions.

Mr. Stone: There is no question though, Mr. Lauck, but what you understand Exhibit 28, and what they are trying to do with it, sheets, 1, 2, 3 and 4? You understand that, do you not?

Mr. Lauck: Oh, thoroughly, yes, sir.

Mr. Stone: And the only dispute between you is what shall be done with those 12,000 men who worked part of the time.

Mr. Lauck: That may be due to the fact of certain operating conditions. I just brought up the point, because I felt probably that I was misunderstood or misconstrued yesterday.

Mr. Stone: It does show that under conditions such as existed in October, 1913, that it does require a floating population of about that many in order to keep the business of the company going.

Mr. Lauck: That would seem so, which would seem to be a rather remarkable thing to me. But I am not capable of saying that it was remarkable or not.

Mr. Sheean: Well, but you are giving assent to a statement that Mr. Stone just made, Mr. Lauck. Your charts and figures are prepared, by which you count a brakeman who made a single trip as a fireman in an emergency as being equivalent to a fireman who worked all of the month, and treat as the equivalent of his full month's earnings the \$2.80 that that brakeman made on that one trip.

Mr. Lauck: Yes.

Mr. Stone: I think that is correct, and it is also true that in their exhibit they count a man who had worked 23 hours as working one day.

Mr. Sheean: Let me get the answer of Mr. Lauck to the question I asked.

Mr. Lauck: I said yes, that I considered him one of the operating force of 64,000 men, along with any other variations on the other side which Mr. Stone has indicated.

Mr. Stone: You do not think they would have used that brakeman as a fireman if they had had a fireman available?

Mr. Lauck: No, sir.

Mr. Stone: So that it was necessary to use a brakeman on one trip in order to keep the wheels moving?

Mr. Lauck: Yes. I understand that is Mr. Sheean's explanation of the situation.

Mr. Stone: But he is a fireman and he is not a fireman. They do not want to count him as one when the percentage is against them.

Mr. Sheean: He is a fireman for one day. The criticism I make is that you are treating him as a fireman for thirty days, and treating his one day's earnings as if they were all of his thirty days' earnings.

Mr. Stone: Then why is not a fireman who makes 6,000 miles in a month treated as two firemen, when 100 miles are a day and there are 30 days in a month?

Mr. Sheean: What is that?

Mr. Stone: Why is not a fireman who makes 6,000 miles in a month treated as two firemen, when 100 miles are a day and 30 days are a month?

Mr. Sheean: Because it is only for the purposes of pay. He is treated as two men in the amount of the pay he receives for that service, and always has been so treated.

Mr. Stone: But you do not want to count him that way in this showing, because the percentage does not come right.

Mr. Sheean: If you want to reduce this to that basis, recast the tables and treat it simply on the basis of the pay; I see no objection to that being done. It is shown here just what the hours were.

Mr. Stone: No; but the whole thing simmers down to this, that it is all right when it comes out one way, and all wrong when it comes out the other way, when it comes to percentages.

Mr. Sheean: I have not made any complaint about percentages. I want to get it entirely clear, Mr. Lauck, that you have made no estimate here in which the extra men are counted irrespective of the time they worked?

Mr. Lauck: No, sir.

Mr. Sheean: Except in connection with all the others.

Mr. Lauck: No, all the effect that would have—the only point of difference as to us—would be as to how many should be below \$75 as to firemen and how many should be below \$100 as to engineers. So far as the higher groups are concerned it

would not have much effect, as you can see. The contention is as to firemen below \$75 and as to engineers below \$100.

Mr. Sheean: And it does not affect those above that at all?

Mr. Lauck: Only slightly.

Mr. Sheean: Only by reference to the base of which it makes a part.

Mr. Lauck: That is all.

Mr. Sheean: That is all.

Mr. Burgess: Mr. Lauck, you stated that you glanced through that exhibit hurriedly last night?

Mr. Lauck: I did this morning, before I came over.

Mr. Burgess: About how many instances did you find where a brakeman went out to fire—or did you make any note of that?

Mr. Lauck: I did not make any note of those instances. The cases were mostly those of men who had laid off, or who were off part of the month. Some of their earnings were as high as \$60 or \$70 for firemen, and for engineers some as high as \$99, I think, but in glancing through it I did not find any notice of brakemen or other men who made money elsewhere. I think those were exceptional instances.

Mr. Stone: I think the only instances you would find where a brakeman fired would be in cases where a fireman was injured or taken sick on the road, and probably at an outlying point where they could not deadhead a man there, and they wanted to expedite the movement, and so used the brakeman to fire. In a few instances like that they had a brakeman who did firing.

Mr. Sheean: In your way of figuring, both the brakeman and the fireman whose place he took would be counted, each counted as one man, and the wages of the two would be divided by two in ascertaining the monthly wages of each.

The Chairman: Do I understand you to say, Mr. Lauck, that an examination of this exhibit discloses the fact as to whether the fireman or engineer was engaged in other employment?

Mr. Lauck: Mr. Sheean read several cases of that kind. I have never examined it carefully, but in running over it I did not notice any of those cases, and I suppose they are comparatively infrequent, as contrasted with the cases of men who worked

part of the time, who laid off part of the month, and therefore were not included in the showing as to men making over \$75 or over \$100.

The Chairman: About what was the average paid to those below that?

Mr. Lauck: That were below \$75?

The Chairman: Yes.

Mr. Lauck: I do not know, sir. They ran all the way—just glancing through it—

Mr. Sheean: Ninety-nine cents was the lowest one.

Mr. Lauck: Ninety-nine cents—I did not see that one. That was the shop man that you read yesterday. They would run from that up to \$99.

The Chairman: I said below \$75.

Mr. Lauck: Below \$100 is for engineers, and below \$75 is for firemen; but I have made no careful examination of it.

Mr. Stone: Mr. Sheean, can you understand how under any of these schedules in effect that provide for a minimum day, a fireman could draw only 99 cents?

Mr. Sheean: He was not a fireman. He was a man taken from the shop who fired an engine in an emergency, for two or three hours.

Mr. Stone: If he fired an engine five minutes, he should have been paid for a day.

Mr. Sheean: The railroad company do not agree with you that before they can fire an engine in an emergency they must consult the organization. This company took a man out of the shop for two hours, and paid him for it.

Mr. Stone: That particular railroad did not carry out their wage agreement.

Mr. Sheean: That particular railroad was the Chicago, Burlington & Quincy, so I will transfer further discussion of this to Mr. Byram's shoulders.

Mr. Stone: They did not carry out their wage agreement.

Mr. Byram: I do not care to discuss it without knowing the circumstances.

Mr. Stone: A fireman is guaranteed a minimum day under the contract, and if he fired only thirty minutes he was entitled to pay for a minimum day.

Mr. Sheean: The man's name was given yesterday, and

it appears in exhibit 26, and he was on the payroll of October, 1913.

The Chairman: Are there many instances of that kind?

Mr. Sheean: There are a great many of a single trip, yes, and a number who are under the minimum day of the firemen's schedule—men doing a few hours' work.

Mr. Stone: Do you think it was because the man was not a member of one of these organizations, and was taken out of the shop, that they did not pay him for a minimum day?

Mr. Byram: I do not know anything about that, Mr. Stone. I would have to know something about it before I could discuss it.

Mr. Stone: But, Mr. Chairman, if I may ask Mr. Byram—you do know, Mr. Byram, that under the firemen's schedule he is entitled to a minimum day?

Mr. Byram: The schedule says ten hours or less, or 100 miles or less, one day's pay.

Mr. Nagel: Is it your construction that if a man does half a day's work as a fireman he should get a full day's pay as a fireman, and also get pay for the other work he did that day?

Mr. Stone: Yes, if they want to double him up in that way, and on many roads he would be so paid without question.

Mr. Nagel: In other words, the rules would not allow the flexibility of service of which we have heard.

Mr. Stone: Not a combination of service; no, sir.

Mr. Burgess: Mr. Sheean, can you give us any light on that particular point you mentioned a moment ago, when you said there were a great many men who worked as firemen, who were paid less than a minimum day, as guaranteed in their schedules?

Mr. Sheean: I did not say "as guaranteed in their schedules."

Mr. Burgess: Then I caught it wrong.

Mr. Sheean: I said they were paid less than the minimum day provided in the firemen's schedule.

Mr. Burgess: I used the word "guaranteed" instead of "provided."

Mr. Sheean: I meant to say that the firemen's schedules make certain provisions governing firemen, and that certain

men, called to fire an engine for a few minutes or a short time, were apparently paid less than a minimum day.

Mr. Burgess: And their schedules provide in that event that a man shall get a minimum day. Is that what I understood you?

Mr. Sheean: Without looking up the particular schedule, I would not know.

Mr. Burgess: In a general way, you do know that the minimum day is guaranteed in the firemen's schedule.

Mr. Sheean: One hundred miles or less, or ten hours or less, in a great many schedules.

Mr. Burgess: Yes.

Mr. Sheean: Here are some instances: Chicago Junction Railway, Mr. J. Sinnett, \$1.32; roundhouseman used in an emergency.

Mr. J. Smith, \$1.59; roundhouseman used in an emergency.

Mr. J. Welding, \$1.85; roundhouseman used in an emergency.

Mr. Burgess: All I was trying to get was how the railroads could in a great many instances send a man out and not pay him a minimum day if the schedule provided for it.

Mr. Sheean: These are all yard men, called from the roundhouse for a few hours' work. They are carried on this pay roll for this amount of money, and on the roundhouse payroll for I do not know what amount.

Mr. Burgess: Are we to understand, then, that—

Mr. Sheean: They did less than a day's work in each of these cases.

Mr. Burgess: In a great many of those—

Mr. Sheean: All of those did less than a day's work.

Mr. Burgess: Then, we are to understand that in a great many instances the railroads do ignore that particular part of the firemen's schedule wherein it guarantees a day's work, or a minimum day's pay—is that right?

Mr. Sheean: No, that is not right. I know nothing about their ignoring any provision in any schedule.

Mr. Burgess: I was trying to get what you do mean about that.

Mr. Sheean: All I mean to say is that exhibit 28, which is filed here, shows that in the month of October there were

quite a number of men who, for less than a day's work, were taken from the roundhouse, and for that less than a day were paid a certain amount as firemen, and presumably the rest of their day was put in in the roundhouse.

Mr. Burgess: Yes.

Mr. Sheean: And I assume that in each case the part of the day in which they performed fireman's service was paid at the pro rata rate of a fireman's pay.

Mr. Burgess: Yes; but they did not carry out that principle, as stated by yourself a few minutes ago, that ten hours or less, or 100 miles or less, would constitute a day's work, when they paid him less than that. Is that right?

Mr. Sheean: They were evidently paid, on the firemen's payroll, less than a fireman's day.

Mr. Stone: Mr. Chairman, while this may seem trivial, I want to say that it opens up a very serious question, and it shows what railroads will do in order to avoid carrying out a wage agreement. Instead of calling a fireman off the extra board, when they need a fireman, they will take a handy man out of the roundhouse. They know that if they call a fireman they will have to pay him a day's wage, and they get some handy man for two or three hours in order to avoid paying a fireman for a full day; and I want to say to you that if this Board hands down an award of 100 miles or less and ten hours or less for a day's work, I shall most certainly insist that when they call a man and use him for that service they shall pay him a minimum day, and they can use him the full day if they want to.

Mr. Park: Mr. Stone, I should say that if your local chairman finds that there has been a violation of the schedule, the roads will be very glad to adjust it.

Mr. Stone: I have had some experience in adjusting some of these claims for wages. If you spend about \$100 on committee work you can collect 95 cents wages, or overtime, or something.

The Chairman: Is that all with Mr. Lauck?

Mr. Stone: That is all, Mr. Lauck.

Mr. Sheean: That is all.

Mr. Lauck: I thank you very much.

A. S. MEAD was called as a witness in rebuttal, and after being duly sworn, testified as follows:

Mr. Stone: Mr. A. S. Mead is at the present time the salaried chairman of the Brotherhood of Locomotive Engineers on the Wabash Railroad.

For a number of years, Mr. Mead, you were a locomotive engineer in the employ of the Wabash Railway?

Mr. Mead: Yes.

Mr. Stone: How many years?

Mr. Mead: In active service as a locomotive engineer, thirteen years.

Mr. Stone: You were road foreman of engines how many years?

Mr. Mead: Nearly nine years.

Mr. Stone: And had charge of how many men?

Mr. Mead: Two hundred and fifty or three hundred.

Mr. Stone: Engineers?

Mr. Mead: Engineers and firemen.

Mr. Stone: On what division of the Wabash?

Mr. Mead: The Peru division.

Mr. Stone: Then, after being road foreman, you went back on your run again, did you not?

Mr. Mead: Yes.

Mr. Stone: What was your run?

Mr. Mead: The passenger run between Peru and Decatur, Illinois.

Mr. Stone: How long did you run this run?

Mr. Mead: About thirty months.

Mr. Stone: And then you were elected salaried Chairman of the Engineers Committee?

Mr. Mead: Yes.

Mr. Stone: And are in that position at the present time?

Mr. Mead: Yes.

Mr. Stone: During the time you were road foreman of engines, and also during the time you were an engineer in passenger service on the Wabash Railway, the company had a rule in their schedule that speed basis would be computed at twenty miles per hour in passenger service, did they not?

Mr. Mead: Yes.

Mr. Stone: A five hour day for 100 miles or less?

Mr. Mead: Yes.

Mr. Sheean: Just a minute. Did it have a provision in

the schedule for a five hour day, or did it say that overtime would be computed at twenty miles an hour?

Mr. Mead: It said overtime would be paid for necessary time to complete trip at an average speed of twenty miles per hour.

Mr. Stone: You also have in your schedule 100 miles or less per day, do you not?

Mr. Mead: Not in passenger service.

Mr. Stone: But you are paid that?

Mr. Mead: No, sir, we do not get a minimum of 100 miles in passenger service. We get actual miles in passenger service, overtime computed at a speed of twenty miles an hour on each leg of the trip.

Mr. Stone: How many years have you had this twenty miles an hour speed basis?

Mr. Mead: It was written in the schedule when I went to work for the Wabash.

Mr. Stone: And since that time—we lost the organization after the A. R. U. strike, from 1894 up to 1906.

Mr. Mead: 1906.

Mr. Stone: Until 1906, we had no schedule with the Wabash company at all?

Mr. Mead: No, sir.

Mr. Stone: And yet the speed basis remained twenty miles an hour during all that period?

Mr. Mead: That rule remained in the schedules as they were printed from time to time.

Mr. Stone: How much overtime did you draw on your run on the speed basis of twenty miles an hour?

Mr. Mead: I never drew any road overtime except once, and that was in February, 1912, I think it was, I drew some road overtime on one trip, on account of a snow blockade.

Mr. Stone: And that is the only overtime you ever drew?

Mr. Mead: Yes.

Mr. Stone: So the twenty miles an hour speed basis has not materially injured the Wabash Railway in your opinion, has it?

Mr. Mead: No, sir.

Mr. Stone: When you were on the Wabash as road foreman of engines, did your company use brick arches?

Mr. Mead: Yes.

Mr. Stone: Did you ever know any of them to fall down into the fire?

Mr. Mead: Oh, occasionally one did, yes.

Mr. Stone: Did they cut their engine off and come in light when it happened?

Mr. Mead: No, sir.

Mr. Stone: What would you have done to an engineer who did cut off and come in light?

Mr. Mead: The matter would have been investigated, to determine as to the responsibility.

Mr. Stone: And if he was responsible for giving up his train under those conditions he would have been disciplined, would he not?

Mr. Mead: It is my opinion that he would have been if there was no good reason for it.

Mr. Stone: But the brick arches do fall down, and they do continue to handle their tonnage, do they not?

Mr. Mead: Yes.

Mr. Stone: And they bring their trains into the terminals?

Mr. Mead: Yes.

Mr. Stone: That is all, Mr. Chairman.

CROSS EXAMINATION.

Mr. Sheean: Is there in the schedule of the Wabash any provision as to how many hours constitute a day?

Mr. Mead: In the passenger service?

Mr. Sheean: In any service, yes, or does that apply to all service?

Mr. Mead: We have a ten hour day in the switching service.

Mr. Sheean: Is there a provision in the Wabash schedule at all as to how many hours shall constitute a day—the basis of the day's work?

Mr. Mead: No, sir, we have not any number of hours that constitute a day's work in any class of service except switching service.

Mr. Sheean: In passenger service, then, you have neither a limitation in hours nor in miles?

Mr. Mead: No, sir.

Mr. Sheean: No provision as to how many miles or how many hours shall constitute a day?

Mr. Mead: We have no provisions in passenger service as to how many hours or how many miles will be permissible.

Mr. Sheean: There is no provision stating that so many miles or so many hours shall constitute a day?

Mr. Mead: No, sir.

Mr. Sheean: So that the so-called overtime has neither beginning nor ending under your schedule, but is simply a basis by which you compute the payment if the speed on passenger runs averages less than 20 miles an hour.

Mr. Mead: On any trip we make, the number of miles is divided by twenty to determine whether or not we make overtime.

Mr. Sheean: That is, by overtime you mean whether you shall be paid anything in excess of the miles you run?

Mr. Mead: Yes.

Mr. Sheean: You may have a 200 mile run or you may have an 80 mile run?

Mr. Mead: Yes.

Mr. Sheean: And there is no guarantee that you will be paid 100 miles for running 80?

Mr. Mead: No, sir.

Mr. Sheean: None whatever?

Mr. Mead: No, sir, not in the passenger service.

Mr. Sheean: So that you get only the actual miles that are run on the Wabash?

Mr. Mead: That is all.

RE-DIRECT EXAMINATION.

Mr. Stone: Mr. Mead, if you ran 100 miles in 6 hours in passenger service, how much would you be paid?

Mr. Mead: We would be paid for 120 miles.

Mr. Stone: You would be paid one hour overtime?

Mr. Mead: Yes.

Mr. Stone: At 20 miles an hour?

Mr. Mead: Yes.

The Chairman: We will take a recess.

(Whereupon at 12:30 o'clock P. M. a recess was taken until 2:30 P. M.)

AFTER RECESS.

A. S. MEAD was recalled for further examination, and having been previously sworn, testified as follows:

Mr. Stone: Mr. Mead, when we adjourned, Mr. Shecan had asked you in regard to the speed basis on the Wabash, and you evidently didn't get his question right, or something, because I have been checking over your schedule. Is this your last schedule, March 1, 1911?

Mr. Mead: Yes, sir.

Mr. Stone: Well, I wish you would turn to Rule 25, if you will, on page 12. Take your paragraph A of Rule 25. I wish you would read it.

Mr. Mead: "100 miles or less, 10 hours or less, shall constitute a day's work in freight service."

Mr. Stone: That is the standard rule of all the roads in the country, is it not?

Mr. Mead: Yes.

Mr. Stone: So you have a minimum day in freight service?

Mr. Mead: We have a minimum of 100 miles.

Mr. Stone: And 10 hours?

Mr. Mead: We don't have to be on duty the 10 hours.

Mr. Stone: I understand. Now, read paragraph B. No, wait a minute. Second clause of paragraph A.

Mr. Mead: "100 hours or less, 5 hours or less, shall constitute a day's work on extra passenger trains."

Mr. Stone: Why did you not have that applied to through passenger service as well, when you made the schedule?

Mr. Mead: Because we had no regularly assigned passenger runs that were making less than 100 miles.

Mr. Stone: And so it made no difference?

Mr. Mead: It made no difference.

Mr. Stone: But if you were running extra on a passenger train or were called to come out to do any extra passenger work, that would be paid on the basis of 100 miles or less, 5 hours or less, for a day's work?

Mr. Mead: Yes, sir.

Mr. Stone: I think that is all.

RE-CROSS EXAMINATION.

Mr. Shecan: But on all regular passenger trains there is no minimum, either in miles or hours, on the Wabash schedule?

Mr. Mead: No, sir, not on regularly assigned runs at the present time.

Mr. Sheean: That is all.

RE-DIRECT EXAMINATION.

Mr. Stone: Because there is not a regularly assigned run but what is over 100 miles in length on the Wabash System, is there?

Mr. Mead: No, sir.

Mr. Park: Could a train be scheduled 80 miles, and be regularly scheduled on the time table, and then the engineer draw 80 miles?

Mr. Mead: We recently have had one case of that, in St. Louis. We have a short run, running from Olive Street out to Ferguson, that made several round trips in the day, made about 120 miles per day. But recently they took off some of the runs, reducing the mileage to about 70 miles a day. He consumes seven hours making the run, and our claim is for 140 miles, and the company, in their last offer, offered 100 miles a day and overtime after five hours on that, which has not been accepted, as our schedule provides for actual time and overtime on each leg of the trip.

Mr. Park: But there is nothing in the schedule that prohibits—

Mr. Mead: There is nothing in the schedule that compels the company to pay anything but actual miles in regularly assigned passenger runs.

Mr. Burgess: Did I understand you to say that, as a compromise of this grievance, the officers did tender and offer 100 miles, five hours or less for the day?

Mr. Mead: On that run.

Mr. Burgess: And the men have not as yet accepted that offer?

Mr. Mead: No, sir.

Mr. Stone: That is all, Mr. Mead.

Mr. Sheean: That is all.

C. L. HODGE was called as a witness in rebuttal and, having been duly sworn, testified as follows:

Mr. Stone: Mr. Hodge, you are in the employ of the Chi-

cago, Rock Island and Pacific Railway as an engineer?

Mr. Hodge: Yes, sir.

Mr. Stone: Are you a promoted man on the Rock Island?

Mr. Hodge: Yes, sir.

Mr. Stone: How many years have you fired an engine?

Mr. Hodge: Fired an engine about five years.

Mr. Stone: What time did you go to firing?

Mr. Hodge: I went to firing on the 1st of September, 1900.

Mr. Stone: Then you went to firing and got the benefit of the 25 or 30 men who went from the Illinois division at the time the Dellhart division was opened up?

Mr. Hodge: Yes, sir.

Mr. Stone: If it had not been for that promoting of 25 men for a new division in the southwest, you would probably have had to fire longer, would you not?

Mr. Hodge: About nine years.

Mr. Stone: When were you promoted to an engineer?

Mr. Hodge: February 6, 1905.

Mr. Stone: Then you have been running ten years?

Mr. Hodge: Yes, sir.

Mr. Stone: In freight service most of the time?

Mr. Hodge: A little over five years in switch engine service. The balance in freight service.

Mr. Stone: In checking over the book, Mr. Hodge, Exhibit No. 26, on page 117, I find your name, C. L. Hodge, Illinois division, where you worked 20 days, made 20 trips, 2424 miles, 184 hours on duty, average time per day 9 2/10 hours, average time per trip 9 2/10 hours, total wages received \$153.66. Have you your mileage tickets for that month?

Mr. Hodge: I have stubs of my time tickets.

Mr. Stone: Are you satisfied that the stubs of your tickets are correct?

Mr. Hodge: Yes, sir.

Mr. Stone: Well, how do they compare with this exhibit?

Mr. Hodge: Just as the statement reads.

Mr. Stone: That is, the statement in the book?

Mr. Hodge: No, there is a difference between my stubs and the statement in the book.

Mr. Stone: If I have checked over the company's exhibit right, they show "number of hours on duty 184." The stubs

of your time tickets that you have shown to me total 243½ hours. Is that correct?

Mr. Hodge: It should be 242 hours.

Mr. Stone: 242 hours. And I wish you would read a few of your trips there to show what kind of trips you were making during that month. You were in chain gang freight service all the time?

Mr. Hodge: Running a regularly assigned engine in chain gang service. The first I was off, the second I was called for 7:15 A. M.

Mr. Stone: Well just there. You say you were called for 7:15 A. M. What time did they call you?

Mr. Hodge: They called me at 5:15.

Mr. Stone: You have two hours' call in service?

Mr. Hodge: That is the rule, from an hour and one-half to two hours. It is almost always two hours.

Mr. Stone: All right. You were called for 7:15. What time did you leave?

Mr. Hodge: I left the terminal, Silvis, at 8:25 A. M.

Mr. Stone: What time did you arrive at the other terminal?

Mr. Hodge: Arrived at Blue Island at 10:45 P. M.

Mr. Stone: You were 15 hours and 30 minutes on duty?

Mr. Hodge: 15 hours and 30 minutes on duty, 159 actual miles, and 10 miles overtime before leaving, 169 miles.

Mr. Stone: That was initial terminal delay?

Mr. Hodge: Yes.

Mr. Stone: One hour?

Mr. Hodge: Yes.

Mr. Stone: All right, go ahead. When did you leave going back? When did you leave Blue Island?

Mr. Hodge: On the 3rd, I was called for 4:30 P. M., and left at 4:50 P. M.

Mr. Stone: What time did they call you?

Mr. Hodge: 2:30.

Mr. Stone: Two hours' call in Blue Island also?

Mr. Hodge: Yes.

Mr. Stone: What time did you get to Silvis?

Mr. Hodge: I returned to Blue Island, got to Blue Island at 10:45 P. M.

Mr. Stone: What did you do—make a short turn?

Mr. Hodge: I was going light, and at New Lenox, about eighteen miles, blew out a stud in the fire box, and had to return with a dead engine.

Mr. Stone: So you came back there but were on duty 6 hours and 15 minutes?

Mr. Hodge: On duty 6 hours and 15 minutes.

Mr. Stone: For which you were paid a minimum day?

Mr. Hodge: 100 miles.

Mr. Stone: Then the next time you were called to go again was when?

Mr. Hodge: 4:15 P. M., and left Blue Island at 4:15; arrived at La Salle at 7:45 A. M., 15 hours and 30 minutes on duty, for which I received 211 miles.

Mr. Stone: How did you come to get so many miles?

Mr. Hodge: That was on a turn-around run. I went from Blue Island to La Salle, and received turn-around miles at La Salle, and then ran from La Salle to Ottawa, and received turn-around miles there, and I went back to La Salle, turned out on account of a wreck.

The Chairman: What do you mean by “turn-around miles?”

Mr. Hodge: Time between the time I arrive at a station and the time I leave to go back.

The Chairman: The intervening time?

Mr. Hodge: Yes.

Mr. Stone: I notice you had some quite long lay-overs at Silvis, did you not, during the month?

Mr. Hodge: Yes.

Mr. Stone: How long was the longest lay-over you had at Silvis?

Mr. Hodge: 40 hours and 15 minutes.

Mr. Stone: What were you waiting there so long for?

Mr. Hodge: Waiting for my turn out in the pool service.

Mr. Stone: So you put in the entire month in this freight service?

Mr. Hodge: Yes.

Mr. Stone: You were tied up on the road and towed in at one time, I see.

Mr. Hodge: Yes.

Mr. Stone: And you made a few short turn-around runs?

Mr. Hodge: Yes.

Mr. Stone: How do you account for the difference between their report of 184 hours and yours of 242 hours?

Mr. Hodge: I could not say how they figured that out, whether they took the exact time from the train despatcher's sheet, or how they got it. If they took it from the train despatcher's sheet, the time would not show until the time I actually left the terminal; but if they took it from the order for calling, then it should come out the same as my time shows.

Mr. Shea: That is the time you were called to leave?

Mr. Hodge: Yes.

Mr. Shea: To leave the yard with your train, or to leave the roundhouse?

Mr. Hodge: To leave the yard with the train.

Mr. Burgess: But your stubs do show that you were on duty 242 hours?

Mr. Hodge: Yes.

Mr. Stone: That would make a material difference in your average hours per trip. Instead of being 9.2 hours per trip it would be somewhere around 12, I should think.

Mr. Hodge: 12.1 hours a trip.

Mr. Park: How much pay did you draw for the month?

Mr. Hodge: I drew \$150.43.

Mr. Park: Does that compare with your record?

Mr. Hodge: Yes.

Mr. Stone: They show \$153.66 in their exhibit. It is only a few dollars difference. It is the number of hours that we were looking over.

Now, I see you are running one of these 1600 type, Mr. Hodge.

Mr. Hodge: Yes, sir.

Mr. Stone: And also one trip you have one of the 2,000 type?

Mr. Hodge: That was on account of a wreck. They couldn't get my engine through the house, on account of repairs, and I was given another extra engine to make a trip on.

Mr. Stone: Outside of that, you ran engine 1633 for the entire month?

Mr. Hodge: Yes, sir.

Mr. Stone: That is a saturated steam engine, is she not?

Mr. Hodge: Yes, sir.

Mr. Stone: Does she have a brick arch?

Mr. Hodge: No, sir, not at that time.

Mr. Stone: Well, don't all the Rock Island engines have brick arches?

Mr. Hodge: Well, there were very few of them at that time. The last year they have been putting them in.

Mr. Stone: There was a number of years when they discontinued putting in the brick arches?

Mr. Hodge: On some of the classes of engines.

Mr. Burgess: Is this a large engine, Mr. Hodge?

Mr. Hodge: Yes. It runs about 182,000 pounds on the drivers.

Mr. Burgess: How long did you run this engine without a brick arch?

Mr. Hodge: Well, I ran it about 7 or 8 months, as near as I can judge.

Mr. Burgess: No brick arch in it?

Mr. Hodge: No brick arch, no, sir.

Mr. Stone: Did you ever have a brick arch fall down?

Mr. Hodge: Yes, sir, part of one.

Mr. Stone: Did you give up your train?

Mr. Hodge: No, sir.

Mr. Stone: What did you do?

Mr. Hodge: If we couldn't find anything to pull it off with, we would break it up and pull it out. If not, we would keep on going, fire around it.

Mr. Burgess: When you say, Mr. Hodge, if you could not find anything to pull it out, what do you mean? Do you have a fire hook on your locomotive?

Mr. Hodge: No, sir, they furnish nothing now to pull anything out with. This last fall I was running this same engine. I have got it again on a different run, and we had part of an arch fall down, and I took a brick rod out of a car, bent a hook on the end and pulled it out, and put the rod back again. But we are furnished with no hooks or anything now to do that with.

Mr. Shea: Well, supposing something occurred on the engine so that it would be necessary to knock the fire in order to save the boiler, what would you do?

Mr. Hodge: Shake it out with a grate shaker.

Mr. Shea: Could you shake it out?

Mr. Hodge: Yes, sir.

Mr. Stone: Suppose there were heavy clinkers in your fire, could you do it then?

Mr. Hodge: Well, it is a hard job, but you could shake out enough so as to prevent any damage to the boiler, and get rid of your fire. I had to kill the engine on October 3rd. We had to shake the fire out.

Mr. Stone: That was the day the stud blew out of the side of the boiler?

Mr. Hodge: Yes. We were about two miles from the station when it blew out and we shook the fire out as we traveled back two miles. We got in the clear with—

Mr. Burgess: By “killing the engine,” you mean putting the fire out?

Mr. Hodge: Yes, sir.

Mr. Stone: The stud blew out, did the rest? They took the water out?

Mr. Hodge: We got in the clear with about 20 pounds of steam.

Mr. Stone: Did you ever have a lubricator glass break on an engine?

Mr. Hodge: Yes.

Mr. Stone: Did you give up your train?

Mr. Hodge: No, sir.

Mr. Stone: What did you do?

Mr. Hodge: Oiled the valves through the release valve.

Mr. Stone: Kept right on going?

Mr. Hodge: Yes.

Mr. Stone: Were you here the other day when Mr. Tollerton testified as the mechanical expert? Mr. Sheean asked him the following question:

“Mr. Sheean. Do you think it makes for the safety of the handling of the machine and prevents serious damage to it?” That was discussing the fall of a lubricator. Mr. Tollerton replied as follows:

“Oh absolutely. The successful completion of a trip depends on the proper working of the lubricator. If it did not work, they would have to stop. They could not run over the

road." You do run over the road when the lubricator does fall, don't you?

Mr. Hodge: Yes.

Mr. Stone: And if you gave up a train under those conditions, what would happen to you?

Mr. Hodge: Well, I should judge they would censure you for it. In one case, I know where a man received ten demerit marks for a ten minute delay on account of a lubricator glass breaking.

Mr. Stone: What did they do, try to get a new one?

Mr. Hodge: He went back to the roundhouse to get a new one put in.

Mr. Stone: That was right on the Rock Island that you are speaking of?

Mr. Hodge: Yes, sir.

Mr. Stone: Did you ever know of a reverse lever jumping out of the quadrant notches?

Mr. Hodge: Yes, I have.

Mr. Stone: Did you ever know of anybody on the Rock Island being injured with these?

Mr. Hodge: Only by hearing three or four of the men say they had been injured.

Mr. Stone: Do you recognize this? Do you know what this is?

Mr. Hodge: Yes.

Mr. Stone: What is it?

Mr. Hodge: That is a block that they use on the reverse lever. Most all of their passenger engines have them.

Mr. Stone: Where do you get them?

Mr. Hodge: The engineers get them at the 47th street office.

Mr. Stone: They are furnished by the company?

Mr. Hodge: Yes.

Mr. Stone: And they are furnished for the purpose of blocking reverse levers?

Mr. Hodge: Yes.

Mr. Stone: So they cannot jump out of the quadrant notches?

Mr. Hodge: Yes.

Mr. Stone: I think that is all, Mr. Chairman.

CROSS-EXAMINATION.

Mr. Sheean: What causes the reverse lever to jump, Mr. Hodge?

Mr. Hodge: Well, I attribute it to lost motion in the machinery, in the latch getting weak in the reverse lever.

Mr. Stone: You have never had the experience yourself of having one jump?

Mr. Hodge: I have had levers jump out on me. I had one engine that the lever jumped out. It was due to a casting at the bottom end of the reverse lever being loose on the frame, and in order to remove it they would have to jack the deck of of the engine up, and it could not be done in the roundhouse where I was working from, so I used to use a shovel handle at that time.

Mr. Stone: That was before they invented this, was it?

Mr. Hodge: No, they were using them, but I didn't have any of them, haven't today.

Mr. Sheean: And the particular experience you had was because of not keeping the engine in proper repair?

Mr. Hodge: Well, that one case was that.

Mr. Sheean: That is what I mean. The only one you had any experience with?

Mr. Hodge: Yes, I have had others that would jump out. We use treated water out of our Blue Island terminus, and the engine makes about two trips, and it jumps a good deal if you try to make a third with it. That will cause the valves to become dry; you can't keep any oil in them. That is one cause of lever jumping.

Mr. Sheean: This October, 1913. Is that October, or November, that you have? Are you sure?

Mr. Hodge: October.

Mr. Sheean: October?

Mr. Hodge: Yes.

Mr. Sheean: Is this a copy, Mr. Stone?

Mr. Stone: I think it is copied verbatim. I am not sure. Let him see it, Mr. Sheean. Unless the boy made a mistake.

Mr. Hodge: That is the exact copy, with the exception they made a mistake in figuring up the miles I think. They got 243½ hours, and it is 242 hours.

Mr. Sheean: Well, on the pay roll that was shown here, Mr. Hodge, the showing there is 2,424 miles?

Mr. Hodge: Yes.

Mr. Sheean: You show a total miles here of 2,893.

Mr. Hodge: Yes.

Mr. Sheean: If this is totaled right?

Mr. Hodge: Yes.

Mr. Sheean: You have carried into this the constructive miles, have you?

Mr. Hodge: I have carried in the actual miles run, and the overtime as well. All miles or overtime that I received pay for.

Mr. Stone: What is your rate on that class engine?

Mr. Hodge: \$5.20 per hundred.

Mr. Sheean: What I mean here is that on your total miles, that is carrying out 2,823 miles, you are carrying out the equivalent of that many miles that you were paid for on this one or two short runs there?

Mr. Hodge: Yes.

Mr. Sheean: Do you know whether or not the 2,424 as shown in the payroll is the number of actual miles?

Mr. Hodge: Just a minute. I can give to you the actual miles. Well, it will take longer than that. I would have to figure the time up. But I should judge it would be about the actual miles, 2,424, without figuring the terminal overtime, mileage and turn around miles that I made.

Mr. Sheean: Now I notice that you have on this slip that Mr. Stone has handed me two columns there of "time arrived" and "time cleared." Take, for instance, on the 5th, "arrived at La Salle 6:15; time cleared 6:45." What is the difference between those two?

Mr. Hodge: Well, 6:15 is the time that I arrived at the yard, and 6:45 is the time I cleared on the roundhouse track, when I am relieved of the engine.

Mr. Sheean: I have forgotten what the rule of final terminal delay on the Rock Island is.

Mr. Hodge: Thirty minutes gives us one hour's time or ten miles.

Mr. Sheean: So that on that day you were—

Mr. Stone: Pardon me, Mr. Sheean. If you do not draw

terminal delay, your road overtime continues until you are released at the roundhouse, doesn't it?

Mr. Hodge: No, sir.

Mr. Stone: It does not?

Mr. Hodge: No, sir.

Mr. Stone: It stops at the switch?

Mr. Hodge: It stops at the switch, the first switch used.

Mr. Sheean: Well, on that particular day you drew terminal delay?

Mr. Hodge: Yes, sir.

Mr. Sheean: Because of its being thirty minutes?

Mr. Hodge: Yes, sir.

Mr. Sheean: Well, now, the next one below that, "Time arrived 5:40, time cleared 6:00." There was no terminal delay there, was there?

Mr. Hodge: No, sir.

Mr. Sheean: So that the actual time and the compensated time, just as you are converting the miles into hours, may differ somewhat, Mr. Hodge?

Mr. Hodge: Yes, sir.

Mr. Sheean: And what you have given here, is that in all cases the actual hours, or do you carry out the compensated hours in the one case, or two cases, where you are paid 100 miles?

Mr. Hodge: Well, in the column under "Hours" there, the time is figured in there from the time called to leave until the time arrived. On each trip, by trip. There is one column "Time called" and one "Time left," and these hours on duty are figured from the time called and time cleared. That takes in all time on duty, terminal overtime and the trip as well.

Mr. Sheean: And that takes in whether you were paid or not paid for some of that time?

Mr. Hodge: Yes, sir. The last column there on your right, is odd minutes that our agreement didn't give me any allowance for.

Mr. Sheean: But you have carried out a column here?

Mr. Hodge: I have carried it out on the end.

Mr. Sheean: So that the carrying out of these odd minutes that you do not get any allowance for, would make a difference between the compensated time and the actual time?

Mr. Hodge: Well, it would not make as much difference as it shows.

Mr. Stone: It would not make a difference between 183 and 142 hours, would it?

Mr. Hodge: There are 58 hours difference, and the odd minutes, that I received no compensation for. But it would not figure ten hours anyway, at the most. Probably eight or nine hours.

Mr. Sheean: Well, then, you do not figure as against that those 400 odd miles that you were paid for, that you did not run? I think you said the actual miles were about 2,424, and you were paid for 2,893?

Mr. Hodge: Yes, sir.

Mr. Sheean: Now, whether or not that 400 miles that you were paid for that you did not run, more than offset the difference in time, you have not figured?

Mr. Hodge: No. With the overtime and with all, that would figure \$150.43, and their actual miles, the miles that they show on their exhibit, would only make me about \$126.00 for the month of October.

Mr. Stone: They show you drew \$153?

Mr. Hodge: Yes.

Mr. Sheean: That is because on some of these trips, of course, the pay would run into hours, would it not?

Mr. Hodge: Yes.

Mr. Sheean: You have reduced this to the miles paid for?

Mr. Hodge: Yes.

Mr. Sheean: Do you know whether or not the amount that you drew was the \$150.43, which you show by this method of computation, or the \$153.66 which the payroll shows?

Mr. Hodge: I cannot figure just the exact amount of my check, because I did not make a record of it that month. There were two or three months that I did not record what my check called for; but if it ran over that much, there must have been something back from the last month. Sometimes there is time in question that is held over from one month to the next.

Mr. Stone: It is a fact, though, is it not, Mr. Hodge, that the 2,893 miles that you show at the five twenty rate, makes \$153.43?

Mr. Hodge: Yes.

Mr. Stone: It is also a fact, is it not, that by showing less hours than you were actually on duty, a higher rate per hour would be shown in the railroad exhibit, would it not?

Mr. Hodge: Yes.

Mr. Stone: That is all.

Mr. Burgess: Mr. Hodge, how many hours did you say those minutes amounted to, for which you received no compensation?

Mr. Hodge: Well, I did not figure them up. I said about eight hours.

Mr. Stone: Those odd minutes are after your arrival at terminal, are they not?

Mr. Hodge: After arrival and before leaving.

Mr. Stone: It would have to be a full hour—

Mr. Hodge: It would have to be one full hour before leaving, before time called to leave, and 30 minutes after arrival.

Mr. Stone: And you have no figures to show the two hour call every trip before the time for reporting?

Mr. Hodge: No, sir.

Mr. Burgess: The point I was trying to bring out was about how many hours you lost. You need not figure that just exactly. It was about eight or nine hours in the month that you lost, due to the fact that you were not thirty minutes delayed after you arrived, or an hour on your departure; is that right?

Mr. Hodge: Yes.

Mr. Burgess: I was quite interested in your statement relative to the broken glass in the lubricator. If a glass is broken in the lubricator, is it possible to work the lubricator without putting in another one?

Mr. Hodge: If one glass is broken, you can work the other side. There are three glasses in the lubricators that we have that trouble with. One is for the pump, and one for each valve and cylinder. If you break one, you can use the other side, by shutting off the broken one.

Mr. Burgess: Yes, but that would not lubricate the side on which the broken glass was located, would it?

Mr. Hodge: No, sir.

Mr. Burgess: Therefore, it would be necessary to have another glass put in if you expected to work that lubricator?

Mr. Hodge: Yes.

Mr. Burgess: These glasses break frequently, do they not?

Mr. Hodge: Well, not very often, once in a great while. I have not had any experience lately with one.

Mr. Burgess: This engineer was assessed ten demerits because the glass broke, as I understand your statement.

Mr. Hodge: The glass broke when he was leaving the roundhouse, broke going to his train, and he went back to the roundhouse and got a new one put in, which caused thirty minutes delay to the train.

Mr. Burgess: And for that he was assessed ten demerits?

Mr. Hodge: Ten demerit marks.

Mr. Burgess: Did the officer who administered that discipline believe that the engineer could have prevented the glass from breaking?

Mr. Hodge: He did.

Mr. Burgess: In just what way could the engineer prevent the glass from breaking in the lubricator?

Mr. Hodge: Pardon me. Maybe I misunderstood your last question.

Mr. Burgess: I was trying to find out the real reason why the engineer was disciplined.

Mr. Hodge: He was disciplined for going back to have the other glass put in, when the road foreman said he could have continued on his day's work without the delay to the train, by either putting the glass in himself at some point where he had time, or oiling through the relief valve.

Mr. Burgess: That was the point. They did not hold him responsible for the glass breaking?

Mr. Hodge: Oh, no.

Mr. Burgess: But they did think he should have gone on without trying to get another glass put in at that time. Is that right?

Mr. Hodge: Yes.

Mr. Burgess: Did they specify in any manner how he should lubricate the cylinder or the valve on that side of the engine?

Mr. Hodge: No, I never heard what they said about it.

Mr. Burgess: You do not know in what way they expected to guarantee lubrication to that side of the engine, do you? By "they" I mean the officers of the road.

Mr. Hodge: No, only from conversation at different times that I had overheard about lubricating an engine through the relief valve. That led me to believe that was what they expected him to do on that occasion.

Mr. Burgess: Was he going on a passenger train or a freight train?

Mr. Hodge: On a freight.

Mr. Burgess: That is all.

Mr. Park: How long does it take to put in a lubricator glass ordinarily?

Mr. Hodge: You can put one in in about 15 or 20 minutes.

Mr. Park: Do they carry an extra one?

Mr. Hodge: I do. I always carry a couple of extra ones, for that kind of a lubricator.

Mr. Stone: That is all.

Mr. Shecan: Have you your November slips there?

Mr. Hodge: Yes.

Mr. Shecan: What were the total hours in November—the total earnings?

Mr. Hodge: I have not figured that out. I have not any copy of how much I made in November; but I was off from the 22nd until the 1st.

Mr. Shecan: You made more than in the month of November?

Mr. Hodge: I made more in the month of October.

Mr. Shecan: 1913?

Mr. Hodge: Yes. I was off from the 22nd to the 1st of the month.

Mr. Shecan: Of November?

Mr. Hodge: Oh, no—did you say November?

Mr. Shecan: Yes.

Mr. Hodge: Pardon me. I was thinking of the month of September. I have no copy of my November time, only in my stub book here.

Mr. Shecan: And you do not know what your hours were in that month?

Mr. Hodge: I do not know what my hours were in that month.

Mr. Shecan: But you made more money in November, 1913, than in October?

Mr. Hodge: I could not say that. I was thinking of the month previous to October.

Mr. Sheean: That is all.

Mr. Stone: That is all.

(Witness excused.)

ED. LAHERTY was called as a witness, in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and place of residence.

Mr. Laherty: E. Laherty, Parsons, Kansas.

Mr. Carter: What is your occupation?

Mr. Laherty: Engineer on the M. K. & T.

Mr. Carter: On what division are you employed as engineer?

Mr. Laherty: On the Cherokee Division, in the Fourth District.

Mr. Carter: Did you make a trip on September 2, 1914, from Muskogee to Parsons, on train 74?

Mr. Laherty: Yes.

Mr. Carter: Have you examined this so-called test of fireman's work?

Mr. Laherty: I have.

Mr. Carter: You were the engineer on that trip?

Mr. Laherty: I was.

Mr. Carter: I find that the so-called "observer" reports that Fireman Peterson, who I understand was firing for you, only worked 3 hours and 20 minutes in supplying coal to the fire box, and only 3 hours and 40 minutes in actual manual labor of any character, during the 7 hours and 15 minutes. Was that true?

Mr. Laherty: No, sir.

Mr. Carter: Was he engaged in manual labor most of the time throughout the trip?

Mr. Laherty: Yes, sir, practically all the time.

Mr. Carter: I find that he was not credited here for any time taking water. Did he take water on that trip?

Mr. Laherty: Yes, sir.

Mr. Carter: Do you remember about how many times he took water?

Mr. Laherty: Three times.

Mr. Carter: How many?

Mr. Laherty: Three times.

Mr. Carter: Ordinarily, about how much time would it take to take water?

Mr. Laherty: From five to eight minutes.

Mr. Carter: Then that would be from 15 to 30 minutes taking water during the trip?

Mr. Laherty: Yes, sir.

Mr. Carter: Fifteen to twenty-four minutes. Now, will you explain what is done when a fireman takes water?

Mr. Laherty: Why, he gets up on the tank and spots the engine, pulls the train, puts it in the manhole, and then holds the rope down until the tank is full.

Mr. Carter: Then puts up the spout?

Mr. Laherty: Then throws up the spout and comes back down.

Mr. Carter: Comes down over the coal?

Mr. Laherty: Yes, sir.

Mr. Carter: Evidently the observer did not consider that as being manual labor.

Mr. Laherty: I guess not.

Mr. Carter: You would consider it as such, wouldn't you?

Mr. Laherty: I would.

Mr. Carter: He does not give any credit, any time here, for shaking the grates. Does the fireman shake the grate ordinarily?

Mr. Laherty: Yes, sir.

Mr. Carter: Do you think he shook the grates on that trip?

Mr. Laherty: Yes, sir.

Mr. Carter: Does a fireman ever sweep the deck, get the coal off the deck?

Mr. Laherty: Yes, sir.

Mr. Carter: He was not given any credit for that, was he, Mr. Laherty?

Mr. Laherty: I believe not.

Mr. Carter: From your observation as an engineer, and your recollection as a fireman, does that lead you to believe that these so-called tests of manual labor are fair to the fireman?

Mr. Laherty: No, sir.

Mr. Carter: You believe the fireman is a hard worked man, notwithstanding the showing made here in these trips?

Mr. Laherty: I do.

Mr. Carter: It is stated that on that trip, Mr. Laherty, you and Fireman Peterson burned eight tons of coal. What is your recollection of the matter?

Mr. Laherty: In the matter of burning coal, it is all guess work. We burn between eight and ten tons of coal.

Mr. Carter: You think you burned more than eight tons of coal?

Mr. Laherty: Yes, sir.

Mr. Carter: Now, why do you say that? Did you weigh it?

Mr. Laherty: No, sir.

Mr. Carter: Well, did they weigh it?

Mr. Laherty: No, sir.

Mr. Carter: Just your guess against theirs?

Mr. Laherty: Yes, sir.

Mr. Carter: If they wanted to guess very little coal, so as to keep firemen from getting any money in this arbitration, the chances are they would guess less than you, wouldn't they?

Mr. Laherty: Yes, sir.

Mr. Carter: It is purely guess work?

Mr. Laherty: Yes, sir.

Mr. Carter: They speak about how much was a scoop of coal counting the scoops. Is it practical to weigh coal that way?

Mr. Laherty: Hardly.

Mr. Carter: Reaching for coal in a hurry to get it in the firebox, would you sometimes get a great deal more coal in a scoop than at other times?

Mr. Laherty: Yes, sir.

Mr. Carter: Wouldn't a great deal depend on the character of the coal?

Mr. Laherty: Yes, sir.

Mr. Carter: If you had a very big lump it would be almost difficult to lift it, wouldn't it?

Mr. Laherty: Yes, sir.

Mr. Carter: It would weigh probably twice as much as a scoop of fine coal, isn't that true?

Mr. Laherty: Yes, sir.

Mr. Carter: Now why do you guess that you burn more than eight tons of coal?

Mr. Laherty: I am just guessing by the amount that is done when we arrive at the terminal.

Mr. Carter: And, according to your judgment, there was as near ten tons as there were eight tons burned?

Mr. Laherty: Yes, sir.

Mr. Carter: Now, what was the tonnage of this train, do you remember? I will read it. Do you remember what the tonnage of the train was?

Mr. Laherty: 1,928 tons.

Mr. Carter: Yes, 1,928 tons. What is the rating of that engine?

Mr. Laherty: 2,300 tons.

Mr. Carter: Then this was a very light train, was it not?

Mr. Laherty: Yes, sir. This was a fast service train.

Mr. Carter: Fast freight train. According to your statement of the rating of that engine, and the statement of this report here, you were running about 16 per cent light, were you not?

Mr. Laherty: 372 tons light. I did not figure out the percentage.

Mr. Carter: I think you will find that to be about 16 per cent. And yet, notwithstanding this train was a fast freight train, and you were 16 per cent lighter tonnage, the fireman found plenty of work to do, did he not?

Mr. Laherty: Yes, sir.

Mr. Carter: Tell me again about this observer. What did he do when he got on the engine?

Mr. Laherty: He got up on the right front corner of the tank and sat there.

Mr. Carter: What did he have in his hand?

Mr. Laherty: Well, all I saw him have in his hand was a piece of waste.

Mr. Carter: Didn't you see a pencil and paper, and a clicker, and all that kind of stuff?

Mr. Laherty: He had a pencil and paper in his pocket.

Mr. Carter: Well, did he take the pencil and paper out of his pocket to write with, in his hand?

Mr. Laherty: He did when he got on and when he got off.

Mr. Carter: But during the time the fireman reached for coal, didn't he say "3¹/₂ seconds," "2¹/₂ seconds," and "a half a second?"

Mr. Laherty: No, sir.

Mr. Carter: He just sat there and watched?

Mr. Laherty: That is all I saw him doing.

Mr. Carter: What did he have in his hand?

Mr. Laherty: As far as I could see, a piece of waste was all he had.

Mr. Carter: Do you think he had a clicker concealed in that?

Mr. Laherty: Possibly so.

Mr. Carter: But you didn't see him make any records during the trip?

Mr. Laherty: I did not.

Mr. Carter: How long a distance is this, over this division from Muskogee to Parsons, Kansas?

Mr. Laherty: 117 miles.

Mr. Carter: How long did he ride with you?

Mr. Laherty: From Muskogee to Venita.

Mr. Carter: What did he do when he got to Venita?

Mr. Laherty: He got off the engine and told me he was going to go to the caboose.

Mr. Carter: Well, who ran the clicker after he got off the engine?

Mr. Laherty: I don't know.

Mr. Carter: He made a report, however, of the entire trip, did he not?

Mr. Laherty: I think so.

Mr. Shea: Well, Mr. Laherty, right there, was there any one on the engine after he got off, excepting the fireman and yourself?

Mr. Laherty: Well, possibly the brakeman might have been on there. There was no one outside of the crew.

Mr. Shea: How many miles did you say he rode when he first got on?

Mr. Laherty: 65 miles.

Mr. Shea: And then he got off and how much further did you go?

Mr. Laherty: 52 miles.

Mr. Shea: And still he credited you as going over the entire division?

Mr. Laherty: I think so.

Mr. Carter: Mr. Laherty, I want to read something to you that has been testified to by a witness for the railroads. In the proceedings of this Arbitration, pages 4242 and 4243, I find the following:

“Mr. Tollerton: Yes. On some 2,000 observations, made by practical locomotive engineers in this Western territory, one per cent of the fireman’s time only was engaged in pulling down and shoveling down coal. This in itself is an indication of the improvement in tender design, and indicates that no great portion of the fireman’s time is engaged in this work.”

Now the Chairman asked this question:

“The Chairman: What per cent of the labor he performs would be represented by this process? You say only one per cent of his time is consumed in getting this coal down. What per cent of his labor would he be saved by virtue of this process?”

“Mr. Tollerton: What per cent of labor would he be relieved of, if he were relieved of this one per cent of time?”

“The Chairman: Yes.

“Mr. Tollerton: Well, it would be a minute in one hundred minutes. That is what it would be.

“The Chairman: I do not comprehend your answer.

“Mr. Tollerton: Well, we will take a trip of 10 hours; that is 600 minutes. He would be relieved of 6 minutes of work in a trip of 10 hours.”

About how many minutes of work is usually devoted by a fireman to getting coal ahead in a ten hour trip?

Mr. Laherty: That would all depend how far the coal chutes were apart.

Mr. Carter: If you took coal quite often, he would not have to shovel the coal down?

Mr. Laherty: No, sir.

Mr. Carter: Ordinarily, how much do you think he would shovel ahead on your division?

Mr. Laherty: If we did not take coal, he would have to shovel it practically all ahead, if it were not for a coal pusher we have.

Mr. Carter: But a certain amount comes down, of course, that he does not have to shovel ahead; falls down by gravity?

Mr. Laherty: About five or six tons.

Mr. Carter: About five or six tons. Well, how much will your tank hold?

Mr. Laherty: About fourteen tons.

Mr. Carter: And then about eight tons of coal would have to be shoveled, if it were burned?

Mr. Laherty: Yes, sir.

Mr. Carter: But what do they do on your road? Does the fireman have to shovel ahead?

Mr. Laherty: Why, he would have to shovel ahead, if we did not have coal pushers.

Mr. Carter: You have coal pushers?

Mr. Laherty: Yes, on this class of engine.

Mr. Carter: Well, will you describe what coal pushers are?

Mr. Laherty: It is a plunger that works in the bottom of the tank, that pushes the coal out so it reaches the fireman.

Mr. Carter: So he can reach the whole amount?

Mr. Laherty: Practically so.

Mr. Carter: How long have you had these coal pushers there?

Mr. Laherty: A little over a year.

Mr. Carter: Are they working satisfactorily?

Mr. Laherty: Yes, sir.

Mr. Carter: You do not know what it costs to maintain them?

Mr. Laherty: I know nothing of them.

Mr. Carter: Now, I will proceed with what Mr. Tollerton said, again, on the following pages.

“Mr. Tolerton: I consider the most practical way of keeping coal within reach of the fireman, is by the proper designing of the tender, which will shoot it by gravity to the coal gate, without any mechanical appliances whatsoever.”

And again he said, down a little below it:

“Without the device, Judge, tenders properly designed, the shape of the coal space being such, 45 degrees, that it will shoot by gravity, 70 per cent of the contents of the tender will be carried against the coal gate. What Mr. Burgess was talking about was a power device that does exactly the same thing, merely

moves the angle of the coal gate to a more acute angle, being pushed up by cylinders.”

Do you notice any difference between these so-called hopper tanks and the coal pushers, in getting the coal forward?

Mr. Laherty: Yes, sir.

Mr. Carter: Do you think the coal actually does come forward on a hopper tank?

Mr. Laherty: I have never seen it.

Mr. Carter: You think then, that a fireman would have to shovel a great deal of coal forward unless you take coal at a coal chute, or had a coal pusher?

Mr. Laherty: That is what we did on our division.

Mr. Carter: I am going to read again, and this time from pages 5703 and 5704, when Mr. Trenholm was on the stand. Mr. Phillips asked him this question:

“Do you think, Mr. Trenholm, that, in all cases where coal chutes are located between terminals, a fireman is permitted to say when he requires coal and that a stop will be made for that purpose?”

“Mr. Trenholm: I think it is entirely left, I should say, to the engineer, Mr. Phillips, as being the man in charge of the engine, but I do not think any engineer would run a coal shed over the protest of the fireman, that he wanted coal. I do not think the engineer has any desire to burden the fireman with any additional work; but it only means a minute or two to fill the tank.”

Mr. Carter: Is it a fact, Mr. Laherty, that every man on the train does his utmost to get that train over the road as quickly as possible?

Mr. Laherty: Yes, sir.

Mr. Carter: Is it often that they make sacrifices, and do run these coal chutes?

Mr. Laherty: Yes, sir.

Mr. Carter: Is it often that the engineer or brakeman helps the fireman shovel down the coal rather than stop for coal?

Mr. Laherty: Very often.

Mr. Carter: I will read something else, from pages 4262 and 4263:

“Mr. Sheean: And you have given the reasons why you think they should fill the lubricators?”

“Mr. Tollerton: Yes.

“Mr. Sheean: Do you think it makes for the safety of the handling of the machine and prevents serious damage to it?

“Mr. Tollerton: Oh, absolutely. The successful completion of a trip depends on the proper working of the lubricator. If it did not work, they would have to stop; they could not run over the road.”

What would you do, if a lubricator stopped working?

Mr. Laherty: I would go right ahead.

Mr. Carter: Did you ever hear of a lubricator stopping working and putting that train out of business?

Mr. Laherty: No, sir.

Mr. Carter: Mr. Laherty, have you ever filled lubricators?

Mr. Laherty: Yes, sir.

Mr. Carter: Is it much easier and safer to fill a lubricator in a roundhouse, where the steam pressure is at least low, if not entirely absent, than it is on the road?

Mr. Laherty: Yes, sir.

Mr. Carter: Explain how difficult it is to fill a lubricator with full pressure of steam on the boiler.

Mr. Laherty: Well, the steam on the boiler has nothing to do with it, if the valves will shut off tight, but the lubricator is hot, and when you take the plug out to fill it, the oil that is in the pipes will squirt out all over you.

Mr. Carter: Sometimes it gets on the top of the cab?

Mr. Laherty: Yes, all over the cab, or the right side of it.

Mr. Carter: Any little sediment under the seat of the valve would result in that cutting off the steam from the steam dome?

Mr. Laherty: It keeps it hot; it keeps the lubricator hot.

Mr. Carter: It keeps the lubricator hot, and it blows out, does it?

Mr. Laherty: Yes, sir.

Mr. Carter: Would you not much prefer to fill a lubricator after the end of the trip, if you did not have to get up out of your bed to come down and fill it?

Mr. Laherty: Yes, sir.

Mr. Carter: And if the lubricator was deranged in any manner, why, you would proceed with your train by a little

additional work of oiling through the release valves on the front end of the steam chest?

Mr. Laherty: Yes, sir.

Mr. Carter: Now, I will read from page 4341:

“Mr. Stone: Is it not a fact that when the arch falls down in one of these big, modern locomotives, that it is almost impossible to keep coal in them then?

“Mr. Tollerton: The arch does not fall down: If the arch fell down, or any other accident happened to the locomotive, the engine crew would give up their train and come in light.”

Did you ever run or fire an engine with a brick arch?

Mr. Laherty: Yes, sir.

Mr. Carter: Did you ever see bricks fall down in the fire box?

Mr. Laherty: Yes, sir.

Mr. Carter: What did you do then?

Mr. Laherty: Well, we picked them out if we could, and if we could not get them out, why, we would go ahead with them in there.

Mr. Carter: Did you ever have experience where they did not have any bricks to put back in the arch, and you had to run the same locomotive without brick arches in there?

Mr. Laherty: Yes, sir.

Mr. Carter: Did you get over the road?

Mr. Laherty: Yes, sir.

Mr. Carter: Did you get over the road all right?

Mr. Laherty: Yes, sir.

Mr. Carter: Therefore, if it is the intent to convince anybody that you have to have a brick arch in order to fire a locomotive, that is a mistake, is it not?

Mr. Laherty: Will you repeat that?

Mr. Carter: I say, if it is the intent to show that a brick arch is necessary in order to properly fire a locomotive, or make a locomotive steam, it is a mistake, is it not?

Mr. Laherty: Yes, sir.

Mr. Carter: But you have to ordinarily have a different front end device, do you not?

Mr. Laherty: Why, it would have to be if it was to be

permanent; but to finish the trip, why, you do not make any changes in the draft rigging.

Mr. Carter: Mr. Laherty, on the M. K. & T. Road, were you there when the big engines were introduced into service?

Mr. Laherty: Yes, sir.

Mr. Carter: What was the effect on the men, the engineers and firemen?

Mr. Laherty: Well, it took off pretty near one-third of the crews.

Mr. Carter: And they continued to pull the same amount of freight?

Mr. Laherty: The same amount of tonnage.

Mr. Carter: You say it took off nearly one-third of the engineers and firemen?

Mr. Laherty: Yes.

Mr. Carter: Are those same engines there now?

Mr. Laherty: Yes.

Mr. Carter: Has business begun to improve recently?

Mr. Laherty: We have seven crews on the division where I work, where we used to have 10.

Mr. Carter: Was there a time when you had a less number of crews?

Mr. Laherty: Not until the big engines were there.

Mr. Carter: What I mean to say is, have they any more crews working there with those same big engines than they had soon after they were introduced? I mean, has business picked up any?

Mr. Laherty: No, sir.

Mr. Carter: It is just the same, is it?

Mr. Laherty: Just about so.

Mr. Carter: I heard that they were employing firemen at Parsons.

Mr. Laherty: They are putting those on another district. That is where they use smaller engines.

Mr. Carter: They are employing more firemen where they use smaller engines?

Mr. Laherty: Yes.

Mr. Carter: They have never employed firemen or engineers where they use the large engines?

Mr. Laherty: No, sir.

Mr. Carter: It has been a permanent loss to the men, has it, in earnings?

Mr. Laherty: Yes, sir.

Mr. Carter: What has it done to the company?

Mr. Laherty: It has resulted in an increase in their earnings.

Mr. Carter: Do you mean to say that, with a lower labor cost for engineers and firemen, they can earn the same amount of revenue?

Mr. Laherty: I should think so. They earn more revenue.

Mr. Carter: Provided there is no change in the rate?

Mr. Laherty: They earn more revenue.

Mr. Carter: I overlooked a question when I was on the lubricator. Have you not had instructions at some time to take engines out without lubricator working?

Mr. Laherty: I did at one time.

Mr. Carter: Did you ever go over the road without a lubricator?

Mr. Laherty: Yes.

Mr. Carter: By the instructions of the mechanical officials?

Mr. Laherty: The master mechanic.

Mr. Carter: Evidently he did not agree that lubricator not working would cause you to set a train out.

Mr. Laherty: No, sir.

Mr. Carter: That is all.

CROSS-EXAMINATION.

Mr. Sheean: When was it, Mr. Laherty, that these larger engines were put on, on the "Katy?"

Mr. Laherty: A little over a year ago, on this division where I am working—a year ago last November.

Mr. Sheean: In November, 1913?

Mr. Laherty: Yes.

Mr. Sheean: Engines of the same weight on drivers were put on on another division of the same railroad earlier than that?

Mr. Laherty: I think so, yes, on the Kansas City division.

Mr. Sheean: In fact, in 1910, when the firemen got their increased rates of pay, the larger engines on a part of the

M., K. & T. were made the basis for that increase, were they not?

Mr. Laherty: We did not have these engines of that size then.

Mr. Sheean: No, but you had engines as high as 185,000 pounds on drivers—not on your division, but on another part of the “Katy?”

Mr. Laherty: Yes.

Mr. Sheean: And the fact that the “Katy” had, previous to that time, installed these larger engines, was made one of the bases for increased rates of pay which were granted in 1910?

Mr. Laherty: Possibly so.

Mr. Sheean: The rates that were granted because of larger engines on a part of the system, those rates extended over the entire system, did they not?

Mr. Laherty: Yes.

Mr. Sheean: So that when the heavier power came to other divisions of the railroad, the rates fixed for the heavier power also became operative. Now, in this experience of yours with the brick arch, what kind of an engine was it you were running? What was the dimension of the grate area on the locomotive where there was a falling down of the arch?

Mr. Laherty: It was engine No. 510. I think it is a 30 per cent engine, the way they are rated now.

Mr. Sheean: How many bricks fell out of the arch?

Mr. Laherty: Three or four fell down in the middle of the firebox.

Mr. Sheean: Three or four of the bricks?

Mr. Laherty: The first row.

Mr. Sheean: Of the first row.

Mr. Laherty: All of the first row.

Mr. Sheean: That was all of the first row?

Mr. Laherty: Yes.

Mr. Sheean: How many bricks were there in this particular brick arch?

Mr. Laherty: I could not tell you. I did not count them.

Mr. Sheean: About how many?

Mr. Laherty: I could not tell you. I did not count them.

Mr. Sheean: Do you know of any case where the entire brick arch fell down?

Mr. Laherty: I do not know as I do.

Mr. Sheean: But your experience was with three bricks in the front row falling down?

Mr. Laherty: The front row of bricks, whether it is three or four in those engines I don't know.

Mr. Sheean: Simply the front row was disturbed. How many rows were there altogether in this engine, No. 510?

Mr. Laherty: I do not know. I did not count.

Mr. Sheean: About how many?

Mr. Laherty: Possibly three or four.

Mr. Sheean: What would have been the effect on that engine 510 if the entire brick arch had fallen down?

Mr. Laherty: Do you mean in regard to steaming?

Mr. Sheean: As to what the engineer would do with an engine in that condition?

Mr. Laherty: He could go right ahead with it.

Mr. Sheean: With the arch entirely down?

Mr. Laherty: Yes.

Mr. Sheean: Is that based upon experience or observation? Did you ever know of any one doing it?

Mr. Laherty: Yes. I have known several of them that did it. I cannot recall their names right now.

Mr. Sheean: The entire arch fell down?

Mr. Laherty: Yes, took it out. In a number of their engines they have taken the arches out of them at the roundhouse.

Mr. Sheean: Taken them out at the roundhouse?

Mr. Laherty: Yes.

Mr. Sheean: And have they readjusted the engine then.

Mr. Laherty: Possibly so. I don't know. The tubes are still in.

Mr. Sheean: I wish you would give us, if you can, the name of the man who made the trip with the entire brick arch down.

Mr. Laherty: I could not tell you.

Mr. Sheean: Have you any idea where he is—the man who made the trip with the complete arch down, finished and went in with his tonnage?

Mr. Laherty: I don't know.

Mr. Sheean: Your own experience is limited to the falling in of the three or four bricks of the front row.

Mr. Laherty: The first row of bricks. From that, I could

understand by Mr. Tollerton's statement, he wanted to show that it would change the draft on the fire so that it would practically kill the engine.

Mr. Sheean: No matter what Mr. Tollerton intended or did not intend, your observation or experience is limited to one engine on which the front row fell down?

Mr. Laherty: What I want to say is that the front row would have the same effect on the draft. It would give it more overdraft.

Mr. Sheean: Your experience has been limited to the one instance of the falling down of the bricks on one engine, and on that one engine the bricks on the front row?

Mr. Laherty: That is the only one that fell down that amounted to anything. We have taken several others out, but probably just one brick.

Mr. Sheean: On this trip made in September last, you recall the circumstances do you of some one—what was the man's name?

Mr. Laherty: Mr. Griffey. I am well acquainted with him.

Mr. Sheean: Mr. Griffey?

Mr. Laherty: Yes, sir.

Mr. Sheean: Who is he?

Mr. Laherty: Traveling fireman.

Mr. Sheean: A traveling fireman? He is a man who has shoveled coal on that road?

Mr. Laherty: Yes. He is working there now. He is an engineer now.

Mr. Sheean: An engineer now. A member of the Brotherhood?

Mr. Laherty: I think so.

Mr. Sheean: And you remember his getting on your engine in the afternoon at Muskogee?

Mr. Laherty: Yes, sir.

Mr. Sheean: And outside of this photostat from which you refreshed your recollection, have you any recollection of just what the train loading was on that trip?

Mr. Laherty: The conductor said, when he brought the orders over, 1,928 tons. He most always puts it on the register book.

Mr. Sheean: Had you anything to fix the particular tonnage in your mind, outside of the fact that you have seen this report of it here at this time? I mean, to fix that particular trip, Mr. Laherty?

Mr. Laherty: Yes. We had an engine that trip that we never had before and never have had since.

Mr. Sheean: That was a heavier engine then—

Mr. Laherty: The same class engine, but a different number.

Mr. Sheean: The same class of engine; and what was the weight on drivers of that engine?

Mr. Laherty: I don't know. 214,000 pounds, I believe.

Mr. Sheean: And that engine was equipped with a mechanical coal pusher?

Mr. Laherty: Yes, sir.

Mr. Sheean: And an air door?

Mr. Laherty: Yes, sir.

Mr. Sheean: Have you any recollection of just how the coal was loaded on that engine?

Mr. Laherty: Just an ordinary tank of coal.

Mr. Sheean: Just an ordinary tank?

Mr. Laherty: Yes.

Mr. Sheean: I take it you have no independent recollection of just when and where you took water?

Mr. Laherty: Yes, sir.

Mr. Sheean: I mean of that particular trip?

Mr. Laherty: Yes, sir.

Mr. Sheean: Was there anything different about that trip from any of the other trips?

Mr. Laherty: No, sir.

Mr. Sheean: That is, you took water at the same places that you always did?

Mr. Laherty: That you would with a fast service train, three times.

Mr. Sheean: Three times?

Mr. Laherty: Yes, sir.

Mr. Sheean: The time of taking water is about five minutes?

Mr. Laherty: From five to eight minutes.

Mr. Sheean: From five to eight minutes, and that was

done three times on that trip?

Mr. Laherty: Yes, sir.

Mr. Sheean: Now do you know what sized scoop was used by the fireman?

Mr. Laherty: The same scoop he always used.

Mr. Sheean: And what is that?

Mr. Laherty: A No. 5 scoop.

Mr. Sheean: And how many pounds of coal does a No. 5 scoop carry?

Mr. Laherty: Well, that would depend on how full it was. Mr. Tierney, our traveling engineer, used to figure about 16 pounds.

Mr. Sheean: That is, you can get a good deal more than 16 pounds on that scoop, can't you?

Mr. Laherty: He based that on the average.

Mr. Sheean: That is, taking and using a No. 5 scoop a number of times, the average will be about 16 pounds?

Mr. Laherty: That is the way he averaged it, I believe.

Mr. Sheean: Well, do you think that is about right, from your observation?

Mr. Laherty: Well, I never weighed a scoop of coal.

Mr. Sheean: You never did?

Mr. Laherty: No, sir.

Mr. Sheean: How big is a ton of coal? What are the dimensions of it?

Mr. Laherty: I don't know.

Mr. Sheean: Well, you made a guess that there were about 10 tons of coal on this trip. How did you guess at it? What are the dimensions?

Mr. Laherty: Well, the bulk of coal will vary. Some coals are lots lighter than others.

Mr. Sheean: I understood you to say, though, that on this trip you guessed the coal was about—you guessed at it between 8 and 10 tons.

Mr. Laherty: Yes.

Mr. Sheean: How?

Mr. Laherty: By the space.

Mr. Sheean: And how much space do you figure for a ton of coal?

Mr. Laherty: I didn't figure it.

Mr. Sheean: Well, in making the estimate. When you made this calculation "now so much space makes a ton of coal," how much space did you set aside?

Mr. Laherty: I just looked back on the coal the same as Mr. Griffey, and it looked like there was 8 or 10 tons gone. He said 8 tons. I didn't say anything.

Mr. Sheean: Then, on this trip, you and Mr. Griffey, this traveling fireman, did he compare notes with you as to about how much coal was carried on the trip?

Mr. Laherty: When we got in?

Mr. Sheean: When you got in.

Mr. Laherty: Yes.

Mr. Sheean: And he said he thought there was about 8 tons of coal?

Mr. Laherty: Yes. That is what he stated.

Mr. Sheean: And then he guessed it as between 8 and 10, but you did not say anything different.

Mr. Laherty: I had nothing to say about it. It was nothing to me.

Mr. Sheean: Well, in just what way did you get the conclusion that it was nearer 8 than 10. I think Mr. Carter put it to you and you thought it was nearer 8 than 10. How much space would be occupied by 8 tons, and how much space would be occupied by 10?

Mr. Laherty: I never figured that in inches. I couldn't tell you.

Mr. Sheean: Well, of course, you have a great many times, Mr. Laherty, seen firemen shoveling coal on these tonnage engines on a fast train. When he puts in a fire about how many scoops does he put in ordinarily?

Mr. Laherty: That varies from 5 or 6 to 8 or 10.

Mr. Sheean: Well, let us take a low one then, about 6. When that door is open he puts in 5 or 6 scoops before the door is closed.

Mr. Laherty: Oh, these air doors open and close—

Mr. Sheean: After each scoop?

Mr. Laherty: Yes.

Mr. Sheean: Well, before the work of putting in that fire is completed, five or six, or eight or ten?

Mr. Laherty: Yes.

Mr. Sheean: And the putting in of those 5 or 6 or 8 or 10 is done pretty rapidly, the putting in of the fire?

Mr. Laherty: Yes.

Mr. Sheean: About how long does it take to put in 6 scoops of coal?

Mr. Laherty: I never figured that, but I have figured on other firemen on these engines putting in a fire, and they took from 45 seconds to a minute.

Mr. Sheean: From 45 seconds to a minute to fire?

Mr. Laherty: Yes.

Mr. Sheean: Now, if there were 6 scoops of coal put in a fire, 16 pounds to a scoop, there would be about 96 pounds put in to each fire?

Mr. Laherty: Yes.

Mr. Sheean: Or if you put in your 8 scoops of coal there would be 128 pounds put into each fire? Now you have figured it takes a fireman about 45 seconds to put in a fire?

Mr. Laherty: Well, that was not on this class of engine, and it was not this class of train, and I did not figure this.

Mr. Sheean: No, but you have observed this before. That is what I am trying to get at.

Mr. Laherty: I have on different trains.

Mr. Sheean: Well, the time of putting in a fire, your observation has been it takes about 45 seconds to put in a fire.

Mr. Laherty: Yes, sir.

Mr. Sheean: Well, then, Mr. Laherty, if it takes 45 seconds to put in a fire, and each fire is about 100 pounds, then about 20 fires will take up a ton of coal, won't it?

Mr. Laherty: I never figured it out.

Mr. Sheean: Well, there is 2,000 pounds, that is 20 times 100.

Mr. Laherty: I don't know that a fireman would put it in with an air door fire that quick.

Mr. Sheean: Well, was your observation where there was not an air door?

Mr. Laherty: Yes.

Mr. Sheean: And you think a fireman would be able to fire quicker without the air door than with it?

Mr. Laherty: He might, yes.

Mr. Sheean: Well, what is your judgment on that?

Mr. Laherty: I think he would, because the fireman would hurry more to get the door shut ordinarily, and open it quicker, and be in a bigger hurry to get his coal.

Mr. Sheean: How much difference, in your judgment, would that make in the length of time, firing with or without an air door?

Mr. Laherty: It has been my observation that a fireman with an air door fires slower. That is, he puts in the fire slower, uses more time.

Mr. Sheean: But you could not give us any idea of how much slower that would be?

Mr. Laherty: No, sir.

Mr. Sheean: You do recall that upon this trip Mr. Griffey stated that his judgment was that 8 tons of coal had been consumed in the trip?

Mr. Laherty: I believe that is what he had on his record.

Mr. Sheean: You would put it between 8 or 10 tons?

Mr. Laherty: Somewhere around there, I am just guessing at it, the same as he is.

Mr. Sheean: And on that trip you left Muskogee in the afternoon and arrived at Parsons at 9 o'clock that same evening.

Mr. Laherty: 9:05.

Mr. Sheean: And on that trip the fireman was paid \$4.75?

Mr. Laherty: I never figured it. I expect so.

Mr. Sheean: Well, what was your rate there on that trip?

Mr. Laherty: My rate is \$6.85, counting one hour's overtime.

Mr. Sheean: \$6.85?

Mr. Laherty: Yes, sir. \$6.31 without the hour's overtime.

Mr. Sheean: So that the fireman would be getting approximately \$4.75.

Mr. Laherty: Exactly.

Mr. Sheean: Well, if at the rate of shoveling coal where you have observed it it takes about 45 seconds to completely put in a fire, then the fireman does something other than shovel coal on the trip, doesn't he?

Mr. Laherty: Yes, sir.

Mr. Sheean: He does not take all of the time of making the trip in shoveling the coal?

Mr. Laherty: No.

Mr. Sheean: But you have made no estimate of just what part of his time is put in shoveling coal and what in other work.

Mr. Laherty: No, I have not.

Mr. Sheean: Nor on this particular trip whether it was 50 per cent of his time that was put in shoveling coal and 50 per cent in other work, or any other. You have made no observation or computation?

Mr. Laherty: Not on the full trip, no.

Mr. Sheean: When was it you made the observations as to the length of time that it takes to put in a fire?

Mr. Laherty: This was on a passenger train, and I was riding on it. That was a good while ago. It was a smaller engine, and I couldn't tell you just when it was.

Mr. Sheean: How about the coal consumption on a fast passenger train? Does the fireman in the same length of time shovel more or less coal than on a freight train? I mean in the same length of time, not in the same number of miles.

Mr. Laherty: Well, on a through heavy train it is about the same.

Mr. Sheean: In hours?

Mr. Laherty: In tons.

Mr. Sheean: I mean in time. In what hours time does a fireman on a passenger or a freight train shovel the most coal?

Mr. Laherty: Take two ordinary trains, it would be about the same.

Mr. Sheean: At the end of five hours, the fireman on the freight train shovels as much as the fireman on a passenger train?

Mr. Laherty: Yes, he shovels more.

Mr. Sheean: At the end of five hours?

Mr. Laherty: Yes, sir.

Mr. Sheean: That is the result of observation?

Mr. Laherty: That figures up with my observation on an engine both running and firing.

Mr. Sheean: The freight fireman puts in much longer hours than the passenger fireman?

Mr. Laherty: Yes, sir.

Mr. Sheean: And he works much longer during the time he is firing.

Mr. Laherty: About the same.

Mr. Sheean: Shovels as much coal per shovel and per hour.

Mr. Laherty: I think so.

RE-DIRECT EXAMINATION.

Mr. Carter: Mr. Laherty, you knew this was a test trip, did you not?

Mr. Laherty: No, sir.

Mr. Carter: What did you think that man was sitting up there on that seat for?

Mr. Laherty: Well, he was a traveling fireman and it was nothing unusual for him to be up there on the engine.

Mr. Carter: And he did not make any record so you could see he was making a test trip?

Mr. Laherty: No, sir.

Mr. Carter: In regard to these large engines, when were these large engines brought on to the M., K. & T. R. R.?

Mr. Laherty: I could not tell you, Mr. Carter, just exactly. They were put in service on that division about November, 1913.

Mr. Carter: In regard to these bricks falling out of arches, about what size were the bricks?

Mr. Laherty: Well, I will just guess at it, about a foot square.

Mr. Carter: And how thick?

Mr. Laherty: About three and a half or four inches.

Mr. Carter: There is no doubt about your understanding of the matter, that the falling down of a brick would be no great inconvenience?

Mr. Laherty: No, sir.

Mr. Carter: If enough brick fell down to obstruct the draft, you would drop the dump, would you not, and clear the bricks out, or pull them out some way?

Mr. Laherty: We would pull them out through the fire door.

Mr. Carter: There is no question about the bricks falling out and your going on? There seems to be a doubt here in the mind of the counsel about whether you are right about being able to run an engine without a brick arch in it.

Mr. Laherty: We would go right along without them.

Mr. Carter: You would take engines out of a terminal where the brick arches have been removed in the roundhouse?

Mr. Laherty: They have some where they have taken the arches out of them.

Mr. Carter: And don't put them back at all?

Mr. Laherty: No, sir.

Mr. Carter: And you go right on, do you?

Mr. Laherty: Yes, sir.

Mr. Carter: I guess that is all.

RE-CROSS EXAMINATION.

Mr. Sheean: I just want to clear up, Mr. Laherty. This traveling fireman, when did he come back to your engine, when he made this statement about 8 tons of coal having been burned?

Mr. Laherty: When we arrived on the terminal at Parsons, when our trip was complete.

Mr. Sheean: On the completion of the trip?

Mr. Laherty: Yes.

Mr. Sheean: And he rode with you 65 miles on the trip?

Mr. Laherty: Yes, sir.

Mr. Sheean: And then before you were released, came out to the engine?

Mr. Laherty: Yes, sir.

Mr. Sheean: And made the observation as to how much coal had been used?

Mr. Laherty: Yes, sir.

Mr. Sheean: Now, if I follow you here correctly, from your observations, there is fire put in every forty-five seconds?

Mr. Laherty: That is not on this trip I was doing.

Mr. Sheean: No, that is on a passenger run. That is on a passenger run, where the fire is put in every forty-five seconds, but if coal is put in at that rate, of one fire in forty-five seconds, that puts in a ton about every twenty minutes, doesn't it, less than twenty minutes? That is, adding your forty-five second periods together, by the time you got twenty of those periods together, you would have twenty fires?

Mr. Laherty: You are taking it right down to the forty-five seconds, and I said from forty-five seconds to a minute.

Mr. Sheean: I will take it a minute with you. If you put

in one hundred pounds in one minute, a fire a minute; and we will put in a small fire.

Mr. Laherty: And you are taking from five to eight scoops, whatever they may be.

Mr. Sheean: All right. Taking a small scoop then.

Mr. Laherty: There is no specified number of scoops to any fire.

Mr. Sheean: I am taking the small with you; six small scoops of coal; you said five or six were small and eight large. Six times sixteen would be 96 pounds; and make it a minute, 100 pounds a minute, in twenty minutes you will get in twenty times 100 pounds, or one ton of coal.

Mr. Laherty: That is the way you have it.

Mr. Sheean: Well, to get your eight tons of coal in here, you would have eight times twenty minutes, wouldn't you?

Mr. Laherty: Yes.

Mr. Sheean: So your observation was only about one-half the time that this man gives from observation of shoveling eight tons of coal?

Mr. Laherty: This man takes the observation sixty-five miles, and didn't take any of the fifty-two miles, and I only took his, for one mile.

The Chairman: Does the exhibit showing this record trip, purport to show he made it on the other fifty-two miles to which he refers?

Mr. Sheean: He shows eight tons of coal consumed on the entire trip. While, taking the liberal estimate of a fire every minute put in, and the fire that is put in being only 100 pounds, when you aggregate those minutes it only takes twenty of those fires to put in a ton of coal, doesn't it?

Mr. Laherty: If you put in 100 pounds of fire.

Mr. Sheean: Well, 100 pounds is a pretty small fire on one of these engines, isn't it, the kind that was under observation here, 214,000 pounds on drivers?

Mr. Laherty: I never weighed the coal, nor never measured it.

Mr. Sheean: Well, how many scoops? We will take it by scoops.

Mr. Laherty: I never counted it on that class of engine.

Mr. Sheean: Well, it would be more than five or six. That is the larger engine, they would put in more scoops.

Mr. Laherty: Sometimes it might be more, and sometimes it might be less.

Mr. Sheean: Well, ordinarily, the number of scoops would go up as the size of the fire box went up, wouldn't it?

Mr. Laherty: Yes, ordinarily it would, on the same grade.

Mr. Sheean: Well, no matter how it is distributed. Through an eight-hour period. Seven and a half hours you were on this run. Of course, he could not have been shoveling coal all of the time at this rate, could he?

Mr. Laherty: Not hardly.

Mr. Sheean: Because, if he had done that, and shoveled it at that rate you observed, by putting in a fire every minute, and keeping that up during all of the minutes of the time here, he would have put in so many tons of coal, that your tank wouldn't carry it?

Mr. Laherty: Yes. They quite often do that on that division.

Mr. Sheean: If you take it as ten tons of coal on this trip, that it was ten tons of coal that were burned, instead of eight tons of coal, ten tons consumed on a trip lasting seven hours and a half, the actual shoveling of coal could not have been more than two and a half to three hours, could it, on any basis of speed that you ever observed? That is, you have got just ten tons of coal that was put in here in this length of time, and if you put them in in six scoops full at a time, there is 100 pounds going into the door each time you fire; putting in twenty of such fires gets rid of a ton of coal?

Mr. Laherty: Yes.

Mr. Sheean: Well, now, on an eight hour run you have got to figure that you cannot possibly—

Mr. Laherty: Do you believe a man puts in 100 pounds of coal in a fire?

Mr. Sheean: I am taking your estimate. I don't know, Mr. Laherty. I asked you how the firemen worked, and you said five or six scoops to a fire.

Mr. Laherty: Yes.

Mr. Sheean: Sometimes five or six, and other times, eight or ten.

Mr. Laherty: I never weighed a scoop of coal. I don't know what they weigh. They may weigh ten pounds, and may weigh sixteen.

Mr. Sheean: I thought you gave assent to the statement of your traveling engineer that expressed the theory several times that 16 pounds was about fair.

Mr. Laherty: He was weighing a different sort of coal.

Mr. Sheean: Well, you thought it was about right.

Mr. Laherty: I never said so.

Mr. Sheean: You never made any observation?

Mr. Laherty: No.

Mr. Sheean: Then just on what do you base your experience or your ability to guess as between eight and ten, or between five and six, Mr. Laherty?

Mr. Laherty: On the space in the tank.

Mr. Sheean: What space in the tank?

Mr. Laherty: As left by the coal that is shoveled out.

Mr. Sheean: And what space in the tank is equal to a ton of coal, or is equal to eight tons of coal?

Mr. Laherty: When we go to take coal there, we look in the tank, and guess, and just call for the number of tons we think the tank will hold. That is the only way we have of taking coal. It is all guess work.

Mr. Sheean: I just want to get clear.

Mr. Laherty: I don't leave a ticket when I arrive at a terminal, for coal to fill the tank. Some other roads do.

Mr. Sheean: But on the "Katy" there is no ticket system?

Mr. Laherty: The hostler makes out the ticket when he coals the engine up.

Mr. Sheean: Do you sign for it?

Mr. Laherty: No, sir.

Mr. Sheean: Or keep an account of what goes in?

Mr. Laherty: Yes, sir.

Mr. Sheean: Now, do you prefer, or do you know whether the firemen on the "Katy" prefer the pneumatic door to the old door with the chain?

Mr. Laherty: Those I have talked to, claim they do.

Mr. Sheean: Prefer the old door?

Mr. Laherty: No, the automatic door.

Mr. Sheean: The automatic door?

Mr. Laherty: Yes, sir.

Mr. Sheean: That is the kind that was on this particular engine. That is all.

RE-DIRECT EXAMINATION.

Mr. Carter: Mr. Laherty, after a man fires an engine several years, and runs an engine several years, do you believe he is competent to judge about how much coal is taken out of a tank, and how much coal he needs to put in the tank?

Mr. Laherty: I do.

Mr. Carter: You know the size of your tank; you know what size of coal the tank holds, and you know the proportion of the coal that has been removed, don't you?

Mr. Laherty: That is all we have to go by there.

Mr. Carter: This hostler, does he have a pair of scales to weigh this coal when he puts it on the tank?

Mr. Laherty: No, sir.

Mr. Carter: How does he do?

Mr. Laherty: He just guesses at it.

Mr. Carter: Is not this whole coal accounting system largely a system of guess?

Mr. Laherty: That is all it is, as far as it is charged to the individual engine.

Mr. Carter: Now, I find here that under the railroads' method of accounting, that out of 7 hours and 15 minutes, they say there was a total of actual manual labor of 3 hours and 40 minutes, and time performing no physical labor was 3 hours and 38 minutes. They have said that when the fireman was performing no physical labor, he was either standing in the gangway or sitting on the seat box. Now, the statement is made here that on this trip the fireman, Patterson and yourself as engineers, either sat on the seat box or stood in the gangway half of his time. Is that true?

Mr. Laherty: No, sir.

Mr. Carter: Absolutely false, is it?

Mr. Laherty: Well, it is not true. There are several things that the fireman does that are not mentioned in there.

Mr. Carter: Now a fireman has plenty to do besides coal-ing the fire box, has he not?

Mr. Laherty: A fireman is required to look out for signals all the time that he isn't putting coal in the fire box.

Mr. Carter: Does he have to shovel down coal, drag coal ahead? I am not talking about your coal pusher, but where there is no coal pusher.

Mr. Laherty: Yes, sir.

Mr. Carter: Is he busy most of his time?

Mr. Laherty: Yes.

Mr. Carter: If he has any time to watch for signals, where does he go to watch for signals?

Mr. Laherty: He either has to get in on the seat box or on the gangway.

Mr. Carter: And if it should appear that the attempt has been made to show that he was loafing half his time, it is not fair to the fireman, is it?

Mr. Laherty: No, sir.

Mr. Carter: That is all.

RE-CROSS-EXAMINATION.

Mr. Shean: Mr. Laherty, this report, as I have it here, shows that in that time that was put in he was 3 hours and 20 minutes supplying coal to the fire box; that in addition to 3 hours and 20 minutes shoveling coal there was other manual labor that made his total manual labor 3 hours and 40 minutes. You say that there were three water stops that might run from 5 to 8 minutes each?

Mr. Laherty: Yes.

Mr. Shean: They figure here that there were 20 minutes of work outside of the 3 hours and 20 minutes that he was shoveling coal. How much would you say? How many minutes of actual work are you able to testify to, as being done outside of the work that he was shoveling coal?

Mr. Laherty: I consider that he was busy from the time we left until we arrived at Parsons.

Mr. Shean: Yes, we grant that. There has been no dispute about that. We are talking about performing physical labor. There was physical labor during the taking of the water.

Mr. Laherty: The fireman pumped the engine. He is required to put the injector on and off, sweep the deck, and wet down the coal.

Mr. Sheean: Did he sweep the deck on this trip?

Mr. Laherty: Sure.

Mr. Sheean: Where?

Mr. Laherty: I expect several different times. I could not say just how many, but he keeps the deck clean, keeps the coal wet down, to keep the dust off.

Mr. Sheean: Do you remember the particular time or place where that was done?

Mr. Laherty: No, that would be an impossibility.

Mr. Sheean: That would be an impossibility unless you made a record of it?

Mr. Laherty: Yes.

Mr. Sheean: How much time do you say was taken in the actual shoveling of the coal?

Mr. Laherty: I did not keep any track of it.

Mr. Sheean: You gave assent to Mr. Carter's statement, that the statement that he was only 3 hours and 30 minutes in shoveling coal, was absolutely false. Now, how many minutes did he put in in shoveling coal?

Mr. Laherty: Was that Mr. Carter's question?

Mr. Sheean: That was Mr. Carter's question, which he has been nodding assent to, which he is nodding assent to now, assenting to the fact that you assented to it.

Mr. Laherty: I did not quite understand it that way. I understood that the question was, how many hours did he put in on the trip.

Mr. Sheean: How many hours did he put in shoveling coal.

Mr. Laherty: I did not understand it that way. I have no record of how many hours he was shoveling coal?

Mr. Carter: Mr. Chairman, I do not like to have the witness deceived. The counsel is trying to deceive the witness. If you will read what I asked him, maybe the counsel will be better able to state the question to the witness. I said the total actual manual labor. I was not saying anything about putting in coal. I was talking about the time of performing no physical labor, 3 hours and 38 minutes. I was not talking about putting in coal. I was talking about physical labor.

Mr. Sheean: Let us straighten that out, Mr. Laherty. How many minutes did he put in, shoveling coal?

Mr. Laherty: I do not know. I have no record of it.

Mr. Sheean: Have you any knowledge, or can you give me any estimate that possesses any degree of accuracy?

Mr. Laherty: No, not accurately.

Mr. Sheean: What are the other elements of manual labor that the fireman does, besides shoveling coal and sweeping the deck? Tell me how many minutes were put in on that

Mr. Laherty: I could not tell you that. I have no record of it. I did not keep a record of it.

Mr. Sheean: What is the second element of manual labor that the fireman does?

Mr. Laherty: He puts on and off the injector.

Mr. Sheean: On and off the injector. How many minutes did he do that on that trip?

Mr. Laherty: I could not tell you.

Mr. Sheean: Without following any of them, can you give me on any of the items or elements of manual labor, an estimate as to the hours or minutes that this fireman put in, on any of them?

Mr. Laherty: I could not tell you just how long. I could not attempt to tell you how long he was at leisure, as you claim. I would not attempt to tell you how long he was at leisure, without I had kept track of it.

Mr. Sheean: Then how are you able to say it is absolutely false that all his manual labor was within the time of 3 hours and 40 minutes?

Mr. Laherty: I do not consider a fireman at leisure unless we are in on a side track and stopped, or stopped on the main line.

Mr. Sheean: Assuming that it is true that he is not at leisure, and no one here has said anything about being at leisure—

Mr. Carter: I shall ask an opportunity to bring the record, and have read the statement made by Mr. Tollerton, what he was doing on the seat box and what he was doing when he was standing in the gangway.

Mr. Sheean: "Standing at ease."

Mr. Carter: Standing at ease.

Mr. Sheean: Yes, and sitting at ease.

Mr. Carter: He is not performing manual labor then?

Mr. Sheean: No, he is not performing manual labor. I want to find out if I can, Mr. Laherty, granting that a fireman on duty is working during all the time from the minute he reports for duty until he is relieved, his work is partially physical and partly mental, is it not?

Mr. Laherty: The only thing that would be mental would be looking for signals.

Mr. Sheean: Then do you consider that a fireman's entire work is manual labor?

Mr. Laherty: Unless we are stopped, and he is not taking care of the fire.

Mr. Sheean: Do you consider that all of his work is manual labor—all the work that the fireman does?

Mr. Laherty: With those exceptions. He is putting on and off the injectors, sweeping the deck, and doing various other things.

Mr. Sheean: And is he doing it all the time?

Mr. Laherty: Practically all the time while we are going.

Mr. Sheean: Mr. Laherty, let us see for one moment again: on your estimate here you say there were ten tons of coal as an outside estimate, consumed on this trip.

Mr. Laherty: I did not say exactly ten tons.

Mr. Sheean: Well, from eight to ten, nearer ten than eight.

Mr. Laherty: Yes.

Mr. Sheean: On this particular trip how many scoops would ordinarily be needed to fire the engine?

Mr. Laherty: I did not count them.

Mr. Sheean: What is your judgment?

Mr. Laherty: I did not count them.

Mr. Sheean: What was your observation?

Mr. Laherty: I did not take any observation of the scoops he put in.

Mr. Sheean: How many do you think were put in, in keeping up the fire?

Mr. Laherty: I did not count them.

Mr. Sheean: And you have no thought or judgment on it?

Mr. Laherty: I have no record of that. I did not count the scoops.

Mr. Sheean: Can you give us any idea from your observa-

tion as to about how many scoops should be put in on an engine of that class, to make the fire?

Mr. Laherty: There is a vast range of difference.

Mr. Sheean: Within what limits as to low and high?

Mr. Laherty: I do not know as there is any limit.

Mr. Sheean: No limit, either high or low?

Mr. Laherty: A fireman would need to put in, of course, as many—

Mr. Sheean: I should like to get, if I could, an estimate from you of about how many scoops of coal were put in?

Mr. Laherty: I did not count them.

Mr. Sheean: Can you give us any judgment of about how many are put in on a trip, on an engine of this type and style?

Mr. Laherty: There is no given amount of coal, that is, no number of shovels for any one fire.

Mr. Sheean: Then, Mr. Laherty, in 3 hours and 40 minutes of shoveling coal, about how many tons are shoveled, if a man works at nothing but shoveling coal, I mean on the deck of a moving engine?

Mr. Laherty: I believe they consider 26 tons a day's work for a man shoveling coal out of a car.

Mr. Sheean: Yes. That gives us some idea—26 tons a day. How much do they pay a ton to the man who shovels coal?

Mr. Laherty: I don't know.

Mr. Sheean: Well, about what?

Mr. Laherty: I don't know.

Mr. Sheean: Well, that is a fair average day's work of shoveling coal on the "Katy," 26 tons?

Mr. Laherty: For a man shoveling it out of a car.

Mr. Sheean: Yes, and that is in a ten-hour day.

Mr. Laherty: I never kept a coal sheet. I don't know.

Mr. Sheean: And in the purely physical, manual labor of shoveling coal, 26 tons of coal is considered a day's work?

Mr. Laherty: I said I had heard it was.

Mr. Sheean: That is all.

RE-DIRECT EXAMINATION.

Mr. Carter: Mr. Laherty, how long have you been in Chicago?

Mr. Laherty: I came in here Sunday morning.

Mr. Carter: Have you seen these policemen standing on the street corners down here?

Mr. Laherty: Yes, I have seen several of them.

Mr. Carter: Do you think they stand there all day?

Mr. Laherty: Yes. That is—

Mr. Carter: They do not perform any manual labor, do they?

Mr. Laherty: Not according to—

Mr. Carter: Pedal labor, foot labor, standing on their feet, and the policeman is standing at ease, is he not, all day?

Mr. Laherty: He must be.

Mr. Carter: Don't you think it is a shame that he is getting any pay for it?

Mr. Laherty: I don't know why he should.

Mr. Carter: If he should work for a railroad company, they would not want to pay him anything, would they, because he was standing at ease?

Mr. Laherty: Really, I could not say. They might want to pay him.

Mr. Carter: What kind of labor would you call it, riding on one of these rough riding engines, without even sitting down, as the engineer does. Would you call it manual labor, labor of the hand, or what labor would it be?

Mr. Laherty: I would consider it manual labor.

Mr. Carter: It is labor of some kind, isn't it?

Mr. Laherty: It is labor.

Mr. Carter: About how long would the average man who had never fired any on a locomotive, last on his first trip, without becoming practically exhausted? What is the experience of these big fellows on their first trip as fireman?

Mr. Laherty: They do not last very long.

Mr. Carter: The engineer generally has to help them over the road?

Mr. Laherty: They have to make student trips until the engineer O. K.s them.

Mr. Carter: Does he find it a pretty hard job?

Mr. Laherty: Yes.

Mr. Carter: Don't you have to shake the grates, once in a while?

Mr. Laherty: Yes, quite frequently.

Mr. Carter: Now, with regard to your observation of what this fireman was doing, and the observation of this man, Griffey, you were on the engine all the time, were you not?

Mr. Laherty: Yes.

Mr. Carter: And he was on the engine only half the time?

Mr. Laherty: Approximately half way.

Mr. Carter: Do you think you would be a better judge of how much this fireman did, by being on the engine all the time, than the observer being on the engine half the time?

Mr. Laherty: I should think so.

Mr. Carter: Mr. Laherty, do you ever expect to fire a locomotive again?

Mr. Laherty: No, sir.

Mr. Carter: Then you have no interest in the fireman proposition?

Mr. Laherty: No, sir, not any more than—

Mr. Carter: Do you know of any work performed by any class of employes in any industry, where the labor is harder than firing a locomotive?

Mr. Laherty: I never worked at anything harder.

Mr. Carter: Did you ever see work that you thought was harder?

Mr. Laherty: No, sir.

Mr. Carter: That is all.

RE-CROSS EXAMINATION.

Mr. Sheean: Mr. Laherty, if these policemen here complained that their manual labor was past the limit of human endurance, and requested that two of them be placed on each street instead of one, do you think it would be proper to show, in response to their request for two, where one is now doing the work, that during a part of the time they were being paid for, they were standing and not doing physical work?

Mr. Laherty: I see two on several beats.

Mr. Sheean: And they were standing at ease, were they?

Mr. Laherty: They were not doing any manual labor. They were just walking. There are some corners down here that have got two or three of them, and they are just standing at ease.

Mr. Sheean: Do you know whether or not they have made

any claim that the second man was necessary because their hard physical labor had passed the limit of human endurance?

Mr. Laherty: I do not know what their claim was. Evidently they claimed something, because they have got two now.

Mr. Shecan: But whether it was predicated upon the claim that it was past the limit of human endurance you do not know?

Mr. Laherty: I suppose they got two men on account of one not being able to do the work and I believe that is why the firemen are asking for two firemen.

Mr. Shecan: That is all.

Mr. Carter: With regard to the time performing no physical labor, according to the man who was in the caboose, three hours and 38 minutes that he was not performing any manual labor, you disagree with the man in the caboose, do you not?

Mr. Laherty: Why, certainly.

Mr. Carter: That is all.

(Witness excused.)

WILLIAM KALBER was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION

Mr. Carter: State your name and place of residence.

Mr. Kalber: William Kalber, Cheyenne, Wyoming.

Mr. Carter: What is your occupation?

Mr. Kalber: Fireman on the Union Pacific.

Mr. Carter: How long have you been a fireman?

Mr. Kalber: Three years and seven months.

Mr. Carter: Are you the Kalber who is reported on this record of individual trips as firing engine on train 255, on September 16th, last?

Mr. Kalber: Yes.

Mr. Carter: Have you examined the details of this trip as reported?

Mr. Kalber: Yes.

Mr. Carter: I see that you are credited with being seven hours and 25 minutes between terminals, or 7 hours and 25 minutes on duty, and they credit you with performing manual labor a total of 4 hours and 25 minutes; on time performing

no physical labor, 3 hours. Were there three hours on this trip that you performed no physical labor?

Mr. Kalber: No, sir.

Mr. Carter: How long were you on duty before you left Sidney that day?

Mr. Kalber: Thirty minutes.

Mr. Carter: There is no account of that here, is there?

Mr. Kalber: I do not think so.

Mr. Carter: This train tonnage here is stated as 1,576 tons. Was that the full rating of that engine?

Mr. Kalber: No, sir.

Mr. Carter: About how much light was that?

Mr. Kalber: About 675 tons.

Mr. Carter: That was a very light train, then, was it not?

Mr. Kalber: Yes.

Mr. Carter: You are credited here with burning 22 tons of coal. How much coal did you actually burn?

Mr. Kalber: Twenty-seven tons.

Mr. Carter: Why do you know you burned 27 tons?

Mr. Kalber: In my opinion, that is what I used in making this test trip. I knew it was a test trip, and I made very close observation.

Mr. Carter: Describe that trip, how you took coal, how much you started with, where you took coal, where you shoveled it down, and so forth.

Mr. Kalber: We left Sidney with 18 tons of coal.

Mr. Carter: How do you know you left Sidney with 18 tons of coal?

Mr. Kalber: That is the full capacity of the tank.

Mr. Carter: You understand that the tank holds 18 tons of coal?

Mr. Kalber: Yes.

Mr. Carter: And it was as full as it ordinarily could be filled?

Mr. Kalber: Yes.

Mr. Carter: All right. Now you left Sidney with 18 tons of coal. What did you do?

Mr. Kalber: We went to Kimball. Two miles west of Kimball I started pulling coal.

Mr. Carter: You must have made observations as well as the observer.

Mr. Kalber: I don't know.

Mr. Carter: You remember these things, do you?

Mr. Kalber: Yes.

Mr. Carter: How far was it from Sidney before you started pulling down coal?

Mr. Kalber: About 38 or 39 miles.

Mr. Carter: Thirty-eight miles from Sidney you started pulling down coal. Go ahead. How much coal did you pull down?

Mr. Kalber: I pulled down about 6 tons of coal from that point to Pine Bluff Station.

Mr. Carter: How far was Pine Bluff?

Mr. Kalber: Twenty-one miles.

Mr. Carter: How much coal was on the tank when you got to Pine Bluff?

Mr. Kalber: Four tons.

Mr. Carter: There was only about four tons left in the tank?

Mr. Kalber: Yes.

Mr. Carter: You used fourteen tons?

Mr. Kalber: Yes.

Mr. Carter: And to the best of your judgment, you got fourteen tons there?

Mr. Kalber: Yes.

Mr. Carter: Then what did you do after leaving Pine Bluff?

Mr. Kalber: After leaving Pine Bluff, I fired the engine as usual, swept the deck and wet down the coal—was practically busy all the time.

Mr. Carter: Did you start pulling down coal again?

Mr. Kalber: I got to Archer, and went in on the track to let a passenger train by, and I pulled down coal while waiting for the passenger train to go by.

Mr. Carter: You pulled down coal while you were "resting?"

Mr. Kalber: Yes.

Mr. Carter: Yet you say this was a light tonnage train on this trip?

Mr. Kalber: Yes.

Mr. Carter: Did they give you a special scoop with which to make this test trip?

Mr. Kalber: Yes, they gave me a No. 6 scoop.

Mr. Carter: Did you ever fire with a No. 6 scoop before or after that?

Mr. Kalber: No, sir.

Mr. Carter: They must have wanted to favor you.

Mr. Kalber: Yes.

Mr. Carter: Is this No. 6 scoop an extraordinarily large scoop?

Mr. Kalber: Yes.

Mr. Carter: They furnished it just for this test trip?

Mr. Kalber: Yes.

Mr. Carter: Do you think it makes a smaller number of scoops of coal, by having a big scoop?

Mr. Kalber: Yes, I think so.

Mr. Carter: It was like furnishing a big locomotive for you?

Mr. Kalber: Yes.

Mr. Carter: Doing more for the same wages?

Mr. Kalber: Yes.

Mr. Carter: And when it is said here that for three hours you were performing no physical labor, you are sure that is wrong, are you?

Mr. Kalber: Yes.

Mr. Carter: Was there any credit given to you at all for shoveling this coal ahead?

Mr. Kalber: I don't know.

Mr. Carter: There is no mark here. Shoveling coal down and ahead, nothing. What do you suppose the observer was doing while you were shoveling all this coal ahead?

Mr. Kalber: He was sitting up on the tank watching us.

Mr. Carter: He did not click his clicker then, did he?

Mr. Kalber: I do not think he did.

Mr. Carter: According to the report, you did not shovel any coal ahead?

Mr. Kalber: No, sir.

Mr. Carter: And you know you did?

Mr. Kalber: Yes.

Mr. Carter: Did you hear me read what Mr. Tollerton said about the time required for a fireman to shovel coal ahead? He says: "Well, we will take a trip of ten hours. That is 600 minutes. He would be relieved of 6 minutes of work in a trip of 10 hours." Did you ever hear of a man only doing six minutes work shoveling coal ahead, in ten hours?

Mr. Kalber: No, sir.

Mr. Carter: Not where you were raised to be a fireman?

Mr. Kalber: No, sir.

Mr. Carter: About these coal pushers, these sloping tanks, what kind of tanks have you on your road?

Mr. Kalber: We have sloping tanks.

Mr. Carter: He says here:

"Oh, I think all of the tenders built today are the hopper bottom type, and will shoot 70 per cent of the contents against the coal gate." How much did your tank shoot against the coal gate?

Mr. Kalber: None.

Mr. Carter: It was not in shooting order?

Mr. Kalber: No, sir.

Mr. Carter: How many of the tanks on your road would shoot 70 per cent of the coal against the coal gate?

Mr. Kalber: None of them.

Mr. Carter: You do not know anything about these mechanical coal pushers, do you?

Mr. Kalber: No, sir.

Mr. Carter: From what you have heard of them, would you like one?

Mr. Kalber: Yes.

Mr. Carter: Are you strong and healthy?

Mr. Kalber: Yes, pretty healthy.

Mr. Carter: Do you claim that you have as much work as you can do?

Mr. Kalber: Yes, I have.

Mr. Carter: Would you like to have help sometimes?

Mr. Kalber: Certainly.

Mr. Carter: Does the engineer or sometimes the brakeman help you?

Mr. Kalber: Very seldom.

Mr. Carter: Maybe it is because you look strong.

Mr. Kalber: I guess so.

Mr. Carter: With regard to taking coal, you have to take coal at Pine Bluff, do you not?

Mr. Kalber: Yes, sir.

Mr. Carter: Are there any coal chutes on your road that you run at all?

Mr. Kalber: No, sir.

Mr. Carter: You have to take coal wherever you get a chance?

Mr. Kalber: Yes, sir.

Mr. Carter: Now, with regard to filling these lubricators, have you ever had a lubricator to get out of order?

Mr. Kalber: No, sir.

Mr. Carter: They are always in perfect order?

Mr. Kalber: Yes, sir.

Mr. Carter: Would you rather fill a lubricator on the engine with a steam pressure there, even if you had to shut off the steam, leaving the hot oil and pressure in there, or would you rather fill a lubricator when the steam was off the boiler?

Mr. Kalber: I would rather fill it when the steam was off the boiler.

Mr. Carter: Do you think, in your judgment, that the company should have these lubricators filled for the engine crews when the engines are in the house, instead of requiring them to do it while they are on the road?

Mr. Kalber: Yes, sir, I think so.

Mr. Carter: By the way, if you shoveled 27 tons of coal in three hours and 57 minutes, that was about 7 or 8 tons an hour wasn't it?

Mr. Kalber: Why, yes.

Mr. Carter: Do you think any man could shovel that much coal from a tank into an open firebox while the engine was running?

Mr. Kalber: No, sir.

Mr. Carter: Do you believe that the difference in the labor of shoveling coal in a firebox to properly fire a locomotive and shoveling it from a box car, or rather a coal car, is great?

Mr. Kalber: I do not understand you, Mr. Carter.

Mr. Carter: Do you think it requires a greater physical effort on a rapidly moving train to shovel a ton of coal from

a tank into a firebox, properly, I mean, than it would be to move coal from a stationary place?

Mr. Kalber: Yes, indeed.

Mr. Carter: What is the effect on a man on a rapidly moving train, in going around curves, trying to fire an engine?

Mr. Kalber: Well, oftentimes the man will lose his balance when he gets in a curve.

Mr. Carter: Sometimes, when he tries to swing a scoop of coal in front of the firebox he will hit the side of the firebox?

Mr. Kalber: Yes, sir.

Mr. Carter: Isn't that an awful jar to your arms?

Mr. Kalber: Yes, sir.

Mr. Carter: Sometimes numbs your hands and fingers?

Mr. Kalber: Yes, sir.

Mr. Carter: Very difficult work, you think?

Mr. Kalber: Yes, sir.

Mr. Park: Was this a rapidly moving train that you are describing now?

Mr. Kalber: No.

Mr. Park: Are there many curves in that territory?

Mr. Kalber: Not so many, no.

Mr. Park: You were not thrown around the engine much by the curves on this trip?

Mr. Kalber: No, not all of them, I don't believe.

Mr. Park: How long is your division?

Mr. Kalber: One hundred and two miles.

Mr. Park: Do you know how much coal you shoveled coming back the next trip? From Cheyenne to Sidney?

Mr. Kalber: We did not average over 10 tons coming east; that is all downhill, practically all downhill.

Mr. Carter: Are you through, Mr. Park?

Mr. Park: Yes.

Mr. Carter: But this test trip was up the hill, was it not?

Mr. Kalber: Yes, sir.

Mr. Carter: Do you know anything about brick arches falling down?

Mr. Kalber: I have had them fall down, yes, part of them.

Mr. Carter: Well, what did you do when they fell down?

Mr. Kalber: Why, I just kept a going.

Mr. Carter: You did not set out your train and come in light?

Mr. Kalber: No.

Mr. Carter: I believe you have a lot of letters here from firemen from Cheyenne, Wyo., and from other points, most of them from Cheyenne, all addressed to you, Mr. Kalber. Were these addressed to you by the firemen employed on that road?

Mr. Kalber: Yes, sir.

Mr. Carter: Do they generally corroborate what you state here?

Mr. Kalber: Yes, sir.

Mr. Carter: Therefore your experience would not be peculiar here?

Mr. Kalber: No, sir.

Mr. Carter: You have affidavits here showing the amount of coal consumed by other men?

Mr. Kalber: Off of different territory, do you mean?

Mr. Carter: Well, I don't know whether it is the same territory or not. Who is Neilson?

Mr. Kalber: Those men are all on my territory.

Mr. Carter: On what territory?

Mr. Kalber: On the 4th district of the Nebraska division.

Mr. Carter: Is that the one you are on?

Mr. Kalber: Yes.

Mr. Carter: Are their experiences about the same as yours?

Mr. Kalber: Yes, sir.

Mr. Carter: That is all.

CROSS EXAMINATION.

Mr. Sheean: Mr. Kalber, is it?

Mr. Kalber: Yes, sir.

Mr. Sheean: K-a-l-b-e-r?

Mr. Kalber: Yes, sir.

Mr. Sheean: On this test trip, I believe you said you knew it was a test trip when it was made?

Mr. Kalber: Yes, sir.

Mr. Sheean: And you took particular observation at that time?

Mr. Kalber: Yes, sir.

Mr. Carter: Who were the men who made the tests for observation?

Mr. Kalber: Mr. V. A. Wirt, and J. A. O'Leavy.

Mr. Shecan: Who were they?

Mr. Kalber: Mr. Wirt is trainmaster, and Jack O'Leavy is a traveling engineer on the first district.

Mr. Shecan: Traveling engineer?

Mr. Kalber: Yes.

Mr. Shecan: There were two there then?

Mr. Kalber: Yes.

Mr. Shecan: And the traveling engineer is an old employe, is he, on the Union Pacific?

Mr. Kalber: Yes, sir.

Mr. Shecan: A man who has been a fireman and engineer?

Mr. Kalber: Yes, I suppose he has gone up through that way.

Mr. Shecan: A member of the Brotherhood?

Mr. Kalber: I don't know.

Mr. Shecan: Well, how did you know that this was a test trip for observation?

Mr. Kalber: He told me it was.

Mr. Shecan: They told you that they were going to try to find out how much coal you burned, and how much time you were putting this in, shoveling?

Mr. Kalber: No, they didn't say that. They said they were going to make a test on me.

Mr. Shecan: They said they were going to make a test on you. Well, you did leave Sidney that evening at 8:40, is that right?

Mr. Kalber: No, sir, we left Sidney at 1:25, I think, in the afternoon.

Mr. Shecan: September 16?

Mr. Kalber: Yes, sir.

Mr. Shecan: Oh, yes, 1:25, and arrived at 8:40 in the evening.

Mr. Kalber: Yes, sir.

Mr. Shecan: You had a drag of 80 empty cars?

Mr. Kalber: Yes, sir.

Mr. Shecan: Now, what kind of coal was it that was being burned on this trip?

Mr. Kalber: Hannah coal is the name of it.

Mr. Carter: Spell it.

Mr. Kalber: H-a-n-n-a-h.

Mr. Park: It is a lignite coal, is it?

Mr. Kalber: Yes, it is a lignite coal.

Mr. Sheean: This was a hay burner test on this trip?

Mr. Kalber: Yes.

Mr. Sheean: How much does this lignite weigh?

Mr. Stone: A ton weighs a ton, I suppose, doesn't it?

Mr. Sheean: Well, I mean in a scoop of coal. I was talking about your scoop. How many pounds are there in a scoop of lignite?

Mr. Kalber: Why, I don't know.

Mr. Sheean: Well, is this lignite always burned there?

Mr. Kalber: Yes, sir.

Mr. Sheean: You ordinarily have a No. 5 scoop?

Mr. Kalber: A No. 4 scoop.

Mr. Sheean: A No. 4 scoop?

Mr. Kalber: Yes, sir.

Mr. Sheean: What is the difference between a No. 6 and a No. 4?

Mr. Kalber: Why a No. 6 is about three inches longer and about two or three inches wider.

Mr. Sheean: Have you had any experience at all with the weight of a scoop of coal? How many pounds of coal there are in a scoop?

Mr. Kalber: No, sir, I do not have any experience in that line.

Mr. Sheean: Now this tank is an 18-ton tank for lignite, is it?

Mr. Kalber: Yes, sir.

Mr. Sheean: But with real coal, about how many tons would go into one of those tanks?

Mr. Kalber: 18 tons is their capacity.

Mr. Sheean: Well, lignite is a great deal lighter coal, isn't it?

Mr. Kalber: Well, it is not a lignite coal; it is a form of lignite, but it is not called a lignite coal.

Mr. Sheean: But it is a form of lignite?

Mr. Kalber: Well, it is in a way a form of lignite.

Mr. Sheean: Well, this is the capacity of these tanks, the 18-ton tank, for the ordinary bituminous coal, isn't it?

Mr. Kalber: Yes.

Mr. Sheean: And this ordinary coal is considerably heavier than this, is it not?

Mr. Kalber: Yes.

Mr. Sheean: Well, then, about what is the difference, I mean proportionately in size—about how much bigger does a ton of lignite have to be in size than the ordinary bituminous coal?

Mr. Kalber: I do not know.

Mr. Sheean: Well, then, these tons that you are speaking of are what would have been tons if they had had bituminous coal there of that size and dimensions?

Mr. Kalber: Yes.

Mr. Sheean: When you say 28 tons, it is the space that would be occupied by 28 tons of real coal?

Mr. Kalber: Well, this was real coal.

Mr. Sheean: Well, the lignite is a good deal lighter, isn't it?

Mr. Kalber: Yes, indeed.

Mr. Sheean: Very much lighter?

Mr. Kalber: In fact I have never seen much of the lignite coal. I never handled any.

Mr. Sheean: Well, this coal is a lignite coal, isn't it?

Mr. Kalber: Well, I don't know whether they call that a lignite coal or not.

Mr. Sheean: Have you always fired on this particular division, Mr. Kalber?

Mr. Kalber: Yes, sir.

Mr. Sheean: And how long have you been a fireman?

Mr. Kalber: Three years and seven months in that district.

Mr. Sheean: Three years and seven months?

Mr. Kalber: Yes.

Mr. Sheean: Well, is that your whole experience as a fireman?

Mr. Kalber: Yes, sir.

Mr. Sheean: Well, now, just how was this observation

taken by the two of them? One of them timed you and the other did what?

Mr. Kalber: The traveling engineer was sitting on the seat box with the stop watch—I think that is what they call it, and the trainmaster was sitting on the tank with a book and pencil.

Mr. Sheean: And counted the scoops?

Mr. Kalber: I don't know what the man was doing on the tank.

Mr. Sheean: Well, according to this report, Mr. Kalber, out of a total of four hours and 25 minutes which they report that you were engaged in manual labor, three hours and 57 minutes were in shoveling coal?

Mr. Kalber: Yes, sir.

Mr. Sheean: Now, do you think that outside of the time that you were shoveling coal that there was more than half an hour put in by you in other physical work?

Mr. Kalber: Oh, yes, indeed.

Mr. Sheean: More than half an hour?

Mr. Kalber: Yes, sir, I was busy all the time.

Mr. Sheean: Well, I mean outside of the time that you were shoveling coal.

Mr. Kalber: Yes, that is what I mean.

Mr. Sheean: Well, about how much time did you have on the trip that you were not shoveling coal?

Mr. Kalber: Well, I would say an hour and a half.

Mr. Sheean: An hour and one-half that you were not shoveling coal?

Mr. Kalber: Yes, sir.

Mr. Sheean: Well, they give you credit here for one-half hour of that time being put in on other work than shoveling coal.

Mr. Kalber: The rest of this time was put in on other work.

Mr. Sheean: You can't tell, I take it, just how much time there was taken up in shoveling coal?

Mr. Kalber: No.

Mr. Sheean: In the actual shoveling of coal?

Mr. Kalber: No, I could not.

Mr. Sheean: Of course there is some time between fires, a few seconds or a few minutes, isn't there?

Mr. Kalber: Well, all my time between fires I was pulling coal.

Mr. Sheean: Well, that takes some little time, doesn't it, to pull coal?

Mr. Kalber: Yes, sir.

Mr. Sheean: You have got to go back in the end of the tank to pull it down?

Mr. Kalber: Yes, sir.

Mr. Sheean: That takes some considerable time?

Mr. Kalber: Yes, sir.

Mr. Sheean: And there was sufficient time between fires to enable you to go back to the rear of the tank and pull down coal and get it ready for other firing?

Mr. Kalber: Yes, sir.

Mr. Sheean: And you could do that without endangering the steadiness of your fire at all?

Mr. Kalber: Well, my fire would burn down pretty well and die out in the corners.

Mr. Sheean: But what is the space of time between fires after you have got your fire going good, and you have some of these other duties to attend to, about how much time can you spare from the time that you have got your fire going and the door closed and a fresh fire put in, until you come back to put in another fire?

Mr. Kalber: About a minute.

Mr. Sheean: About a minute?

Mr. Kalber: Yes, sir.

Mr. Sheean: So that with this kind of coal there is about a minute's time ordinarily between the closing of the firebox door and the opening of it again?

Mr. Kalber: Yes, sir.

Mr. Sheean: Is that the result of any timing that you have done, or just your observation?

Mr. Kalber: Just my observation.

Mr. Sheean: But you think there is a minute's time between the closing of the firebox and before it is opened again.

Mr. Kalber: Yes, sir.

Mr. Sheean: About how many scoops on this type of engine would you ordinarily put in in putting in a fire?

Mr. Kalber: Well, that would vary on how the engine was being worked.

Mr. Sheean: Well, what would it average; on what would be an average fire on a trip?

Mr. Kalber: Sometimes we would need 10, 15 or 20 scoops to fill in a fire.

Mr. Sheean: How long does it take you to put in 20 scoops?

Mr. Kalber: Oh, about two minutes.

Mr. Sheean: About two minutes. That is the result of your observation or that is your estimate?

Mr. Kalber: That is my estimate.

Mr. Sheean: About how many steps would you take in putting in those scoops?

Mr. Kalber: How many steps?

Mr. Sheean: Yes.

Mr. Kalber: None.

Mr. Sheean: Starting now, will you tell me when thirty seconds are up? I just want to get your idea on estimating time. Or tell me when two minutes are up. The time that you would be in putting in these 20 scoops. Now we have been talking all this time, and I just want to get an idea of what you estimate as to when two minutes would be up. I wish you would tell me when you think two minutes are up. About the same length of time that it would take to put in these scoops. How much of the time is gone now?

Mr. Shea: Well, Mr. Sheean, when do you want him to start?

Mr. Sheean: Any time he wants to. Have we passed it now? Could you put in twenty scoops since we began talking?

Mr. Kalber: No, I could not.

Mr. Sheean: You could not. How much time has elapsed since I first asked you about starting to take time?

Mr. Kalber: Probably a little better than a minute.

Mr. Sheean: Forty seconds, as I timed it. I just wish you would take a test sometimes of what you would be doing with a scoop during the period of two minutes. And see if you make it twenty times.

Mr. Burgess: But, Mr. Sheean, just a moment. I was trying to follow you in the start, too, and I don't know where to start. Maybe the witness did not either.

Mr. Sheean: Well, you tell him when to start, and ask him to stop you at the end of thirty seconds.

Mr. Burgess: Well, I would prefer that you would do that yourself. I was trying to follow you myself.

Mr. Sheean: Very well. Stop at the end of thirty seconds, and start now.

Mr. Kalber: I think it is up now.

Mr. Carter: Seventeen seconds.

Mr. Sheean: Seventeen.

Mr. Kalber: Well that is better than half of it.

Mr. Sheean: Well, don't you think you could really have put in twenty scoops now during those 17 seconds if you had been hustling?

Mr. Kalber: Yes, if I had been hurrying.

Mr. Sheean: You could have gotten 20 scoops in there during that 17 seconds?

Mr. Kalber: Yes, sir.

Mr. Carter: How many scoops of coal do you think you could have put in while you were figuring that?

Mr. Kalber: I don't know.

Mr. Sheean: He says 20, if he had hurried.

Mr. Shea: I think he would have to have used lightning speed to put in 20 scoops in a furnace in that period of time.

Mr. Stone: I think you would have to screw on the grease cups about after the second fire.

Mr. Sheean: Well, Mr. Kalber, the fact of the matter is that you never actually have attempted to make any calculation?

Mr. Kalber: No.

Mr. Sheean: You are a busy man from the time you start out until you get in?

Mr. Kalber: Yes.

Mr. Sheean: And you put in a fire, and when that fire is put in, and you know that without endangering it after the door is closed, if you have occasion to go back to the rear of the tank and to pull down other coal, that that can be pulled down and shoved forward, and your fire is not endangered by that kind of work if it is necessary?

Mr. Kalber: No, sir.

Mr. Sheean: And the work on the 7 or 8 or 9 hours is in-

termittent. You work rapidly while the door is open, and shovel in rapidly?

Mr. Kalber: Yes.

Mr. Sheean: And then you close your door, and again, when you have to put in another fire, you work again rapidly?

Mr. Kalber: Yes.

Mr. Sheean: And it is a matter of seconds that you have never timed yourself on?

Mr. Kalber: Yes, sir.

Mr. Sheean: That is all.

Mr. Park: Mr. Kalber, how much coal do you burn on an average each trip?

Mr. Kalber: That is about the average amount.

Mr. Park: About 27 tons?

Mr. Kalber: Yes, sir.

Mr. Park: What do you estimate you would burn on this trip if you had had your full tonnage? You say you had about three-quarters of it?

Mr. Kalber: Well, if we had had the average tonnage on the grading we would probably have burned around 30 tons, around 30 or 31 tons.

Mr. Park: How much?

Mr. Kalber: About 30 or 31 tons.

Mr. Park: What class of engines did you fire?

Mr. Kalber: The Mikado type.

Mr. Park: Was it a superheated engine?

Mr. Kalber: No, sir.

Mr. Park: Did you have any wind on this trip?

Mr. Kalber: No, sir, the weather was fine, very calm.

Mr. Park: And you were how long making the trip, from 1:15 to when?

Mr. Kalber: To 8:45, I think.

Mr. Park: Was that an ordinary trip for that time of year?

Mr. Kalber: It is for that time of year, yes, sir.

Mr. Park: You say it is down hill at Archer? It is down hill for several miles from Archer to Cheyenne, is it not?

Mr. Kalber: Four miles.

Mr. Park: That is all.

RE-DIRECT EXAMINATION.

Mr. Carter: How much coal do the local officials of the Union Pacific Railroad say these tanks hold?

Mr. Kalber: 18 tons.

Mr. Carter: Do they mean the kind of coal they have got there, or the kind of coal they have got in New York?

Mr. Kalber: The coal we get out there.

Mr. Carter: Well, when you say 18 tons of coal, you mean 18 tons of coal you have got out there, and not in the anthracite district of Pennsylvania?

Mr. Kalber: No, sir.

Mr. Carter: Is it a fact that the Hannah coal is quite heavy coal, and very much heavier than the ordinary coal you use on other divisions there?

Mr. Kalber: Yes, sir.

Mr. Carter: Isn't it a fact that the coal is very difficult to slide down; that you have to pull most of it down?

Mr. Kalber: Yes, sir.

Mr. Carter: And notwithstanding that fact, in this test trip it says "shoveling down coal and ahead no time." That is wrong, is it not?

Mr. Kalber: Yes, sir.

Mr. Carter: That is all.

Mr. Sheean: Well, what do they show there, Mr. Carter, of all other manual labor? Don't they show 26 minutes and 57 seconds, or 27 minutes outside of the time you were shoveling coal on the trip? The last line there.

Mr. Carter: 26 minutes and 57 seconds of other manual labor.

Mr. Sheean: Yes.

Mr. Carter: Did you take water?

Mr. Kalber: Yes.

Mr. Sheean: Outside of the breaking of coal. Pardon me, Mr. Carter, but this is just to get it clear; I do not want to interrupt. But on the total of four hours and 25 minutes, all except 3 hours and 57 minutes were shown as shoveling coal.

Mr. Carter: There are 25 minutes not accounted for, Mr. Sheean.

Mr. Sheean: There are 28 minutes. They give him 28 minutes outside of the time he is shoveling coal.

Mr. Carter: 28 minutes in addition to shoveling coal?

Mr. Sheean: Yes.

Mr. Carter: How many times did you take water?

Mr. Kalber: Five times.

Mr. Carter: How long does it take you to take water?

Mr. Kalber: Five to eight minutes.

Mr. Carter: That would be 25 to 40 minutes?

Mr. Kalber: Yes.

Mr. Carter: Did you shake the grates?

Mr. Kalber: No, sir.

Mr. Carter: Did you sweep the deck?

Mr. Kalber: Yes, sir.

Mr. Carter: And you shoveled coal ahead?

Mr. Kalber: Yes, sir.

Mr. Carter: And they gave you 28 minutes credit for all that?

Mr. Kalber: Yes, sir.

Mr. Carter: About how much time do you think you spent in the whole trip? You don't know exactly, but just guess.

Mr. Kalber: I don't quite understand your question, Mr. Carter?

Mr. Carter: About how much time do you think you spent on all manual labor in addition to actually putting the coal in the firebox, that is, shoveling coal ahead, taking water, etc. Just make a guess.

Mr. Kalber: I put in about six hours and 45 minutes.

Mr. Carter: All told?

Mr. Kalber: Yes, sir.

Mr. Carter: Out of the 7 hours and 25 minutes?

Mr. Kalber: Yes, sir.

The Chairman: You speak of performing other duties as a fireman, that is, duties other than that of shoveling coal? What are those other duties?

Mr. Kalber: Cleaning the deck, putting off and putting on injectors and wetting down coal; shaking grates, or something like that.

Mr. Carter: Watching for signals and semaphores?

Mr. Kalber: Watching for signals.

Mr. Sheean: During all the time you have been firing,

though, you have been on engines that weighed more than 185,000 pounds, all of this time?

Mr. Kalber: How is that?

Mr. Sheean: Have you been firing on engines weighing more than 185,000 pounds on drivers?

Mr. Kalber: Yes, sir.

Mr. Sheean: All of your firing life has been where there was one fireman on an engine that weighed more than 185,000 pounds on drivers?

Mr. Kalber: Yes, sir.

Mr. Sheean: That is all.

Mr. Stone: Just one question. I see by the company's report here that they give you credit for burning 44,183 pounds of coal. That would be 22 tons and 183 pounds of coal, and you did that in 3 hours and 57 minutes. That is a little over five tons of coal an hour, according to their estimate.

Mr. Kalber: Yes, sir.

Mr. Stone: Yet, if I remember correctly, Mr. Tollerton testified the other day that five or six thousand pounds per hour was all a fireman could handle in ordinary firing?

Mr. Kalber: Yes.

Mr. Stone: So you must have been more than busy if you put over 11,000 pounds of coal per hour into the fire box?

Mr. Kalber: Yes, sir.

Mr. Stone: That is all.

The Chairman: Anything more, Mr. Sheean?

Mr. Sheean: No.

Mr. Carter: Are you through, Mr. Sheean?

Mr. Sheean: Yes, that is all.

(Witness excused.)

G. B. ROBERG was called as a witness, in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and place of residence.

Mr. Roberg: G. B. Roberg, Chicago, Illinois.

Mr. Carter: What is your present occupation?

Mr. Roberg: Fireman on the Chicago & North Western Railroad.

Mr. Carter: How long have you been working for the Chicago & North Western?

Mr. Roberg: Since December 8, 1905, nine years and three months.

Mr. Carter: Have you been running all the time?

Mr. Roberg: Yes, sir.

Mr. Carter: Are you firing now?

Mr. Roberg: Yes.

Mr. Carter: Were you firing last September?

Mr. Roberg: Yes, sir.

Mr. Carter: G. B. Roberg is reported here as making a round trip from Chicago to South Janesville on September 7th and 8th, 1914. Are you the same Roberg?

Mr. Roberg: Yes, sir.

Mr. Carter: Have you examined the details of this trip?

Mr. Roberg: I have.

Mr. Carter: Do you believe it is an accurate report of the work that you did?

Mr. Roberg: No, I don't.

Mr. Carter: This is only an 86-mile trip, is it not?

Mr. Roberg: Yes, that is all.

Mr. Carter: You are reported as starting out with 536 tonnage, and winding up with 1,552. How is that?

Mr. Roberg: That is wrong.

Mr. Carter: How is it?

Mr. Roberg: I started out with seventy cars, 1,552 tons.

Mr. Carter: This is right, excepting it is backward, is that right?

Mr. Roberg: Yes, sir.

Mr. Carter: You started out with 1,552 tons?

Mr. Roberg: Yes.

Mr. Carter: Just describe how you set out.

Mr. Roberg: Well, we left Chicago at 3:55 in the morning; went to Palatine, twenty-six miles out, and stopped there; cut off one car; ran up to the next cross-over; one of the observers got off and went out flagging to protect the wrong main. While he was setting out his cars on the southbound main. That was one of my duties in ordinary times. Made a drop of the car; we then spotted it, and took water; coupled onto the train, and started out to Barrington. When we got there we took water

again and set out the cars; switched in the yard; then went to Cary, Illinois, set out some empties, and coupled on and went to Crystal Lake.

Mr. Carter: All in all, you set out down to seventeen cars?

Mr. Roberg: About. Yes, that is my recollection?

Mr. Carter: Would you consider this a very light trip?

Mr. Roberg: It was lighter tonnage out of Chicago, and very light from Crystal Lake on.

Mr. Carter: It is a light trip?

Mr. Roberg: It is a light trip, yes, sir.

The Chairman: Mr. Carter, will you suspend?

(Whereupon, at 5 o'clock P. M., March 10, 1915, an adjournment was taken to March 11, 1915, at 10 o'clock A. M.)

IN THE MATTER OF THE
 ARBITRATION
between the
 WESTERN RAILWAYS
and
 BROTHERHOOD OF LOCOMOTIVE
 ENGINEERS
and
 BROTHERHOOD OF LOCOMOTIVE FIRE-
 MEN AND ENGINEMEN
under the Act approved July 15, 1913, by agree-
ment dated August 3, 1914.

Chicago, Illinois, March 11, 1915.

Met pursuant to adjournment at 10:08 o'clock A. M.

Present: Arbitrators and parties as before.

Mr. Stone: Mr. Chairman, I have a few corrections I should like to make. On page 6541:

"Mr. Stone: Well, Mr. Lanek, I think it is hardly necessary that you state what you have found."

It should read "very necessary."

On page 6549:

"Mr. Stone: As I recall it, the road cost somewhere between \$29,000,000 and \$30,000,000."

It should read:

"\$39,000,000 to \$40,000,000."

On page 6596, Mr. Hodge, at the bottom of the page is reported as saying:

"I took a brick rod out of a car."

It should read "brake rod."

On page 6597, near the center of the page:

"Mr. Stone: The stud blew out, did the rest? They took the water out?"

It should read:

"That let the steam and water out."

And at the bottom of the page, in explanation of Mr.

Sheean's question on the same page they have it to read "the fall of a lubricator."

It should be "the filling of a lubricator."

On page 6598, the last word in the first line should read "fail" instead of "fall."

And the third paragraph on the same page should read "thirty minute delay" instead of "ten minute delay."

And on page 6599, Mr. Hodge is quoted as stating "we used treated water out of our Blue Island terminus, and the engine makes about two trips, and it jumps a good deal if you try to make a third with it."

It should be:

"it foams a good deal."

The Chairman: Are there any other corrections? If not, Mr. Sheean, you may proceed with the cross examination.

Mr. Sheean: I don't think they have finished the direct.

The Chairman: I thought you had the witness?

Mr. Sheean: No.

G. B. ROBERG was recalled for further examination, and having been previously sworn testified as follows:

Mr. Carter: Mr. Roberg, when we adjourned last night I think you had stated that the trips from Chicago to South Janesville and return were easy trips?

Mr. Roberg: Yes, sir.

Mr. Carter: And only 86 miles each direction?

Mr. Roberg: Yes, sir.

Mr. Carter: Do you think this record here of the work you performed is wrong?

Mr. Roberg: Yes, I do.

Mr. Carter: Now with regard to shaking the grates—

Mr. Chairman: In what respect, Mr. Carter? I wish you would ask him right there.

Mr. Carter: I am asking him. Now in regard to shaking the grates, you are given credit of one minute and 45 seconds going from Chicago to South Janesville, and one minute and 50 seconds going from Janesville to Chicago. How long is that?

Mr. Roberg: I don't know if that is wrong or not. I did not time myself.

Mr. Carter: Well, I thought you said it was wrong with regard to shaking grates.

Mr. Roberg: No.

Mr. Carter: Well, you were allowed a credit of 2 hours and 41 minutes of actual labor going to South Janesville, and only one hour and 28 minutes of actual manual labor returning. Is that what you say is wrong?

Mr. Roberg: I know that going to Janesville the actual labor performed is wrong, on the time shown. Coming back I am not positive.

Mr. Carter: Was the time for shoveling coal down and the performance of all manual labor wrong?

Mr. Roberg: Yes.

Mr. Carter: What was wrong about it?

Mr. Roberg: We were on duty 9 hours and 6 minutes. The test trip shows that I worked only 2 hours and 41 minutes, and I know for a positive fact that I did not spend 6 hours and 46 minutes at leisure.

Mr. Carter: You know that you worked a great deal more than 2 hours and 41 minutes out of 9 hours and 6 minutes?

Mr. Roberg: Yes.

Mr. Carter: I see here you are only credited with working 1 hour and 28 minutes out of 6 hours and 8 minutes. Do you know whether that is wrong, too?

Mr. Roberg: Yes, I know it is wrong.

Mr. Carter: With regard to shoveling down coal, you are credited between Chicago and South Janesville, with 20 minutes and 13 seconds, and no time at all coming back. Is that correct?

Mr. Roberg: No, sir, it is not.

Mr. Carter: What is correct?

Mr. Roberg: The observers pulled most of the coal, shoveled most of the coal ahead of me, and I spent about 10 minutes shoveling the coal ahead.

Mr. Carter: You, yourself, spent only about 10 minutes shoveling the coal ahead?

Mr. Roberg: Yes.

Mr. Carter: How much time did the observers spend shoveling coal ahead for you?

Mr. Roberg: They worked practically continuously; that is, supplied me with enough coal to keep the engine going from 18 miles from Chicago to 42 miles from Chicago.

Mr. Carter: They were not testing themselves, though, were they?

Mr. Roberg: I don't think so.

Mr. Carter: They were only testing you?

Mr. Roberg: Yes.

Mr. Carter: Now, according to this statement here, on the trip from Chicago to South Janesville, they say you burned 19,854 pounds of coal, and the way I estimate it you burned it in 5,332 seconds, or at the rate of one scoop of coal for every 3.7 seconds. Will you describe what it takes to put a scoop of coal in the fire box?

Mr. Roberg: It takes practically nine movements.

Mr. Carter: Nine movements, you say?

Mr. Roberg: Yes.

Mr. Carter: Describe those movements.

Mr. Roberg: You place yourself in the firing position, that is with one foot on the engine deck and one foot on the shoveling apron between the engine and the tank.

You brace yourself. You stoop down and get hold of the scoop shovel.

Next, you lower the scoop shovel, lift it up, turn half way around, place your foot on the air door pedal, and push that down, so as to open the air door.

Then you note the condition of your fire, and swing the shovel so as to scatter the coal where the engine requires it in the fire box. In doing so—

Mr. Carter: Then you release?

Mr. Roberg: Then you pull the shovel out from the fire box, step off the air door pedal, so as to close the door, turn around and place the shovel back in the coal tank.

Mr. Carter: According to this, 19,854 pounds of coal were shoveled in 5,332 seconds, or at the rate of one scoop of coal for every 3.7 seconds. You think that would be impossible?

Mr. Roberg: Yes, I think I would not be able to do that.

Mr. Carter: How long have you been working for this company?

Mr. Roberg: Nine years and three months.

Mr. Carter: You heard the testimony here about brick arches falling down, did you?

Mr. Roberg: Yes, sir.

Mr. Carter: Did you ever see a brick arch fall down?

Mr. Roberg: Lots of times.

Mr. Carter: Well, did you set out your train?

Mr. Roberg: No, I did not.

Mr. Carter: Did you ever hear of anybody else setting out a train?

Mr. Roberg: Never heard of it.

Mr. Carter: You heard about the statement being made about when a lubricator becomes deranged, by setting out trains?

Mr. Roberg: No, sir.

Mr. Carter: Did you ever hear of anything of that kind?

Mr. Roberg: No, I never heard of anything of that kind.

Mr. Carter: You heard me read yesterday about 70 per cent of the coal shooting down against the coal gate on these open tanks. Is that your experience?

Mr. Roberg: No, sir.

Mr. Carter: That is all.

The Chairman: You say that those testers pulled the coal down so that it would be convenient to you?

Mr. Roberg: Yes, sir, they did.

The Chairman: Well, now, had they not been there, whose duty would it have been to have gotten the coal down?

Mr. Roberg: My own.

The Chairman: That is all.

CROSS EXAMINATION.

Mr. Sheean: Mr. Roberg, was this a sloping tank on this engine?

Mr. Roberg: Yes, a sloping tank.

Mr. Sheean: A sloping tank. About what percentage of the coal on the sloping tank comes against the gate when the tank is filled?

Mr. Roberg: Well, ordinary coal, the weights we are getting now, dry coal, it will be about four or five tons will fall up against the coal gate. With wet coal, not so much as that will fall up against the coal gate.

Mr. Sheean: And what is the capacity of the tank?

Mr. Roberg: Fourteen tons.

Mr. Sheean: Fourteen tons. Then after the gate is taken

out, how much of it slides down within reach of the fireman, without shoveling ahead?

Mr. Roberg: That depends on the speed of the engine. But on a freight train, not any. You have got to pull it all down.

Mr. Sheean: After taking out the gate it is all—it is pulled entirely from the time the gate is taken out?

Mr. Roberg: Yes, sir.

Mr. Sheean: And about five tons, you say?

Mr. Roberg: Between four and five tons.

Mr. Sheean: Between four and five tons. What is the angle against which this tank is set? Do you know?

Mr. Roberg: Well, about—

Mr. Sheean: Outside of the angle in figures, how much further forward is the bottom of this slope than the rear end of the tank? How much of it does it cut off?

Mr. Roberg: I don't know.

Mr. Sheean: About how much?

Mr. Roberg: I couldn't tell. I would judge that the back chute slants down at an angle of 75 degrees.

Mr. Carter: 45.

Mr. Roberg: No.

Mr. Carter: Do you know what 45 is?

Mr. Sheean: Well, what I want to get at, Mr. Roberg—perhaps this would be a simpler way of putting it. How much narrower is the bottom of this tank than the top?

Mr. Roberg: I don't think it is any less than—or any more than 18 inches difference between the bottom and the top on our sloping tanks.

Mr. Sheean: And about what is the space at the bottom, from the front to the rear of the tank?

Mr. Roberg: I should judge about 8 feet.

Mr. Sheean: 8 feet?

Mr. Roberg: Yes.

Mr. Sheean: And then the top of it, where the coal is, would only be about 18 inches more than that, where the coal was piled on top?

Mr. Roberg: I think the top is about 10 feet; about 2 feet difference.

Mr. Sheean: About 2 feet difference. Now, Mr. Roberg,

you started out from Chicago that night with 70 cars in the train.

Mr. Roberg: Yes, sir.

Mr. Sheean: Well, on the runs there, or on that run between Chicago and South Janesville, is not 70 cars pretty well up in the tonnage of the trains that you run there, or were running at that time?

Mr. Roberg: Well, this 70-car train did not show up to the tonnage. It was 300 tons light.

Mr. Sheean: Yes, but isn't there a difference, based partially on the number of cars; that is, even though 70 or 80 cars may be in tonnage as heavy as the others, is not there a difference in the work that is done in hauling a large number of empty cars?

Mr. Roberg: I don't understand your question.

Mr. Sheean: Well, you say the tonnage itself was light.

Mr. Roberg: Yes.

Mr. Sheean: That is, is was not the full tonnage loading?

Mr. Roberg: Yes.

Mr. Sheean: But is not 70 cars in a train more than the ordinary number of cars that are handled on that run there?

Mr. Roberg: No, sir. Seventy cars is supposed to be the limit.

Mr. Sheean: Supposed to be the limit?

Mr. Roberg: And 1,850 tons supposed to be the tonnage limit.

Mr. Sheean: On the other tests on this run, made about this time, there are not as many cars as started out on this run; 70 cars is the limit there, is it not, on that run?

Mr. Roberg: Coming south?

Mr. Sheean: No, going north. I am talking about going out of Chicago.

Mr. Roberg: Well, I don't know whether that is the limit or not, but I don't ever think I hauled more than 72 or so.

Mr. Sheean: So that on this morning you started out with 70?

Mr. Roberg: Yes.

Mr. Sheean: And then the cut-outs were made at different points?

Mr. Roberg: Yes.

Mr. Sheean: Where were the 5 set out. It shows 65 as the next. Where did you set out the five cars?

Mr. Roberg: Well, we would set out one first at Palatine, and then we set out some more, set out some empties, and picked up some loads at Barrington; switched there.

Mr. Sheean: I thought you had in mind there, Mr. Roberg, yesterday, just how the tonnage got down. You started out with 70, and got down to 65 where?

Mr. Roberg: I think at Barrington.

Mr. Sheean: And took the 65 to where?

Mr. Roberg: To Cary.

Mr. Sheean: And from Cary on?

Mr. Roberg: At Cary we set out a string of empties.

Mr. Sheean: A string of empties. Well, now, you say that this 20 minutes of shoveling coal ahead, or shoveling coal down, is more than the actual time you put in shoveling coal ahead?

Mr. Roberg: Yes, I think so.

Mr. Sheean: And on the return trip the observer reports as no shoveling down. The trip back was quite light, was it not?

Mr. Roberg: Only half the engine rating.

Mr. Sheean: And you came back light, and there was not any shoveling down on the trip back?

Mr. Roberg: No, sir.

Mr. Sheean: Can you tell us, Mr. Roberg, how much time you put in in the actual shoveling of coal?

Mr. Roberg: That depends on several different things.

Mr. Sheean: Well, I mean on this trip. Just counting the time that you picked up your shovel each time, down to the time that you laid down the shovel after putting in the fire.

Mr. Roberg: No, I could not tell that.

Mr. Sheean: You could not tell that?

Mr. Roberg: No.

Mr. Sheean: Then, how much more than the 1 hour and 28 minutes that the observer says was taken up in this work, you cannot say?

Mr. Roberg: No, I did not time myself.

Mr. Sheean: I take it, Mr. Roberg, that in this work you have described here, of nine different movements, that work is done very rapidly, is it not, while you are actually putting in the fire?

Mr. Roberg: Well, that depends on your experience.

Mr. Sheean: Yes, but one who has had the experience that you have had, does that work quite rapidly? I mean of the actual putting in of the fire. It varies with the experience of the man, I take it.

Mr. Roberg: Why, yes.

Mr. Sheean: What I mean is, you speed up. When you come to put in the fire, you get that fire in just as rapidly as you can and do it properly.

Mr. Roberg: Why, no, I don't, because if I tried to shovel that coal as rapidly as I could, I would soon wear out. I would not be able to fire that engine over the road in that way.

Mr. Sheean: About how many scoops do you put in, putting in a fire, generally?

Mr. Roberg: All the way from two to five or six.

Mr. Sheean: From two to five or six? And what kind of scoop, or number of scoop do you use?

Mr. Roberg: No. 5.

Mr. Sheean: About how much coal does it average? Sometimes more and sometimes less I take it.

Mr. Roberg: They made an efficiency test on the train that I fired, and the official making the test told me that the scoop of fire held 16 pounds of coal.

Mr. Sheean: I suppose you made no effort at all on this trip to ascertain just how many scoops you put in?

Mr. Roberg: No, I did not.

Mr. Sheean: You knew this was a test trip?

Mr. Roberg: No, sir, I did not. Well, just a second. I knew it was some kind of an efficiency test, but I did not know it was a test for the Arbitration Board.

Mr. Sheean: There are tests made quite frequently, are there, as to how much coal is consumed and the manner of firing and so on—efficiency tests?

Mr. Roberg: No, not that I know of.

Mr. Sheean: You knew there was some sort of a test or observation being made on this run?

Mr. Roberg: Yes.

Mr. Sheean: And who made it?

Mr. Roberg: Mr. Harvey and Mr. Backus.

Mr. Sheean: Who are they?

Mr. Roberg: A traveling engineer, and the smoke inspector.

Mr. Sheean: You knew both of them?

Mr. Roberg: I knew Mr. Harvey.

Mr. Sheean: You have no particular recollection of just how much time was put in on any of these different items of the shoveling down? Your recollection is that it was about ten minutes, instead of the twenty minutes with which they credit you?

Mr. Roberg: Yes.

Mr. Sheean: And the breaking coal—have you any particular recollection on that?

Mr. Roberg: No. They broke the coal for me.

Mr. Sheean: How much time was put in at that?

Mr. Roberg: I don't know.

Mr. Sheean: You did not do any?

Mr. Roberg: A little.

Mr. Sheean: Do you remember what you were paid for this trip?

Mr. Roberg: No, I do not.

Mr. Sheean: The weight on drivers of this engine is 207,000 pounds?

Mr. Roberg: Yes.

Mr. Sheean: How long have you fired on engines of that size or about that size?

Mr. Roberg: I don't know.

Mr. Roberg: Well, I have fired them off and on since I came here, practically.

Mr. Sheean: Oh, about?

Mr. Sheean: And that is about how long ago?

Mr. Roberg: About five years.

Mr. Sheean: That is all.

WALTER WILKE, called as a witness in rebuttal and having been duly sworn, testified as follows:

Mr. Carter: State your name and place of residence.

Mr. Wilke: Walter Wilke, Chicago, Ill.

Mr. Carter: What is your present occupation?

Mr. Wilke: Locomotive fireman on the North Western Ry.

Mr. Carter: How long have you fired on the Chicago & North Western Railroad?

Mr. Wilke: Ten years the 17th day of October, 1915.

Mr. Carter: You have been running some, have you, during that time?

Mr. Wilke. Yes, sir.

Mr. Carter: You were firing, however, last October?

Mr. Wilke. Yes, sir.

Mr. Carter: Well, it was last August these test trips were made?

Mr. Wilke. Yes, sir.

Mr. Carter: Were you on this same round trip service between Chicago and South Janesville that was just described by Mr. Roberg?

Mr. Wilke: Yes, on August 25th.

Mr. Carter: Yes, different dates, but the same round trip?

Mr. Wilke: Yes.

The Chairman: You must speak a little more distinctly. When you nod your head to Mr. Carter, of course the stenographer does not get that. Speak distinctly.

Mr. Carter: And remember you are not talking to me, you are talking to the Board.

I note on the first north bound trip it is stated on this report that you have burned 17,910 pounds of coal, approximately 9 tons of coal. About how much coal did you actually burn?

Mr. Wilke: Thirteen tons.

Mr. Carter: Why do you say you burned 13 tons?

Mr. Wilke: I know that the tank holds 15 tons of coal, and my judgment tells me when that coal is half gone out of the tank, which must be 7 tons.

Mr. Carter: And you took coal on that trip?

Mr. Wilke. Yes, sir.

Mr. Carter: How much coal did you take, and where?

Mr. Wilke: Seven tons at Ridgefield. 6 tons at South Janesville.

Mr. Carter: And, all told, you know you burned 13 tons?

Mr. Wilke: I am not exactly sure, but around 12 or 13 tons.

Mr. Carter: On the round trip, 12 or 13 tons?

Mr. Wilke: I said around 12 or 13 tons. It has not been weighed.

Mr. Carter: Did anybody weigh it?

Mr. Wilke: No.

Mr. Carter: Did the observers weigh it?

Mr. Wilke: No, sir.

Mr. Carter: And did you weigh it?

Mr. Wilke: No.

Mr. Carter: And in your judgment you burned a great deal more coal than you are credited with?

Mr. Wilke: Yes, sir.

Mr. Carter: Now if you take about 13 tons on a trip, and your tank was full when you started, where could you have put it except in the fire box?

Mr. Wilke: I could not put it any place else, I don't think.

Mr. Carter: You did not shovel it out of the gangway?

Mr. Wilke: No, sir.

Mr. Carter: When you take coal there, is it weighed?

Mr. Wilke: No, sir.

Mr. Carter: Does the engineer turn in a ticket?

Mr. Wilke: Yes, sir.

Mr. Carter: Does he have a stub in his book so he can keep a record of it?

Mr. Wilke: No, sir.

Mr. Carter: They used to, didn't they?

Mr. Wilke: Yes, sir.

Mr. Carter: How long since they deprived the engineer of a record of how much coal he took?

Mr. Wilke: About five years, I should judge.

Mr. Carter: In the last five years the engineer has had no check on how much coal he is ordering?

Mr. Wilke: Well, I am not sure about that, whether it is four or five or six years.

Mr. Carter: But you remember since you went there it has been changed?

Mr. Wilke: Yes, sir.

Mr. Carter: Now in shaking the grates here in going from Chicago to Janesville, they say you shook the grates one minute and 30 seconds, and coming back you shook the grates just 41 seconds. Now is that right?

Mr. Wilke: Well, I don't know. I never timed myself shaking the grates. I don't know how long it takes, but I know it is awfully hard work.

Mr. Carter: Will you describe about what you have to do to shake grates?

Mr. Wilke: Well, the grates are in four sections, and you have a big bar to shake them with.

Mr. Carter: How much does that bar weigh, and where do you keep it?

Mr. Wilke: Well, it lays over on the studs of the shaker, the grate shaker. And it is a bar about four feet long, and I should judge it weighs about 50 pounds—well, I couldn't say whether it weighs 50 pounds or 75.

Mr. Carter: It is a very heavy bar, is it?

Mr. Wilke: Well, it is quite heavy.

Mr. Carter: Then what do you do?

Mr. Wilke: And you unlatch the grate shakers, you put your bar on there and start shaking?

Mr. Carter: Well, do you have to change the bar from one section to the other?

Mr. Wilke: Yes, you have to change it four times if you want to shake the four sections of the grate.

Mr. Carter: And what do you do with the bar after you get through?

Mr. Wilke: Put it back where you got it.

Mr. Carter: Do you think you could do that in 41 seconds?

Mr. Wilke: I don't know. I couldn't say.

Mr. Carter: I notice you were credited there with self-dumping ash pans. Do these ash pans dump themselves?

Mr. Wilke: No, sir.

Mr. Carter: Well, why do they call them self-dumping ash pans?

Mr. Wilke: I don't know.

Mr. Carter: Would it sound better in an effort to reduce the work of the fireman to call it a self-dumping ash pan? What do you do in order to dump the ash pan?

Mr. Wilke: You have a big wrench, they call it a key, to the ash pan, and go down and open up the slides.

Mr. Carter: Open up the slides?

Mr. Wilke: Yes.

Mr. Carter: And when you open up the slides, do the ashes ever stick in there?

Mr. Wilke: Yes.

- Mr. Carter: What do you do when the ashes stick in there?
- Mr. Wilke: You have a rod and you have to take it out.
- Mr. Carter: What do you do after you have taken it out?
- Mr. Wilke: When you are done you close up the ash pan.
- Mr. Carter: And get up on the engine?
- Mr. Wilke: Yes.
- Mr. Carter: This self-dumping ash pan is wrongly named, isn't it?
- Mr. Wilke: Yes, sir.
- Mr. Carter: It does not dump itself?
- Mr. Wilke: No, sir.
- Mr. Carter: You say that you have been there ten years?
- Mr. Wilke: Well, it will be ten years in October.
- Mr. Carter: October next?
- Mr. Wilke: Yes, sir.
- Mr. Carter: And you have run an engine during part of this time?
- Mr. Wilke: Yes, sir.
- Mr. Carter: Do you find it harder to fire an engine now than when you first went to firing there, that is, can you stand the work now like you used to?
- Mr. Wilke: No, I can't stand the work like I used to, no.
- Mr. Carter: Is there a heavier tonnage?
- Mr. Wilke: Yes, sir.
- Mr. Carter: Do you find the irregular hours very trying on a man of your age?
- Mr. Wilke: Yes, sir.
- Mr. Carter: Do you think it would take a young, robust fellow to do this work successfully without exhausting himself?
- Mr. Wilke: You bet it does.
- Mr. Carter: Do you think that firing a locomotive is very hard work?
- Mr. Wilke: The hardest work I ever tackled.
- Mr. Carter: That is all.

CROSS EXAMINATION.

Mr. Sheean: Mr. Wilke, I am not quite clear on this matter; you started out with a tank full from Chicago?

Mr. Wilke: Yes, all but maybe a couple of bushel baskets was on.

Mr. Sheean: That is a 14 ton tank?

Mr. Wilke: 15 ton tank.

Mr. Sheean: Fifteen ton tank. And then you took on 7 tons at—

Mr. Wilke: At Ridgefield.

Mr. Sheean: Ridgefield?

Mr. Wilke: Yes, sir, 45 miles from Chicago.

Mr. Sheean: And then you took 6 tons at South Janesville.

Mr. Wilke: Yes, sir.

Mr. Sheean: Then you started back?

Mr. Wilke: The next day, after midnight, 12:30. The order was for 12:30, the 26th.

Mr. Sheean: South Janesville was the end of your run?

Mr. Wilke: Yes.

Mr. Sheean: You put in that six tons after you got in?

Mr. Wilke: Yes.

Mr. Sheean: On your run?

Mr. Wilke: Yes.

Mr. Sheean: So that starting out with 15 tons, the only coal you took en route before the end of it, was 7 tons?

Mr. Wilke: Yes.

Mr. Sheean: Then, this 6 tons that you put on after you got to Janesville, filled up the tank?

Mr. Wilke: Yes.

Mr. Sheean: Up to the capacity of 15 tons?

Mr. Wilke: Yes.

Mr. Sheean: Then you came back with the same engine?

Mr. Wilke: Yes.

Mr. Sheean: Was any coal taken en route on the return trip?

Mr. Wilke: Yes.

Mr. Sheean: Where did you take coal?

Mr. Wilke: At Ridgefield.

Mr. Sheean: How much did you take on there on the return trip?

Mr. Wilke: I don't really know. It was either four or five tons. I think it was five tons.

Mr. Sheean: Did you coal the engine, then, when you got to Chicago.

Mr. Wilke: The engineer left tickets for coal. The hostler put the coal on at Chicago.

Mr. Sheean: You don't know how much was put on there?

Mr. Wilke: He left tickets for six tons.

Mr. Sheean: He left tickets for six tons?

Mr. Wilke: So he told me.

Mr. Sheean: I take it you made no effort to time yourself in any way on this trip?

Mr. Wilke: No, sir.

Mr. Sheean: As to just how much work done at particular times.

Mr. Wilke: No, sir.

Mr. Sheean: And you made no effort to count the number of scoops that were put in?

Mr. Wilke: On this trip there was a fellow checking, and counting the scoops.

Mr. Sheean: He counted the scoops?

Mr. Wilke: Yes.

Mr. Sheean: And you knew each time that he was counting the number that you put in, with each fire?

Mr. Wilke: Yes.

Mr. Sheean: What was the scoop that you used?

Mr. Wilke: A No. 5.

Mr. Sheean: A No. 5 scoop. That is a scoop that takes about how many pounds of coal?

Mr. Wilke: They told me 18 pounds—about 18 pounds.

Mr. Sheean: Have you any recollection of where you did any shoveling down of coal?

Mr. Wilke: I did not on that trip, because the road foreman of engines shoveled down the coal for me.

Mr. Sheean: Who was that?

Mr. Wilke: Mr. Harvey.

Mr. Sheean: So you did no shoveling down?

Mr. Wilke: Not on that trip, no, sir.

Mr. Sheean: There are recorded here 61½ minutes time put in on shoveling down.

Mr. Wilke: He did it and gave me credit for it, I suppose.

Mr. Sheean: You did none at all?

Mr. Wilke: No, I did none. At Baring, he shoveled down coal for me, from there.

Mr. Sheean: And on the return trip there was no shoveling down?

Mr. Wilke: No, sir.

Mr. Sheean: Just what is it that fixes in your mind on this particular date, the fact that the engineer left a ticket, calling for a certain number of tons of coal at the end of his trip?

Mr. Wilke: When we got into South Janesville, the road foreman of engines told me, "You have burned about eight or nine tons of coal." I asked him why he had marked that seven tons at Ridgefield, and he said he only guessed at it. So the next trip I asked the coal shed man at Ridgefield why he had marked seven tons of coal, and he said that the coal chutes were marked, that they had been measured once, and marked, so when they got a chute that full, they knew there were so many tons in it.

Mr. Sheean: At the end of the trip up, Mr. Harvey said you had burned about nine tons of coal?

Mr. Wilke: About eight or nine tons of coal.

Mr. Sheean: On the trip?

Mr. Wilke: Yes.

Mr. Sheean: On the return trip did he tell you about how many tons of coal you had burned there?

Mr. Wilke: No, but the number of scoops were pretty near the same, so I did not ask how many tons.

Mr. Sheean: He told you the number of scoops you had put in?

Mr. Wilke: Yes.

Mr. Sheean: And you knew at the time that the scoops were being counted?

Mr. Wilke: Yes. That is, he showed me the list.

Mr. Sheean: How long have you been firing on these heavy engines?

Mr. Wilke: I have fired them off and on since they have been here.

Mr. Sheean: How long has that been, on the North Western?

Mr. Wilke: We got big engines here in 1909, I think.

Mr. Sheean: This one weighed 214,000 pounds on drivers—the engine you were on?

Mr. Wilke: 214,500, isn't it?

Mr. Sheean: Locomotive engine 1872?

Mr. Wilke: Yes.

Mr. Sheean: 214,500 pounds on drivers?

Mr. Wilke: Yes.

Mr. Sheean: And that weight of engine you have been firing how long?

Mr. Wilke: I fired that weight of engine last summer, and I fired a 1700 and a 1400 before that.

Mr. Sheean: And 1700 and the 1400 are both 200,000?

Mr. Wilke: Yes.

Mr. Sheean: That is all.

Mr. Burgess: Mr. Wilke, I think you stated you knew that a test was being made on this particular trip?

Mr. Wilke: I knew there was a test being made, but I did not know what for, and I asked the road foreman, and he told me the company wanted to know the difference in minutes between a superheater and a saturated engine.

Mr. Burgess: And did you not state that Mr. Harvey shoveled the coal down?

Mr. Wilke: Yes.

Mr. Burgess: Do you know of any reason why Mr. Harvey would shovel the coal down on that particular trip?

Mr. Wilke: No, I don't. I suppose to get a little exercise, got sick of sitting on the seat.

Mr. Burgess: Is it customary on all trips for Mr. Harvey to take exercise in that manner?

Mr. Wilke: Well, whenever he is with me he has helped me out when I needed help.

Mr. Burgess: About how many times does it occur that Mr. Harvey rides on your engine and shovels coal down?

Mr. Wilke: Not very often; when he happens to ride with me, maybe once in six months.

Mr. Burgess: Once in six months then, you do get relief from shoveling the coal ahead?

Mr. Wilke: Well, yes, if he is on the engine and I need coal. Whenever I did, he would fire the engine and I would pull the coal down, or else he would shovel it down.

Mr. Burgess: Is that the only time that you get this rest,

when Mr. Harvey rides with you?—the only time you get this relief?

Mr. Wilke: I have had brakemen pull down a little coal, and I have had engineers pull down coal.

Mr. Burgess: But if the engineer or brakeman, or Mr. Harvey, do not pull the coal down, then it is your duty to do it?

Mr. Wilke: It is my duty to do it.

Mr. Burgess: That is all.

Mr. Shea: Mr. Wilke, it is quite a relief for a fireman to have someone assist in shoveling the coal down, is it not?

Mr. Wilke: You bet your life it is.

Mr. Shea: That is all.

Mr. Sheean: There was not on the return trip any shoveling down of the coal by anyone?

Mr. Wilke: No, sir.

Mr. Sheean: And whether or not the total time of shoveling down coal stated at 6¹/₂ minutes, is correct or incorrect, you do not know?

Mr. Wilke: I do not know.

Mr. Sheean: But you know you did not do any of it?

Mr. Wilke: I did not do any of it.

Mr. Shea: But the next trip you made when you were alone, you shoveled coal down?

Mr. Wilke: Yes, every trip, on that job going north.

Mr. Burgess: On that trip there was no test being made, as far as you know, was there?

Mr. Wilke: The trip that they rode with me?

Mr. Burgess: The trip that Mr. Shea has referred to, when you did the shoveling?

Mr. Wilke: No, sir.

Mr. Sheean: And on the trip when you did shovel the coal ahead, do you know whether the total time of shoveling ahead or shoveling down was more or less than 6 minutes?

Mr. Wilke: I could not say.

Mr. Sheean: By the way, there is a fact I want to develop. This 1872 engine of 214,500 pounds on drivers, was a superheated engine, was it not?

Mr. Wilke: Yes.

Mr. Sheean: The engine 1749 that Mr. Roberg fired, was a saturated engine?

Mr. Wilke: Yes.

Mr. Sheean: That is all.

RE-DIRECT EXAMINATION.

Mr. Stone: Mr. Wilke, a superheater engine will burn just as much coal as a saturated steam engine, if she is loaded to her full capacity, will she not?

Mr. Wilke: Yes.

Mr. Stone: I understood you to say in reply to a question of Mr. Carter, that there was about the same number of scoops each way on this trip?

Mr. Wilke: Pretty near it, I think.

Mr. Stone: But according to their report, there is over a ton and a half difference in the weight of coal shoveled. Now, if you have the same number of scoops, would there be that much difference in the loading of the scoop?

Mr. Wilke: I had the same scoop both trips, and I think it was around 1,000 scoops going north and about 975 scoops of coal going south.

Mr. Stone: It was 1,000 scoops going north. They say you handled 17,910 pounds. So you would handle 17.9 pounds at every scoop full, which agrees with your statement of about 18 pounds to the scoop. I guess your statement would be about right, even if their figures are correct; but you say you burned even more than that.

Mr. Wilke: Well, I say I burned 7 tons of coal going to Ridgefield, on account of my tank—

Mr. Stone: You took six tons more after getting into South Janesville?

Mr. Wilke: Yes.

Mr. Stone: That would make 13 tons of coal that you had taken on the tank. Was there any more on than when you started?

Mr. Wilke: There might have been a couple of hundred pounds, probably.

Mr. Stone: And that makes you feel that if they gave you full measure at these two chutes, you really burned 13 tons of coal?

Mr. Wilke: Yes.

Mr. Stone: That is all.

Mr. Shecan: That is all.
(Witness excused.)

E. O. BEIL was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and place of residence.

Mr. Beil: E. O. Beil, Newton, Kansas.

Mr. Carter: By what railroad are you employed?

Mr. Beil: The Santa Fe Railway.

Mr. Carter: In what capacity?

Mr. Beil: Locomotive engineer.

Mr. Carter: I find, Mr. Beil, that we have a record of individual trips, or so-called test trips, where the name of E. O. Beil appears three times, as engineer. Are you the same Mr. Beil?

Mr. Beil: Yes.

Mr. Carter: You have examined these tests, have you?

Mr. Beil: Yes.

Mr. Carter: Will you describe how these officers began making their tests, how long they stayed on the engine, and so forth.

Mr. Beil: They arrived at the engine shortly before the time that we started to leave the roundhouse track, or the roundhouse lead, for the train, and they started keeping track of the shovelfuls of coal after we had coupled onto the train in the trainyard, and they discontinued keeping track as soon as we arrived in the yards, at the other terminal, at the other end of the road. They had two men with them out of the office of tests, at Topeka. I understand that is where they were from. One man had a stop watch, and he handled that when the fireman was working. The other man had a counting machine, or adding machine, and he was supposed to keep track of the number of scoops of coal.

We also had a traveling engineer with us on two trips, and the master mechanic part of the way, on one trip.

Mr. Carter: When the fireman put in a scoop of coal, did the man who had the stop watch call to the man who kept the record, "46 seconds"?

Mr. Beil: No, sir.

Mr. Carter: How did they communicate to each other—how did they make the record?

Mr. Beil: The man with the stop watch handled the time part himself. That is, I never paid any particular attention to him, but I saw him use his stop watch, and after the fireman would get done putting in the fire, he would make some notations with a pencil in a book that he had.

Mr. Carter: Take this trip on September 4, Extra E. They report here that you, as engineer, and G. T. Warhurst, as fireman, were on duty 13 hours and 25 minutes, and that fireman Warhurst only used 2 hours and 45 minutes of the 13 hours and 25 minutes firing the locomotive.

Mr. Beil: No, sir.

Mr. Carter: On the next trip, Extra E., September 6th, they report that you were on duty 11 hours and 30 minutes, and this same fireman, Warhurst, only fired his engine 2 hours and 42 minutes out of 11 hours and 30 minutes. Do you think that is true?

Mr. Beil: No, sir.

Mr. Carter: On September 7th, you had another fireman, S. W. Fleener, and they report that you were on duty 15 hours and 30 minutes, and of that 15 hours and 30 minutes, the fireman was only firing the engine 3 hours and 12 minutes. Is that true?

Mr. Beil: No, sir.

Mr. Carter: Were any of these trips exceptionally light trips?

Mr. Beil: The trip on the 4th and the trip on the 6th were both exceptionally light trips.

Mr. Carter: They could not be considered average trips?

Mr. Beil: No, sir.

Mr. Carter: What was the condition of the engines?

Mr. Beil: The engines on the 4th and on the 7th, were exceptionally good engines, and two of the freest steaming engines on the division.

Mr. Carter: Would you think that those trips which have just been described would be typical of all of the firemen's work, even though they had given the fireman credit for all of his work?

Mr. Beil: No, sir.

Mr. Carter: This test trip made September 7th, shows a

credit of 6 minutes and 25 seconds shoveling coal down. Did anybody else shovel down coal besides the fireman?

Mr. Beil: Yes.

Mr. Carter: Who did?

Mr. Beil: I did.

Mr. Carter: How much coal did you shovel down?

Mr. Beil: I shoveled down coal for a distance of 36 miles on an uphill grade, all except about five miles.

Mr. Carter: You do not find that credited in here, do you?

Mr. Beil: No, sir.

Mr. Carter: This was from Kinsley, Kansas to Dodge City?

Mr. Beil: Yes.

Mr. Carter: Why did you do this?

Mr. Beil: When we arrived at Kinsley, Kansas, it is necessary there to cut off and go around on the side track, in order to take coal; and upon looking at my watch I was satisfied that if we delayed ourselves long enough to take coal it would be impossible to get to Dodge City without tying up under the Sixteen Hour Law. I told the traveling engineer or officer that was making the test, that if he would run the engine from Kinsley, Kansas, to Dodge City, Kansas, I would dig down the coal in order to avoid taking coal and tying up there, at Kinsley, or some point between Kinsley and Dodge City; and he ran the engine from Kinsley, Kansas, to Dodge City, Kansas, and I dug down coal for that distance.

Mr. Carter: Was he clicking his clicker and pencilling his pencil, and running the engine, all at the same time?

Mr. Beil: No, sir. One of the men from the Office of Tests at Topeka, was doing that.

Mr. Carter: And that was done in order to get over the road within the sixteen hour limit?

Mr. Beil: Yes.

Mr. Carter: But you do not find any credit for the shoveling down of coal that you did?

Mr. Beil: No, sir.

Mr. Carter: Suppose you had not shoveled it down, do you believe it would have been possible for the fireman to have shoveled that coal down, and kept your engine hot while you were making that trip?

Mr. Beil: No, sir.

Mr. Carter: You did it because you believed that you were working for the interests of the company and the crew, to get in under the 16 hour limit?

Mr. Beil: Yes, sir.

Mr. Carter: It has been intimated here by certain witnesses for the railroads that train crews do not try to get over the road if there is any chance to make overtime. Has that been your experience?

Mr. Beil: No, sir.

Mr. Carter: Would men always try to get over the road and avoid making overtime?

Mr. Beil: Yes, sir.

Mr. Carter: Even though the overtime was at a higher rate than the regular time?

Mr. Beil: Yes, sir.

Mr. Carter: A man desires to get over the road as quick as he can, does he?

Mr. Beil: Yes, sir. That has always been my experience.

Mr. Carter: Do you believe that engineers and firemen are as honest as other railroad employees?

Mr. Beil: Yes, sir.

Mr. Carter: Now this time shown for cleaning fire and ash pans, on September 4, 17 minutes 20 seconds, and over here on September 6, 8 minutes and no seconds, and over here on September 7, 11 minutes even. That is cleaning fire and ash pans. Now was there more time spent in cleaning ash pans than that?

Mr. Beil: Well, I have never seen the time that you could clean an ash pan under four or five minutes, and the pans on those freight trains must be cleaned several times over the division, and on our trips going west when we are burning that eastern coal, I have seen the time it would take as high as 20 or 25 minutes to clean an ash pan.

Mr. Carter: Do the ashes become clogged in the ash pan, broken clinkers and cinders that fall through?

Mr. Beil: They are a solid clinker. That eastern coal that we burn, Frontenac coal, has a tendency to form solid clinkers in the pan, and sometimes they get so solid in there that it is almost impossible to get them out, and after they are gotten out we have to put the fire out by water from the squirt holes,

in order to keep from setting the ties afire, burning up ties. Sometimes we have to move the engine once or twice, in order to get all the ashes out of the pan.

Mr. Carter: And these molten clinkers falling through red hot form a compact mass, and then the draft of the air through them again fuses them together in a solid clinker, does it?

Mr. Beil: Yes, sir.

Mr. Carter: And you think there was much more time used in cleaning fire than is indicated here.

Mr. Beil: Yes, sir.

Mr. Carter: You did not clean any fire on these trips, did you?

Mr. Beil: Yes, sir, I helped.

Mr. Carter: You say you cleaned fires in addition to cleaning ash pans?

Mr. Beil: I helped clean the ash pans. As far as cleaning fire is concerned, what we call cleaning fire is when we have to drop the dump, the dump grate, and pull clinkers out of our fire, and in order to clean our fire enough, so that we can get in without making a failure for steam, when we have had bad coal. But I always assist the fireman in cleaning the ash pan at every opportunity that I have.

Mr. Carter: Is it not a fact that the engineer helps the fireman all he can, in order to relieve the fireman of burdensome duties?

Mr. Beil: Yes, sir.

Mr. Carter: Would an engineer do this because he wanted to work hard, or would he do it because he feels the fireman is working too hard unassisted?

Mr. Beil: I always do it because I think a fireman has more work than he can attend to and attend to properly and get over the road without becoming entirely exhausted.

Mr. Carter: Then, when it is shown in these tests that a man is standing at ease in a gangway, or sitting at ease on a seat box more than half his time, you think it is a mistaken test, do you not?

Mr. Beil: Yes, sir.

Mr. Carter: Now on this test trip of Sept. 4, when Mr. Norton was the observer, how far did he ride the engine?

Mr. Beil: 36 miles—called 36 miles. There might be a

fraction of a few tenths difference, from Dodge City, Kansas, to Kinsley, Kansas.

Mr. Carter: Then what did he do?

Mr. Beil: Went back to the way car, or at least that is where he told me he was going.

Mr. Carter: Whom did he leave in charge of making the tests?

Mr. Beil: Two men from the office of tests at Topeka, Kansas.

Mr. Carter: Now how did they do?

Mr. Beil: They proceeded with the test as outlined in my former testimony.

Mr. Carter: Well, you did not get in until 2:50 o'clock in the morning. Did they have any trouble keeping awake?

Mr. Beil: Yes, sir. That is, the man who was keeping track of the shovel, firing the coal, quite a number of times the man who was handling the stop watch accused him of going to sleep.

Mr. Carter: And do you think that the clicker would click when a man was asleep?

Mr. Beil: No, sir.

Mr. Carter: You say you are now back on the extra list as an engineer?

Mr. Beil: Yes, sir.

Mr. Carter: About how much do you work? Do you lay off very often?

Mr. Beil: No, sir.

Mr. Carter: How much do you make when you are not laid off?

Mr. Beil: Well, my last month I got in \$75.59; worked every opportunity.

Mr. Carter: Well, now, tracing it back, month to month, how much did you earn as an engineer on the extra board. I understand you have had better jobs. They are back now?

Mr. Beil: Yes.

Mr. Carter: Well, I am talking about extra men.

Mr. Beil: The extra men's salaries will run from about \$115 to \$125 a month, yearly average.

Mr. Carter: Well, how much firing does the extra man do? I mean to say without being demoted?

Mr. Beil: I don't understand what you mean.

Mr. Carter: You are an extra engineer?

Mr. Beil: Yes.

Mr. Carter: On the Board. And you are marked in your turn to go out as extra engineer. How much firing does the company give you to help you out?

Mr. Beil: None whatever as long as we are on the engineer's extra board.

Mr. Carter: Then the Santa Fe does not help out the engineers' earnings when they are on the extra board, by letting them fire?

Mr. Beil: No.

Mr. Carter: Have you ever worked at a place where they did?

Mr. Beil: No, sir.

Mr. Carter: You never worked any place else, however?

Mr. Beil: No.

Mr. Carter: You don't know that on some railroads passenger firemen are doing extra running, and vice versa, the extra engineers are doing the passenger firing?

Mr. Beil: No, sir.

Mr. Carter: You never heard of that, did you?

Mr. Beil: No.

Mr. Carter: The engineer when he is promoted is an engineer, is he not?

Mr. Beil: As long as he is placed on the board with the intention of keeping him there.

Mr. Carter: And then when business falls off, as soon as there is not enough work for them, what do they do to them?

Mr. Beil: They do what they call "cut the board," that is, demote them, and the men that were laid off on a division have the privilege of taking a run and firing.

Mr. Carter: When you are back firing as a demoted engineer, how much running do you get as a fireman?

Mr. Beil: When you are back in the firing service on account of being demoted?

Mr. Carter: Yes.

Mr. Beil: Sometimes you don't get very much. It all depends.

Mr. Carter: An emergency trip once in a while?

Mr. Beil: Yes, sir.

Mr. Carter: Whenever the emergency trips appear to show there is enough work for another engineer on the extra board, what do they do?

Mr. Beil: Increase the engineers' extra board.

Mr. Carter: Then you stop firing altogether?

Mr. Beil: Yes, sir.

Mr. Carter: On the firing trip, do the firemen sometimes have to take their own coal at night time, when they come to coal chutes?

Mr. Beil: Yes, sir. At three coal chutes on our division they have to take their own coal at night. They are supposed to have day coal chute men, but you very seldom find them on duty. They take practically all their coal in the daytime.

Mr. Carter: And the fireman has to go up in the coal chute and raise a gate, so the coal goes into the tank. Is that it?

Mr. Beil: No, sir.

Mr. Carter: How does he handle it?

Mr. Beil: Well, we have a coal chute where there are pockets, what we call coal chute pockets, and they are on an incline, something like that (indicating).

Mr. Carter: How does he open the gate?

Mr. Beil: He just gets back on the tank, and either gets hold of a chain or rope that is attached to a latch in a door in front of the pocket, and pulls that latch down, and that lets the approach down in the line of the pocket full of the coal and it shoots off on to the tank, part of the time.

Mr. Carter: Then by having it hanging down in front of the tank, they must expect the fireman to do this work regularly? Ordinarily, where there is a man up on the coal chute handling it, he would raise the gate from up there, wouldn't he?

Mr. Beil: No, not on those steel chutes. They have to be pulled from the tank.

Mr. Carter: Then it is supposed to be the fireman who does that work?

Mr. Beil: Well, they are supposed to have coal chute men there ready to help coal the engine in the daytime, but there is very seldom you can find them on the job, and in order to avoid delaying the train the fireman takes the coal himself.

Mr. Carter: This coal, in all kinds of weather, and all

kinds of coal, does it sometimes require an effort to get the coal out of the chute into the tank?

Mr. Beil: Yes, sir.

Mr. Carter: Level it off?

Mr. Beil: Yes, sir.

Mr. Carter: The fireman does this?

Mr. Beil: Yes.

Mr. Carter: Now, it was stated here by a witness that if an engine runs hot it was the engineer's fault. Do you think that engineers would agree to that?

Mr. Beil: No, sir.

Mr. Carter: Is it not a fact that engines run hot in spite of all precautions?

Mr. Beil: Yes, sir.

Mr. Carter: How much oil are you allowed to make a trip?

Mr. Beil: We are allowed 4 pints of valve oil and 5 pints of engine oil on our freight engines.

Mr. Carter: Well, now, let us take a trip. Four pints of valve oil. What character of water do you have on your division?

Mr. Beil: We have bad water at several of the water tanks.

Mr. Carter: Now, do you find that four pints of oil is enough to go over a division and properly lubricate the valves when the engine is foaming?

Mr. Beil: No, sir.

Mr. Carter: Is it the engineer's fault that the water foams?

Mr. Beil: No, sir.

Mr. Carter: They would try to blow the boiler out once in a while, would they not?

Mr. Beil: Yes, sir; as often as they can get enough water to do so.

Mr. Carter: Sometimes it is hard to know what you have got in the water tank, water, or what it is?

Mr. Beil: Yes, sir.

Mr. Carter: Now, when this water rises, and foam goes out into the pipe, or into the cylinders of the engine, what effect has it on the valves?

Mr. Beil: It washes the lubrication off the valves and the cylinders.

Mr. Carter: And it requires a considerable additional amount of oil to restore normal conditions?

Mr. Beil: Yes, sir, quite a bit.

Mr. Carter: Have you run superheater engines on this run?

Mr. Beil: One or two trips I took engines that were going through from the Topeka shops out to the Western Lines.

Mr. Carter: You don't know much about superheater engines?

Mr. Beil: No, sir.

Mr. Carter: Now, in your judgment as an engineer, suppose on this same district, when that water foams—and by the way, when the water foams there is a kind of sediment or scum on the top of it, is there not?

Mr. Beil: Yes, sir.

Mr. Carter: Now, when it foams and goes out through the pipe, through the superheater head, and in back through the superheater units, returning twice, does it stay saturated, or immediately become dry when it gets in there?

Mr. Beil: I have been told by the officials that I have talked to on this subject, that the steam becomes dryer.

Mr. Carter: Yes, and wouldn't that precipitate all of this scale forming substance on the inside of the superheater units?

Mr. Beil: Yes, sir.

Mr. Carter: Would that not tend to insulate the superheater units so as to reduce their efficiency?

Mr. Beil: Yes, sir.

Mr. Carter: And when a superheater becomes old, particularly on a bad water district, why, it might be a detriment, rather than an advantage, to have a superheater there, isn't that true?

Mr. Beil: Those are the instructions that the superheater people put out on their diagram of the superheater.

Mr. Carter: How would you clean the interior of superheater units, or do you know?

Mr. Beil: I don't know.

Mr. Carter: But you do know how water foams and goes through?

Mr. Beil: Yes, sir.

Mr. Carter: And in a saturated engine it goes through to

the steam chest and takes off the lubrication, and requires additional oil?

Mr. Beil: Yes, sir.

Mr. Carter: And in a superheater you know it goes through the superheater units?

Mr. Beil: Yes.

Mr. Carter: And dries in that process?

Mr. Beil: Yes.

Mr. Carter: Now, in regard to the engine oil, does it sometimes require more engine oil than you have to keep an engine from running hot?

Mr. Beil: Yes, sir.

Mr. Carter: Therefore, it is not the engineer's fault all the time, or a considerable portion of the time, when a journal does get hot?

Mr. Beil: No, sir.

Mr. Carter: Are engineers usually penalized if some journal does get hot?

Mr. Beil: Well, as a rule they investigate the case; if there is any delay, or any damage done to the journal, there is always a formal investigation held. And they are most always criticized for allowing the bearing to get in that condition.

Mr. Carter: Well, how do they know that you were delayed thirty minutes?

Mr. Beil: The conductor is supposed to make a report of any delay on the engine.

Mr. Carter: Well, it has been intimated here when we have been advancing the claim for time and one-half for overtime, that the officials of the company have no supervision over the engineer and conductor, when they are out on the road, and they could kill time in order to make this extra money for overtime, at a higher rate. How long on a trip would you be delayed before the dispatcher would want to know what is the matter with you?

Mr. Beil: Just a very short time.

Mr. Carter: Would you have to explain the delay?

Mr. Beil: Yes, sir.

Mr. Carter: And there would be an investigation, if it amounted to a very considerable delay, would there not?

Mr. Beil: Yes, sir.

Mr. Carter: That is, when you have not any time and one-half for overtime?

Mr. Beil: Yes, sir.

Mr. Carter: Don't you think they would be more strict if you had time and one-half for overtime?

Mr. Beil: Yes, sir.

Mr. Carter: Don't you think they could check any soldiering on the part of the engine crew?

Mr. Beil: Yes, sir.

Mr. Carter: That is all.

CROSS EXAMINATION.

Mr. Sheean: So that at the present time, Mr. Beil, it is the desire of both the men and of the dispatcher to get them over the road just as fast as possible?

Mr. Beil: Yes, sir.

Mr. Sheean: And everything is being done to expedite the movement, and to get them along just as fast as they can, both by the men on the road and by the officials at the terminals?

Mr. Beil: No, sir, I don't think so. It might possibly be by the officials at the terminals, but they could assist a great deal in that matter by having men on the job all the time to help take coal, and they could have men around those water tanks when you drive up there to take water.

Mr. Sheean: Well, I meant more particularly the despatcher. The despatcher is after you if there is any delay at any place, and asks, "What is the trouble with you," and why you are not getting along faster.

Mr. Beil: Yes, sir.

Mr. Sheean: Just as you answered Mr. Carter.

Mr. Beil: Yes, sir.

Mr. Sheean: The effort on the part of the despatcher is to keep you moving, isn't it?

Mr. Beil: Yes, sir.

Mr. Sheean: Now, on the extra board, at the present time, your earnings on that particular extra board ran from \$115 to \$125 a month?

Mr. Beil: That is, if you will take it for a year's average. Our business is better for the extra men during the summer

months than it is during a mild winter. Of course, during a very hard winter, and in bad weather conditions, why the extra board does very well in the winter time.

Mr. Sheean: Well, the extra board does well in that particular period for those who take the work; isn't that true?

Mr. Beil: Yes, sir.

Mr. Sheean: And the Board gets a little bit shorter during that time of the hard winter months?

Mr. Beil: Yes, sir.

Mr. Sheean: Fewer men to divide up the money?

Mr. Beil: They use more men on account of snow plows, and things like that.

Mr. Sheean: Yes, but those who are available and do get out during that weather, make more money than they would average during the year?

Mr. Beil: No, I don't think so. That is a yearly average will run at about \$115 to \$125 a month.

Mr. Sheean: Well, is there an understanding of any sort about what the earnings shall be, before the board is cut?

Mr. Beil: No, sir.

Mr. Sheean: That is regulated by mutual arrangement between the men and the company, is it?

Mr. Beil: Well, we try to regulate it, but our master mechanic did not seem to want to reduce the board where it should be in order for the men to make a decent wage.

Mr. Sheean: Well, he reduces it, or it is kept down to where, on the average, throughout the year, it runs between \$115 to \$125. Have the men been trying to get it so the earnings would be more than that?

Mr. Beil: We tried to reduce the board. Last month I lay on the extra board for eleven days without getting out, and we had an awful time to reduce the board two men. After he reduced it two men, I lay there four or five days before I got out.

Mr. Sheean: Well, the net result of that reduction of the two men was that the two who had been on this extra board went back to firing, and that put how many firemen out of jobs?

Mr. Beil: Well, the firemen's board has not been cut as yet.

Mr. Sheean: Not cut as yet. But the two engineers who went back to firing just made that many more firemen, and the

youngest fireman would be the one, if there be any out there, that would go?

Mr. Beil: Yes, sir.

Mr. Sheean: Well, the effort has been to keep that extra board where the men on the extra board will average through the year something like \$115 to \$125 a month, take it the year around?

Mr. Beil: No, I can't say as that has been an effort.

Mr. Sheean: Well, but that has been the result?

Mr. Beil: That has been the result.

Mr. Sheean: For how many years past has that been about the situation, that the extra engineer would average through the year \$115 to \$125 a month?

Mr. Beil: Well, I have never paid any attention to the engineers' extra board prior to my time as an engineer. That was out of my line of business.

Mr. Sheean: Well, you have been an engineer since when?

Mr. Beil: I was placed on the engineers' extra board on October 12, 1912.

Mr. Sheean: October 12, 1912?

Mr. Beil: Yes, sir.

Mr. Sheean: Well, since that time the average through the year has been \$115 to \$125 a month?

Mr. Beil: What time I was not set back to firing, and I was set back part of that time, during that time, to firing.

Mr. Sheean: Well, those who remained on the extra list, would average about that?

Mr. Beil: As far as I know, yes, sir.

Mr. Sheean: Now, on these test or observation trips, Mr. Beil, in which you were the engineer, I notice there was no engine which weighs as much as 185,000 pounds on drivers. Have you any engine as heavy as that on that division?

Mr. Beil: No, sir; not that I know of.

Mr. Sheean: These are the heaviest engines that they have out there, the E-3?

Mr. Beil: As far as I know, yes, sir, on that particular division.

Mr. Sheean: And on that particular division the heaviest engine that runs is the E-3. That weighs 174,700 pounds on drivers?

Mr. Beil: Yes, sir.

Mr. Sheean: And on these engines weighing 174,700 pounds on drivers, on these long runs of 15½ hours, the coal that is shoveled runs up to 18 tons sometimes?

Mr. Beil: And more than that.

Mr. Sheean: And more than that, at times?

Mr. Beil: Yes, sir.

Mr. Sheean: I think you made no statement with reference to the amounts as shown here; there is no difference between you and the observers, as to the amount of coal shoveled on these trips?

Mr. Beil: As far as I know, those trips, especially the two trips going east, were approximately correct, but they were very much above the ordinary—considered easy trips. They are easy trips, above the ordinary trip.

Mr. Sheean: Which is east and which is west on this run, Mr. Beil?

Mr. Beil: Well, the run on the 4th, I think, was east, the 4th and 6th.

Mr. Sheean: That is Newton to Dodge City?

Mr. Beil: From Dodge City to Newton.

Mr. Sheean: From Dodge City to Newton?

Mr. Beil: Yes, sir.

Mr. Sheean: Well, now, you said that was a light trip. They had 68 cars in that train, according to your report?

Mr. Beil: Yes, sir.

Mr. Sheean: And what is the number of cars that you ordinarily handle there?

Mr. Beil: All that we have got to go, and that the engine can pull.

Mr. Sheean: The tons are 2,885?

Mr. Beil: Yes, sir.

Mr. Sheean: What is your tonnage rating there?

Mr. Beil: We have no tonnage rate. All that you can haul, all that you can get started and keep agoing.

Mr. Sheean: Well, apparently 68 cars is up pretty well in the number of cars that you get in the ordinary run of traffic there?

Mr. Beil: No, sir.

Mr. Sheean: How high do they go?

Mr. Beil: Well, there have been trains hauled out there with 120 cars. 100 cars is nothing uncommon.

Mr. Park: It is down hill from Dodge City to Newton?

Mr. Beil: That is what we call a water grade.

Mr. Park: It is descending?

Mr. Beil: Some places, and some places it is level, practically level.

Mr. Sheean: Well, from Newton to Dodge City what do they ordinarily haul?

Mr. Beil: Well, all the way from 65 to 100 cars, and even more than 100 cars.

Mr. Sheean: Well, now, on the Dodge City to Newton trip on the 4th, that is the 13 hour and 25 minute trip?

Mr. Beil: I think so.

Mr. Sheean: What is the distance there?

Mr. Beil: 153 miles.

Mr. Sheean: 153 miles?

Mr. Beil: Yes, sir.

Mr. Sheean: The amount of coal I think you say was about right, here, on all of them, as to the amount of coal, but as to the distribution of time you did not agree?

Mr. Beil: Yes, sir.

Mr. Sheean: Now, on that trip of 13 hours and 25 minutes, the observers reported 2 hours and 45 minutes of supplying coal to the fire box with the scoop. They also report, in addition to the specified items of shaking grates, breaking coal, shoveling down coal, cleaning the fire in the ash pan, that in addition to all of those items there was in all other manual labor, 2 hours and 43 minutes.

Mr. Beil: Yes, sir.

Mr. Sheean: Making a total of manual labor of 6 hours and 12 minutes. Now, without any question, Mr. Beil, as to what is or is not manual labor, but just for the purpose of getting a mutual understanding, limiting manual labor to the actual time that the fireman has the scoop in his hand, and is actually shaking the grates, or actually breaking the coal, or actually shoveling down the coal, could you give us any judgment as to just how much all of that would aggregate on the trip?

Mr. Beil: Well, it would take the larger part of the trip, consume most of the fireman's time in his duties in firing the

engine, and sweeping the deck, keeping coal down, keeping his fire box clean, and he is practically busy all the time while he is running?

Mr. Sheean: Well, granting that he is busy, I am trying to get at, if I can, the difference between the part that places a physical strain on him. You understand that there has been a claim made here that after a certain time, or after a certain weight on drivers on engines, that there is a physical strain on him that separates engines of that type and style, from other engines, and getting it to the purely physical part, during what part of the time would you say on these trips there was that physical exertion?

Mr. Beil: Practically all the time.

Mr. Sheean: Well, of course, if you keep shoveling coal all the time, the engine won't burn it constantly? The engine won't burn coal constantly, shoveling, will it?

Mr. Beil: Well, the way they expect us to fire those locomotives out there, and the way they insist on the fireman firing them, is the one shovel method, that is, one shovelful of coal into the fire box and a pause, just wait an instant, long enough for the smoke to clear away, a puff of black smoke, and not put in too much coal at the time, to reduce the temperature of the fire box below the igniting point of those hydrocarbon gases, and wait a little bit, and put in another shovelful of coal. If a man fires one of those locomotives in that way, he is busy practically all the time.

Mr. Sheean: The fire box door, I suppose, is to be kept shut part of the time, isn't it?

Mr. Beil: After each scoopful of coal they insist on it.

Mr. Sheean: Now, how much of the time, or what proportion of the time would you say the fire box door was closed on one of these trips?

Mr. Beil: Just open long enough to put in a shovelful of coal, and then close it.

Mr. Sheean: I know, but if you were trying to differentiate between the part that a fire box door was closed, and the part that it was open on a trip, what would you say?

Mr. Beil: I have no way of knowing.

Mr. Sheean: No way of getting at that?

Mr. Beil: No, sir.

Mr. Sheean: One of the men on each of these trips counted the shovels of coal that were put in.

Mr. Beil: He was supposed to.

Mr. Sheean: Supposed to do that?

Mr. Beil: Yes.

Mr. Sheean: And the other, the time that was occupied in putting it in?

Mr. Beil: Yes, sir.

Mr. Sheean: Now, your judgment is that as to the amount of coal consumed on the trips, these reports show that correctly?

Mr. Beil: I could not dispute it. I never kept any record of the coal.

Mr. Sheean: And you kept no record of the actual time that the fireman was doing any particular thing in the way of physical exertion?

Mr. Beil: Not by a watch, only from observation.

Mr. Sheean: And your observation did not attempt to divide the time, from the time that he left the seat box until he returned to the seat box?

Mr. Beil: Very little of his time that he was on the seat box. Practically all the time he was down on the deck, busy.

Mr. Sheean: But you made no effort to note anything about what part, if any, of his time, he was on the seat box?

Mr. Beil: Practically none of his time at all.

Mr. Sheean: On any of the trips?

Mr. Beil: No, sir.

Mr. Sheean: And that is the situation there on these engines, of 174,700 pounds on drivers?

Mr. Beil: Yes, sir, with the trains that we haul.

Mr. Sheean: They are not superheated, any of these engines?

Mr. Beil: No, sir.

Mr. Sheean: How long have these engines been on that division?

Mr. Beil: It seems to me like it was during the year 1910 or '11; I would not say for sure. Some time along that time.

Mr. Sheean: 1910 or '11?

Mr. Beil: Somewhere along that time, yes, sir.

Mr. Sheean: And on these instructions as to the single

scoop method of firing that you spoke of, has there been any change in the amount of coal consumed out there on that division, or that run?

Mr. Beil: No, I couldn't say.

Mr. Sheean: You don't know about that?

Mr. Beil: No, sir.

Mr. Sheean: Has there been any difference at all with reference to the work of the fireman on those engines, since they were put on, and the present time?

Mr. Beil: In what way?

Mr. Sheean: Oh, about the work that he does, the amount of coal that he shovels?

Mr. Beil: Well, the question that you just asked me, before this, in reference to the amount of work—of course they are a larger engine.

Mr. Sheean: Well, I mean since these engines came on, I mean since these engines, the E-3's came on to that road in 1910.

Mr. Beil: Yes, sir.

Mr. Sheean: Has there been any change in the work on those particular engines?

Mr. Beil: Since the time that they first started to put them in service, until the present time?

Mr. Sheean: Yes, sir.

Mr. Beil: The difference in the work that the fireman has to do?

Mr. Sheean: Yes.

Mr. Beil: There is, because they are hauling bigger trains.

Mr. Sheean: And what is the difference in the trains?

Mr. Beil: The time that those engines first came there, at that time we considered 65 and 70 cars a big train. A very big train.

Mr. Sheean: Yes?

Mr. Beil: And now they haul as high as 120.

Mr. Sheean: 120 loads?

Mr. Beil: Sometimes, yes, sir.

Mr. Sheean: How many trains of 120 cars have been hauled there, in your knowledge, and from your observation?

Mr. Beil: Well, there have been several. Just as to the number, I could not say.

Mr. Sheean: Well, about what proportion or percentage in your observation there, have gotten up to 125 cars?

Mr. Beil: Well, not having kept track of them, I could not say.

Mr. Sheean: Well, about how many do you remember having seen, that you have personal knowledge of?

Mr. Beil: Well, I could not say as to that.

Mr. Sheean: Do you remember any?

Mr. Beil: Those are things that we do not try to keep track of, because it is common with us to see trains of such great length that we do not try to remember the number of times that we see them, or the places we see them at.

Mr. Sheean: But there is no tonnage rating of any sort, on this division?

Mr. Beil: No, sir.

Mr. Sheean: Never has been?

Mr. Beil: Not to my knowledge. Only on two of our trains, only two scheduled trains, they hold them down to a certain tonnage in order to make time and compete with other roads, I understand, for the traffic.

Mr. Sheean: But there never has been any tonnage rating on that?

Mr. Beil: Not on dead freight trains, to my knowledge.

Mr. Sheean: What was the engine next smaller, than this one that you have spoken of, before that was put on?

Mr. Beil: The Vauclain Compound Prairie Type engine we had in service prior to this class we have in service now.

Mr. Sheean: What do they weigh?

Mr. Beil: Not knowing, I could not say.

Mr. Sheean: You can't give us any idea about that?

Mr. Beil: No, sir.

Mr. Sheean: Considerably lighter than these?

Mr. Beil: I could not say as to that. I don't know what their weight is on drivers, and I would not even attempt to estimate their weight. Whenever we want to find out the weight of a locomotive, we have to go to the time-keeper's office, and he has a blueprint of the locomotive, and what is supposed to be the correct weight on drivers.

Mr. Sheean: That is all.

Mr. Burgess: Mr. Beil, did I understand you to state that

on one occasion you had five men on your engine, while the test was being made?

Mr. Beil: Yes, sir, and we had six when the brakeman was on there, including the fireman, myself, the brakeman, and the traveling engineer, and the two men out of the Office of Tests.

Mr. Burgess: I was just wondering where those five men rode on that engine.

Mr. Beil: Well, we had a full house.

Mr. Burgess: And did you state, Mr. Beil, that on one occasion, the tester went back to the way-car or caboose?

Mr. Beil: The man credited with making the observations, our master mechanic, went back to the way-car at Kinsley, Kansas, or that is where he told me he was going, and that is where the conductor told me he was, and stayed there, until we arrived at Newton, Kansas.

Mr. Burgess: Now, just what do you term as a way-car on the Santa Fe?

Mr. Beil: The caboose.

Mr. Burgess: The caboose?

Mr. Beil: Yes, sir.

Mr. Burgess: How long had these gentlemen been on the engine before retiring to the way-car?

Mr. Beil: Thirty-six miles, all down hill, except about nine miles. That is the biggest down hill part of our trip here, this thirty-six miles, between Kinsley and Dodge City.

Mr. Sheean: I think you misunderstood him, Mr. Burgess. I understood that Mr. Chambers went there, but the two observers stayed in the cab.

Mr. Beil: Excuse me, Mr. Norton, that was.

Mr. Burgess: I previously asked him who the men were, Mr. Sheean, who retired.

Mr. Sheean: Your question was, who these gentlemen were that went to the way-car. I thought you misunderstood him. One of them went to the way-car, and two men stayed on the engine, isn't that right?

Mr. Beil: Two men out of the Office of Tests stayed on the engine.

Mr. Sheean: They were the two men who were making the observation then, were they?

Mr. Beil: Yes.

Mr. Shecan: The same two men, and the master mechanic rode up there.

Mr. Beil: He is the man that was credited with being the observer.

Mr. Burgess: Now, did the master mechanic and the road foreman of engines retire to the way-car?

Mr. Beil: The master mechanic on the trip that we made on September the 4th, was supposed to be the observer, and he retired to the way-car at Kinsley, Kansas, and remained there, as far as I know, until we arrived at Newton, at least he was not on the engine until we arrived at the freight terminal at Newton, or just outside of there, two miles and one-half from Newton.

Mr. Burgess: When did the other gentleman go to the way-car?

Mr. Beil: Which other gentleman?

Mr. Burgess: I thought you said two retired to the way-car?

Mr. Beil: No, only one.

Mr. Burgess: Only one?

Mr. Beil: Yes.

Mr. Burgess: Then those men, on that occasion, were the two men out of the Test Office at Topeka?

Mr. Beil: That is where I understand they were from, out of the Office of Tests.

Mr. Burgess: And did I understand you rightly, when you stated that one of those men accused the other of going to sleep while the test was being made?

Mr. Beil: Yes, sir.

Mr. Burgess: About how long had they been on the engine making the tests before they became drowsy and sleepy?

Mr. Beil: Well, I noticed him beginning to get drowsy along about 11 o'clock, or along toward midnight; that the gentleman that was handling the counter, or adding machine, sat over there and nodded, and practically every time the fireman started to put in the fire, the man who handled the stop watch would holler at him, sometimes when he was starting to put in the fire, and sometimes he would not notice what was going on until the fireman had put in part of his fire.

Mr. Burgess: Well, how many hours had they been on duty on the engine?

Mr. Beil: I can't say, unless they tell me what time they left.

Mr. Sheean: 2:50 is shown, Mr. Beil.

Mr. Beil: In the afternoon?

Mr. Sheean: 2:50 P. M., leaving Newton.

Mr. Beil: Well, it would have been about 2:50 P. M. until that night, about 11 or 12 o'clock.

Mr. Burgess: And that is the time they began to indicate a tired feeling?

Mr. Beil: Yes.

Mr. Burgess: So that that feeling would have been aggravated if they had to remain on duty sixteen hours, would it?

Mr. Beil: Yes, sir.

Mr. Burgess: And that is not uncommon for an engineer on your road, is it?

Mr. Beil: No, sir. Practically all of our trips, including freight service going west, are sixteen hour trips,—or in dead freight, I should say.

Mr. Burgess: And the locomotive engineer and the locomotive firemen are not supposed to go to sleep, are they?

Mr. Beil: No, sir.

Mr. Burgess: And if they did go to sleep, after being on duty sixteen hours, there would be very little advantage in installing block signals, would there?

Mr. Beil: Well, I don't understand your question, Mr. Burgess.

Mr. Burgess: I mean to say that the block signal would not prevent an accident if the engineer was asleep, would it?

Mr. Beil: No, sir, it would not.

Mr. Burgess: I think you stated, if I recall your testimony, Mr. Beil, that one of these tests was made with 68 cars in the train; is that right?

Mr. Beil: Yes, sir, as far as I know; that is the conductor's report to me.

Mr. Burgess: While it is not uncommon or out of the ordinary to haul 100 cars on this particular territory, is it?

Mr. Beil: No, sir.

Mr. Burgess: So that in your opinion, making a test as

to the consumption of coal, or the work of the engineer or fireman with a 68 car train, that would not represent the usual and ordinary work performed by these employes, would it?

Mr. Beil: No, sir.

Mr. Burgess: I think you stated, Mr. Beil, that quite recently you had waited eleven days for an opportunity to work.

Mr. Beil: Yes, sir.

Mr. Burgess: And during that time, that there was an effort made to reduce the extra board; is that right?

Mr. Beil: Yes, sir.

Mr. Burgess: And in order to reduce the extra board, it is necessary for a committee of employes, usually spoken of as the Local Committee, to negotiate with the master mechanic, is it not?

Mr. Beil: On our particular division, the engineers have given their Local Chairman, by a vote of the lodge, the power to hand that by himself. That is, in conjunction with the Master Mechanic.

Mr. Burgess: But there is no way that they can put any desire into actual practice unless it meets with the approval of the Master Mechanic?

Mr. Beil: No, sir.

Mr. Burgess: So that the question of regulating the extra board is not entirely in the hands of the employes?

Mr. Beil: Absolutely not.

Mr. Burgess: In the event the master mechanic declined to comply with the request of the employes, what would be the next step, Mr. Beil; appeal it to the General Chairman of the system?

Mr. Beil: I presume so, yes, sir.

Mr. Burgess: Well, Mr. Beil, are your engines equipped with a brick arch?

Mr. Beil: Yes, sir.

Mr. Burgess: Did you ever have a brick fall down, one or more bricks?

Mr. Beil: Yes, sir.

Mr. Burgess: What did you do on that occasion?

Mr. Beil: Well, I would take the clinker hook and pull the brick back to the back end of the fire box, and try to hook it out,

and if I could not hook it out, I would just leave it lay back there, and go on.

Mr. Burgess: Then you do have clinker hooks on your engines?

Mr. Beil: On our engines, yes, sir.

Mr. Burgess: Is every engine equipped with the necessary fire tools?

Mr. Beil: They are supposed to be, but the fireman has to chase after the supply man practically each trip, in order to get some supply or other.

Mr. Burgess: As a practical engineer, would you consider it proper to set off your train in the event a brick fell down from the brick arch?

Mr. Beil: Absolutely no.

Mr. Burgess: Or in the event one row of brick did?

Mr. Beil: No, sir.

Mr. Burgess: Or if the entire arch fell down?

Mr. Beil: No, sir.

Mr. Burgess: Do you know of any engineer on your railroad that ever did set a train off on account of the bricks falling down from the brick arch?

Mr. Beil: No, sir. I know of cases where the arch tubes went to leaking, and leaking bad, and they took their full train through, did take it through.

Mr. Burgess: Would it be fair to assume that in the event an engineer on your road did set his train off because one or more bricks fell down, that he would be severely criticised, and probably disciplined for setting his train off?

Mr. Beil: He most surely would.

Mr. Burgess: So, in order to retain your position on the Santa Fe Railroad, it is necessary to try and get your train in under those circumstances?

Mr. Beil: Yes, sir.

Mr. Burgess: And not only try to, but get it in?

Mr. Beil: Get it in.

Mr. Burgess: Mr. Beil, did you, during your experience, ever have a glass break in the lubricator?

Mr. Beil: Yes, sir. Just recently I had one instance.

Mr. Burgess: Did you consider that sufficient reason to set your train off?

Mr. Beil: No, sir.

Mr. Burgess: In the event that the lubricator for any cause did not work, would you consider that a sufficient reason to set your train off?

Mr. Beil: No, sir.

Mr. Burgess: Is it quite possible to oil the valves and the cylinders in another manner under those circumstances?

Mr. Beil: Yes.

Mr. Burgess: In order to get in?

Mr. Beil: Yes.

Mr. Burgess: And in the event that you did set the train off under those circumstances, would you be severely criticised?

Mr. Beil: I would expect to be severely disciplined for it, yes, sir.

Mr. Burgess: That is all.

Mr. Shea: Mr. Beil, in the event of a lubricator failure, how do you lubricate your cylinders and valves?

Mr. Beil: Through the relief valve.

Mr. Shea: Where is this relief valve located?

Mr. Beil: Out at the front of the engine.

Mr. Shea: Away out on the front end?

Mr. Beil: Yes.

Mr. Shea: In case you are required to lubricate your valves and cylinders through your relief valve, how is that done?

Mr. Beil: When you get ready to lubricate through the relief valve you have the fireman go out—sometimes I have the fireman go out and sometimes I go out—

Mr. Shea: The engine is in motion? The train is running?

Mr. Beil: Yes. You cannot do it except when the engine is running.

Mr. Shea: The steam is shut off?

Mr. Beil: Yes. That is, after you get out there and get ready to oil, then you have to shut the throttle off and let the engine drift. Sometimes I have the fireman go out and do it, and sometimes I do it and have the fireman shut the engine off after I get out there.

Mr. Shea: Either the fireman or yourself must take an oil can in one hand and pass out through the front cab window?

Mr. Beil: Yes.

Mr. Shea: And follow the running board out to the front end?

Mr. Beil: Yes.

Mr. Shea: And then get down and oil the valves through the relief valve?

Mr. Beil: Yes.

Mr. Shea: Do you not consider that a dangerous performance?

Mr. Beil: Yes.

Mr. Shea: But it is necessary to do that?

Mr. Beil: Yes.

Mr. Shea: And still you do that, or the fireman does it, in order to get the train over the road in case of a lubricator failure?

Mr. Beil: We have to do that in order to get the train over the road, yes, sir.

Mr. Shea: And render good service?

Mr. Beil: Yes.

Mr. Shea: I believe you stated that there were some portions of your division where the water was bad?

Mr. Beil: Yes.

Mr. Shea: Which caused the water to foam in the boiler when the throttle was open?

Mr. Beil: Yes.

Mr. Shea: What do you do in that case?

Mr. Beil: When the boiler gets to foaming bad we have to ease off on the throttle in order not to work the engine as hard, and allow the water to settle in the boiler; but we are supposed to blow it off at the blow-off cocks in order to get rid of the sediment in the boiler.

Mr. Shea: How are they blown off?

Mr. Beil: We have a connection into the bottom of the firebox, what we call the leg of the boiler. There is a valve connected with that connection with a lever in the cab, and all we have to do with the new style blow-off cocks that they are putting on all engines now is just to pull that lever back until the required amount of water is blown off, or what we can spare, and let loose of the lever, and the valve will seat itself.

Mr. Shea: How often are you required to blow off the boiler going over the division?

Mr. Beil: Our master mechanic issued a bulletin here recently that the water must be kept in shape on those engines by blowing them off. That was brought about in this way. They used to treat the water at Dodge City. Several months ago they discontinued that and issued a bulletin that the men would be expected to keep the boilers in shape for the round trip, which must be done by the liberal use of the blow-off cocks in order to keep this sediment out of the boilers. It also stated on that bulletin that 200 times would not be considered too many times for blowing off the engine, for one way over the division.

Mr. Shea: Who manipulates that valve?

Mr. Beil: The engineer manipulates the one on his side, and the fireman the one on his side.

Mr. Shea: How long is the division?

Mr. Beil: 167 miles over the first district, and 153 over the second.

Mr. Shea: The master mechanic issued instructions that it would be necessary to blow the boiler off 200 times?

Mr. Beil: That if it was necessary, 200 times would not be too much.

Mr. Shea: That would be extra work for the fireman, would it not?

Mr. Beil: Most assuredly so, in supplying the extra water, heating the extra water, blowing off the boiler.

Mr. Shea: That is all.

RE-CROSS EXAMINATION.

Mr. Sheean: Mr. Beil, on these trips to which you have testified where the tonnage was given, your first one was on the 4th of September, and they were on the 4th, 5th and 7th, I believe?

Mr. Beil: The 4th, 6th and 7th, I think.

Mr. Sheean: Yes, the 4th, 6th and 7th. Now were there any heavier trains run on that division on any of those days than the ones on which those observations were made?

Mr. Beil: Not knowing, I could not say.

Mr. Sheean: Of the observations on this division on August 31, Sept. 2, 3, 4, 5, 6, 7 and 8, are you prepared to say that on any of those days on which those observations were made

there were any trains with heavier tonnage than the ones on which the observations were made?

Mr. Beil: In my own mind I am absolutely satisfied there were, because that was during our wheat rush, and they were hauling extraordinary heavy trains of wheat.

Mr. Sheean: That was last September?

Mr. Beil: Yes.

Mr. Sheean: On one of those, you had 74 cars from Dodge City to Newton?

Mr. Beil: Yes.

Mr. Sheean: On another 68, and on another trip 61 cars of the time freight?

Mr. Beil: Yes, time freight one trip and dead freight two trips.

Mr. Sheean: Dead freight two trips and time freight one trip?

Mr. Beil: Yes.

Mr. Sheean: But you have no record or knowledge of there being heavier trains on those particular days?

Mr. Beil: I have no record of it, but in my own mind I am satisfied that there were, yes, sir.

Mr. Sheean: As to the wages shown here for these hard trips, you have also examined the copy of Mr. Carter's figures, have you?

Mr. Beil: Yes.

Mr. Sheean: And the statements made here that on the first trip you received \$7.95 and the fireman \$5.05 for the trip, that is correct, is it?

Mr. Beil: Well, I would have to take a minute to figure it. You can figure my wages, \$5.20 for a 153 miles, and for the fireman \$3.30 for 153 miles, and you will obtain the result.

Mr. Sheean: Thirteen hours and 25 minutes. On the return trip the other way you received \$8.68 and the fireman \$5.51?

Mr. Beil: It is 167 miles, at \$5.20 for the engineer, and 167 miles at \$3.30 for the fireman.

Mr. Sheean: Why is it in one direction it is 153 miles and in the other direction 167.4 miles?

Mr. Beil: Well, we have what we call the—I can show you a good deal easier on the back of a time card—we have what is called the first and second districts. 33 miles from Newton is

Hutchinson, Kaus., and you branch off at Hutchinson over what is called the third district, till you come to Kinsley. That is a distance of 98 miles, I think they call it.

Mr. Sheean: Well, I didn't care about the detail, except you do take a different route between the two terminals in different directions, do you?

Mr. Beil: Yes, it is a different route to a certain extent.

Mr. Sheean: You don't follow the exact rails in the two directions?

Mr. Beil: No, sir.

Mr. Sheean: That is, this is correct here? I was a little bothered on this showing.

Mr. Beil: That is correct, yes.

Mr. Sheean: From Newton to Dodge City is 153 miles, while from Dodge City to Newton is shown as 153, but Newton to Dodge City is 167.4?

Mr. Beil: That is correct.

Mr. Sheean: And on the 153 mile trip you received \$7.95, and your fireman \$5.05. And on the return trip the engineer gets \$8.68 and the fireman \$5.51?

Mr. Beil: If that figures out the figures I gave you.

Mr. Sheean: Now, Mr. Beil, you have described here a method of getting out on the running board with a train at speed, in order to do some lubricating through a relief valve?

Mr. Beil: Yes.

Mr. Sheean: Did you ever know of any employe being disciplined for refusing to go through this operation that you have described to Mr. Shea?

Mr. Beil: Our Book of Rules tells us that the fireman is under the jurisdiction of the engineer, and must assist him in his work.

Mr. Sheean: Well, and do you wish to be understood that you would direct a fireman to do that?

Mr. Beil: I would either ask him to do it, or do it myself.

Mr. Sheean: There might be some difference, in the judgment of those who believe in "Safety First" as to whether that was a proper thing to do, might there not?

Mr. Beil: You have to do it, in order to get the train over the road.

Mr. Sheean: And some people might prefer to go to a

siding and get relief, rather than to go through that dangerous operation.

Mr. Beil: Well, if they did, they would be open to discipline.

Mr. Sheean: That again might be a matter of the judgment and discretion of those in charge of operations on different roads.

Mr. Beil: No, I think not. I think that under those circumstances we should be able to go out there and do that work without endangering ourselves too much.

Mr. Sheean: Well, how about a broken lubricator on an engine on which there was not any relief valve?

Mr. Beil: I have never seen the engine that did not have a relief valve.

Mr. Sheean: I believe you said you had no experience with superheaters at all.

Mr. Beil: No.

Mr. Sheean: And if the superheater is constructed without any relief valve you could not, without this particular hazardous plan you have described here, get through in that way?

Mr. Beil: Not knowing, I could not say.

Mr. Sheean: That is all.

Mr. Shea: May I ask you a question, Mr. Sheean?

Mr. Sheean: You can't ask me any questions on mechanics, no.

Mr. Shea: No, not on mechanics. No, I don't want to ask you a question, Mr. Sheean, on mechanics. But may I ask you a question?

Mr. Sheean: Surely.

Mr. Shea: Now you are speaking about the fireman going out on the running board to oil the cylinders or valves through the relief valve, intimating that it is a dangerous task. Do you wish, as the representatives of the railroads, that the firemen on all of these roads should be instructed—or the engineers, not to oil the valves or the cylinders through this channel in case of a lubricator failure while out on the road; that they should put the train on the side track?

Mr. Sheean: No, I don't understand that that question is involved in this proceeding at all, or that I would have any authority or judgment or discretion.

Mr. Shea: I just wanted to clear up that point, whether you would advise such a procedure.

Mr. Sheean: I should think it should be left to the judgment and discretion of the operating officers as to what could or could not be done, and that the practice of one road might differ from the practice on another road.

Mr. Shea: Would not you leave that to the crew as to whether or not they would perform that duty, whether they believed themselves it was dangerous?

Mr. Sheean: Oh, I don't think you could leave to separate crews the judgment and determination of questions of that sort. But I think the operating officials of the different roads could well determine what should or should not be done, and that there might be a difference of opinion among operating men.

Mr. Shea: You would not care to say the engineers and firemen might be instructed not to do this?

Mr. Sheean: No, I know nothing at all about whether they should or should not.

Mr. Burgess: Mr. Beil, just imagine yourself on an engine now, with no relief valve.

Mr. Beil: Yes.

Mr. Burgess: And the lubricator has broken all the glasses. Is it not a fact that the engineer could oil the valves through the auxiliary cups attached to the lubricator for that very purpose?

Mr. Beil: Providing that they had auxiliary cups.

Mr. Burgess: Yes.

Mr. Beil: And on our engines we have what we call indicator plugs or test plugs in the valves and cylinders, and in order to avoid an absolute failure probably you would have to stop, or almost stop, every—I would say 10 or 12 or 15 miles, and take them out and put some oil through there. But you would get in.

Mr. Burgess: Now we will imagine a condition where, for some reason or other, the lubricator is thrown away, and another condition that you had to plug your relief valves from the outside.

Mr. Beil: Yes, sir.

Mr. Burgess: Is there any reason in the world why you

could not go out and unscrew the valve on top of the steam chest and then drop some lubrication in there?

Mr. Beil: No, sir.

Mr. Burgess: And you would do that, as a practical engineer, before you would give your train up?

Mr. Beil: Yes, sir.

Mr. Burgess: So you might not only throw the relief valves away, but throw the lubricator away, and still find a way to bring the train in under those circumstances?

Mr. Beil: Yes.

Mr. Burgess: I think you stated, Mr. Beil, that you were unable to testify here positively whether there was any particular train run on this particular day that the test was made, whether there was heavier tonnage than on the train that you were pulling? Is that right?

Mr. Beil: Yes, sir.

Mr. Burgess: You couldn't tell us positively about that?

Mr. Beil: No, sir.

Mr. Burgess: But there was more than one freight train run on that particular day out of the particular terminal which you left, was there?

Mr. Beil: Yes, sir, I am satisfied there was.

Mr. Burgess: Do you know any particular reason why the company could not have held a certain amount of tonnage to place on this particular test train, in order to portray the real and true results?

Mr. Beil: No, sir.

Mr. Burgess: That is all.

Mr. Carter: Mr. Beil, how long have you been in railroad service?

Mr. Beil: I made my first trip on the 6th day of April, 1907, firing.

Mr. Carter: Did you ever hear of any old time engineer talking about the days before they had any lubricators at all?

Mr. Beil: Yes, sir.

Mr. Carter: Suppose I should tell you that I fired an engine three years before ever I saw a lubricator, and went out every trip and oiled through a plug on top of the steam chest, do you think it would be reasonable?

Mr. Beil: I have no ground whatever to disbelieve you, because I have been told that by a number of old engineers.

Mr. Carter: What is the old name given to a fireman? "Tallowpot?"

Mr. Beil: Yes.

Mr. Carter: Where did he get the name "Tallowpot"?

Mr. Beil: Because he was the man who was required to go out there and lubricate, and they used tallow.

Mr. Carter: And they had melted tallow in pots setting behind the steam chest, did they not?

Mr. Beil: Yes.

Mr. Carter: And because it was a fireman's duty to go out on every hill they drifted, and walk around the front end and open the valve and open the tallow pot and pour hot tallow in there, they gave the fireman the name of "Tallowpot"?

Mr. Beil: Yes, sir.

Mr. Carter: Therefore if there were not such things as lubricators, trains would run?

Mr. Beil: Yes, sir.

Mr. Carter: Now did you ever hear of a man being disciplined for setting out a train because he could not get in with a defective lubricator?

Mr. Beil: I don't think we have any engineers who would try that.

Mr. Carter: Mr. Chairman, I don't want to prolong the agony, but I have a note from a Chairman here who would be glad to go on the stand and say he has a man who did give up his train because of a defective lubricator, and was penalized ten days, and the Chairman refused to take his case up, because he thought he ought to be penalized.

The Chairman: All right.

Mr. Carter: That disposes of the lubricator.

Now about this man going to sleep. Is it difficult for a man to remain on a locomotive like that fellow did for long hours without getting sleepy?

Mr. Beil: Yes, sir.

Mr. Carter: It is no reflection on that man?

Mr. Beil: No, sir.

Mr. Carter: Is it not one of the efforts of engineers to watch signals and keep awake sometimes?

Mr. Beil: Yes, sir.

Mr. Carter: They have to do it, they have to struggle against it. It is no reflection upon them?

Mr. Beil: I have seen the time that I had to remain standing in order to keep awake.

Mr. Carter: On an extraordinary long run, have you ever stood in front of the firebox to keep from going to sleep?

Mr. Beil: I could go to sleep hanging on to the chain.

Mr. Carter: Your knees gave way under you?

Mr. Beil: Yes.

Mr. Carter: Because of exhaustion?

Mr. Beil: Yes.

Mr. Carter: On the old style locomotive, where the bracket for the gauge light came out on the bulkhead, you would hang on to that?

Mr. Beil: Yes, sir.

Mr. Carter: About a fast freight train, what is the difference between a fast freight train and a dead freight train?

Mr. Beil: Well, we have what we call time freights which consist of Red Ball loads, I presume merchandise and perishable stuff to a certain extent. Dead freight consists of wheat and coal, and stuff that is not perishable, that they are not in any extra hurry to get over the road.

Mr. Carter: Does time freight get over the road faster than dead freight?

Mr. Beil: Supposed to, yes.

Mr. Carter: Should it have taken you 15 hours and 30 minutes on a time freight, and only 11 hours and 13 minutes on a dead freight?

Mr. Beil: That train 75 is carded as a time freight, but it is nothing more or less than a dead freight train when you get it. It is a drag. That is all it is.

Mr. Carter: Then "fast freights" are sometimes not fast.

Mr. Beil: "Fast freights" are sometimes slow, very slow.

Mr. Carter: Now, in regard to tonnage rates, you don't know. The officials of that company may have a rating for each of those engines, may they not?

Mr. Beil: They might have, but it is not to my knowledge if they have.

Mr. Carter: They have not called it to your attention if they have?

Mr. Beil: No, sir.

Mr. Carter: Now when these engines first came here were they new and in good condition?

Mr. Beil: They had been used on other divisions prior to that time.

Mr. Carter: Now is it not a fact that as engine boilers and valves become old and worn they burn more coal?

Mr. Beil: Yes.

Mr. Carter: Any locomotive would do that, would it?

Mr. Beil: Yes, sir.

Mr. Carter: Your observation leads you to believe that a fireman does work hard?

Mr. Beil: Yes, sir.

Mr. Carter: Do you know of any other employe in any industry, that works harder?

Mr. Beil: I do not.

Mr. Carter: And this Master Mechanic who was the observer, was he Mr. Chambers?

Mr. Beil: That is the Traveling Engineer. The Master Mechanic was Mr. Norton.

Mr. Carter: Mr. Norton was on the extra east on Sept. 4?

Mr. Beil: Yes, sir.

Mr. Carter: And you say he went back?

Mr. Beil: Yes, sir.

Mr. Carter: Do you know the names of the men who really were the observers?

Mr. Beil: No, sir.

Mr. Carter: They are not given here at all?

Mr. Beil: No, sir.

Mr. Carter: That is all.

Mr. Park: Is this alkali water?

Mr. Beil: At certain points, yes, sir.

Mr. Park: Does that form a scale on the flues?

Mr. Beil: Yes, sir.

Mr. Park: How often do you take out the flues?

Mr. Beil: Whenever they get to leaking so bad that they have to be renewed.

Mr. Park: Approximately?

Mr. Beil: Well, I couldn't say. We have a state law, or a government law, that the tubes have to be removed and the boilers cleaned every so often. I don't know what the length of time is. It seems to me it is a year and a half or two years, something like that. Every so often.

Mr. Park: Do you purify an engine from 100 to 200 times in going over the road?

Mr. Beil: We do it as we can, but it is impossible with the trains that we haul. You have to keep one injector on all the time when the engine is working, in order to supply enough water, and part of the time the second was just to supply water to supply the steam to haul the trains up hill, and if you want to supply enough water in order to blow that boiler out 200 times over the road, you have got to put the second injector on a good part of the time, and when you do that it is beyond a fireman's endurance to fire that engine and try to keep up steam and supply water to the two injectors. So we do it when we can. When we can get enough water to spare enough to blow out, we do, and sometimes when we get on a side track and have a few minutes and the fireman is busy with the boiler, shoveling coal and getting a little water ahead, so we can blow her out leaving there. That makes a fireman busy practically all of his time, because when he is on the side track he is busy cleaning ash pans, getting his water in the head, so he can blow out the boiler when he starts to leave there.

Mr. Burgess: Apart from the question of the fireman's endurance, is it not a fact that the heating capacity of the machine itself would not make steam with two injectors working?

Mr. Beil: Yes, sir.

Mr. Burgess: That is all.

Mr. Stone: There is a record on your division, is there not, of one of these engines handling 120 cars of wheat on the division?

Mr. Beil: That is what I understand, yes, sir.

Mr. Stone: It is also a fact that it is quite common for those engines drawing wheat cars to handle 100 cars of wheat?

Mr. Beil: Yes, that is a common train.

Mr. Stone: You spoke of more work for the extra men during a hard winter, and Mr. Sheean asked you about the oppor-

tunity for men who wanted to go out. Is it not a fact that in extreme severe winter weather more men are sick from exposure, pneumonia and heavy colds, and all that, than there are during the mild weather?

Mr. Beil: Yes.

Mr. Stone: A man goes out and gets into snow drifts and gets out in some blizzard, and he comes back and goes to bed for a week with pneumonia, something of that kind?

Mr. Beil: Yes, sir.

Mr. Stone: So it requires a heavy extra board?

Mr. Beil: I was on a branch line where we had quite a bit of snow all week, the week before I came up here; that is, beginning with the first six days of the month; and I had wet feet from the time I would start out until I got in, due to the fact that I could not get some little improvements made in order to get the ash pan open the way I wanted. The pan was a low pan, that practically dragged on the ground, and the only way we could clean our ash pan was to take the squirt hose and thaw the frost away. Then we would have to go to work and try and thaw the ash pan out with hot water, squirt hose. We could thaw the back part of it out very well, but they won't give us long enough squirt hose to reach the front of the pan, and I tried to get longer squirt hose, but yet they wouldn't do it. I tried to get steam hose put on to the boiler connection just ahead of the cab.

Mr. Shea: Mr. Beil, do you know whether there were any tests made during such conditions?

Mr. Beil: No, sir, there were not.

Mr. Stone: They were home in the office during that kind of weather?

Mr. Beil: In order to get that ash pan open I would get down in the snow on my knees, partly lie down, get a squirt hose started and thaw the back end of the pan and at the same time the water would run out through the pipes down into the snow where my feet were, and I would get my feet and my body wet. Then, I would have to thaw the front part of the pan out, and after we would get that done we would proceed and clean the pan and shake the fire down, in order not to have to shake it on to the pan more than we could avoid. We would clean our pan,

and I worked all that week under those conditions, one day as high as 16 hours.

Mr. Stone: If you had not had a constitution like twisted wire, you would have been sick in bed?

Mr. Beil: I presume so, yes, sir.

Mr. Burgess: Mr. Beil, did this occur on a branch, did you say?

Mr. Beil: A branch that runs from Great Bend, Kans., to Scott City, Kans., a distance of about 120 miles.

Mr. Burgess: And you had to undergo all this hardship on a branch?

Mr. Beil: I and the fireman both, the two of us.

Mr. Burgess: Well, we have been told at different times that it was easy work on a branch. That is why it seemed necessary to ask this question. You were unable to get a steam hose put on in order to thaw the ash pan when it fell. Is that right?

Mr. Beil: Yes, sir.

Mr. Burgess: And you were unable to get what is known as a squirt hose extended in order to thaw the ash pan.

Mr. Beil: Yes, sir.

Mr. Burgess: Well, then, that would indicate that the Santa Fe does not put on their locomotives many devices for the sole purpose of relieving the engineer or the fireman, would it not?

Mr. Beil: Yes, sir, there are lots of improvements that they could make.

Mr. Burgess: But, as far as you know, there have not been any engines equipped with mechanical devices for the sole purpose of relieving the engineers and firemen on the Santa Fe railroad?

Mr. Beil: We have some few coal passers, not very many.

Mr. Burgess: On the Santa Fe?

Mr. Beil: Yes, sir.

Mr. Burgess: Outside of that—

Mr. Beil: Some air doors, and some of their lighter engines are getting the air reverse gear.

Mr. Burgess: Well, do you consider them for the sole purpose of relieving the engineer?

Mr. Beil: I couldn't say as I do.

Mr. Sheean: They help the engineer in his work, all of them.

Mr. Beil: Well, they help the fireman more than the engineer when he has to pump the engine.

Mr. Sheean: They help the fireman, and the power reverse gear would help the engineer in his work.

Mr. Beil: On local freight trains it would, but we have no local freight trains where they have them.

Mr. Sheean: This branch that you speak of, what is the weight of the engine you had out there?

Mr. Beil: I couldn't say. It was a 10 wheel engine, 369; 300 class engine.

Mr. Sheean: You were working freight.

Mr. Beil: Yes, sir, local freight.

Mr. Sheean: And it snows on branches as well as on main lines?

Mr. Beil: Yes, what time I was not busy cleaning my engine and helping the fireman I was helping unload freight, in order to get over the road.

Mr. Sheean: On a local run?

Mr. Beil: Yes, sir.

Mr. Carter: You have been very frank in your testimony. You don't believe you will suffer for it when you get back home?

Mr. Beil: Well, I don't see why a man should suffer for telling the truth.

Mr. Carter: If you did you think you would have the sympathy of your associates, do you not?

Mr. Beil: I should think as much.

(Witness excused.)

H. H. McCLOSKEY was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and place of residence.

Mr. McCloskey: H. H. McCloskey, Chicago, Ill.

Mr. Carter: What is your present occupation?

Mr. McCloskey: Locomotive fireman.

Mr. Carter: On what road?

Mr. McCloskey: Chicago & North Western.

Mr. Carter: Mr. McCloskey, I find on one of these reports here the name of H. McCloskey on one or two trips.

Mr. McCloskey: Yes, sir.

Mr. Carter: A trip from Proviso to Butler, Wis., and from Butler back to Proviso? Are you the person who made those trips?

Mr. McCloskey: Yes, sir.

Mr. Carter: Will you explain where Proviso is?

Mr. McCloskey: Proviso is nine miles west of Chicago.

Mr. Carter: Nine miles west of Chicago?

Mr. McCloskey: Yes.

Mr. Carter: Is it a freight terminal?

Mr. McCloskey: Yes.

Mr. Carter: They don't bring the freight down town?

Mr. McCloskey: Not on this run.

Mr. Carter: They leave it out at Proviso?

Mr. McCloskey: Yes, sir.

Mr. Carter: Have you examined this report of your trip?

Mr. McCloskey: Yes, sir.

Mr. Carter: Now let us see. You are reported as having been on duty 9 hours and 20 minutes.

Mr. McCloskey: Yes, sir.

Mr. Carter: When were you called for this trip?

Mr. McCloskey: 6 or 6:30 a. m., to catch a 7:38 train to go to Proviso.

Mr. Carter: You were called at 6 or 6:30 in the morning, were you?

Mr. McCloskey: Yes.

Mr. Carter: And you ran out to Proviso to get your engine, to start?

Mr. McCloskey: Yes.

Mr. Carter: How long after you were called for duty until you actually left Proviso?

Mr. McCloskey: From the time the caller came to call us?

Mr. Carter: Yes.

Mr. McCloskey: It would be 3 hours and 30 minutes, if he called us at 6 a. m.

Mr. Carter: Why don't you live at Proviso?

Mr. McCloskey: There is no place to live out there.

Mr. Carter: How long has Proviso been a freight terminal?

Mr. McCloskey: It has not been for the Wisconsin Division—this is the only run out of Proviso on a Wisconsin Division crew.

Mr. Carter: And you were a Wisconsin Division man, were you?

Mr. McCloskey: Yes.

Mr. Carter: Then you were a great deal longer from the time you were called until you were finally relieved, than is shown here—9 hours and 20 minutes?

Mr. McCloskey: Yes.

Mr. Carter: It is stated here that you burned 23,000 pounds of coal. Do you think they made a mistake and called a ton a thousand pounds? How many tons did you burn?

Mr. McCloskey: We burned about 12 tons of coal.

Mr. Carter: About 12 tons?

Mr. McCloskey: Yes.

Mr. Carter: And how much did you burn in making the round trip?

Mr. McCloskey: 24 tons.

Mr. Carter: That is not very much more than they report here, is it?

Mr. McCloskey: No, sir.

Mr. Carter: You are sure that you burned 24 tons, are you?

Mr. McCloskey: From what tickets we left, and our guesswork in taking coal.

Mr. Carter: Does everybody guess?

Mr. McCloskey: That is the only way we have of telling how much coal we take.

Mr. Carter: Does the coal chute man generally guess?

Mr. McCloskey: That is the only way they have to tell.

Mr. Carter: Is not this coal measuring business guesswork, and has it not always been guesswork, so far as you know?

Mr. McCloskey: Yes.

Mr. Carter: Could it be any other way, and take coal promptly, I mean?

Mr. McCloskey: No, sir.

Mr. Carter: It would take too much time, and delay the train, if you actually weighed the coal?

Mr. McCloskey: Yes.

Mr. Carter: Therefore, it is no reflection on anybody that they do not weigh it?

Mr. McCloskey: No, sir.

Mr. Carter: With regard to the time you worked here, on this first trip, they say you were on duty 9 hours and 20 minutes.

Mr. McCloskey: Yes.

Mr. Carter: And that you were only firing the locomotive 1 hour and 38 minutes. Do you think that is almost right?

Mr. McCloskey: I do not think I could shovel that much coal in that short time.

Mr. Carter: You think you were firing the engine and shoveling coal much longer than that?

Mr. McCloskey: Yes.

Mr. Carter: They said that all the manual work you did was 2 hours and 28 minutes out of 9 hours and 20 minutes. That meant, they say, that you were performing no physical labor for seven hours on that trip. Do you remember that seven hours of rest?

Mr. McCloskey: I did not get it.

Mr. Carter: In shoveling down coal on the first trip, they said you were shoveling down coal 16 minutes and 23 seconds, and that coming back you were shoveling down coal 21 minutes and 23 seconds. Now, how much coal did you actually shovel down, and how long did it take you to shovel it down?

Mr. McCloskey: I did not shovel down any coal.

Mr. Carter: Who did?

Mr. McCloskey: Mr. Harvey and the other gentleman who was with him.

Mr. Carter: Mr. Harvey and Mr. Backus?

Mr. McCloskey: Yes.

Mr. Carter: They did the shoveling?

Mr. McCloskey: Yes.

Mr. Carter: Did they shovel a great deal more than that?

Mr. McCloskey: Yes.

Mr. McCloskey: Yes. You could not shovel the coal down in 16 minutes.

Mr. Carter: About how much coal did they shovel down, and where was it shoveled?

Mr. McCloskey: On the trip going up, the coal would be shoveled down—at that time our coal shed at Bain was burned down, so they had a platform built at a place called Blodgett, twenty miles out of Chicago, to take coal by air; but on this day I believe we were a short time ahead of a passenger train there, where we filled out to our tonnage, and in order to take coal and water there it would delay us so much that we would have to get out of the way of this passenger train. So we decided that we would go to St. Francis for coal, instead of taking coal there, and that they would keep it to the front so I could get it.

Mr. Carter: How long do you think they were shoveling coal ahead for you on the road, to St. Francis?

Mr. McCloskey: Lots of times you have to pull coal right out of Blodgett.

Mr. Carter: I mean out of this trip. They said you were only 16 minutes, but I understand they shoveled for you, and they gave you credit for the work they did. Did they do more than 16 minutes' work?

Mr. McCloskey: Oh, yes.

Mr. Carter: It was quite a relief to you, however, to have them do it, wasn't it?

Mr. McCloskey: I would like to have them do it every day.

Mr. Carter: Don't you wish there were observers to shovel the coal ahead for you on every trip?

Mr. McCloskey: Yes.

Mr. Carter: They state here that you had a self-dumping ash pan.

Mr. McCloskey: I don't know what they call self-dumping. You have to get this large wrench that we have there, four feet long or so, which we have placed up in the cab; take it down on the ground on either side, and use all your strength to open it. It just depends on the working of the pan. Some work easier, and others work hard. We have to open the pan. Also, the firemen all provide themselves with a part of an old clinker hook, that they carry on the back of the tank, or some other place on the engine, to make it easier to get these ashes and clinkers out of the pan.

Mr. Carter: And that is what they call a self-dumping ash pan?

Mr. McCloskey: Yes.

Mr. Carter: Now, they have got here a self-cleaning front end—what was that?

Mr. McCloskey: We do not have anything to do with the front end. They clean themselves.

Mr. Carter: They drop the cinders themselves, do they?

Mr. McCloskey: Yes.

Mr. Carter: They say here you did not clean any ash pan.

Mr. McCloskey: I would not say whether I did, on this particular trip.

Mr. Carter: You do not remember?

Mr. McCloskey: No, but I make it a regular practice to clean this pan at Bain.

Mr. Carter: Was this an ordinary trip?

Mr. McCloskey: Well, we had the regular tonnage, 90 cars.

Mr. Carter: Was the air door working properly?

Mr. McCloskey: I would not say whether it was on this particular trip or not, but we have had considerable trouble with this air door.

Mr. Carter: Although these air doors are automatic, sometimes they are not automatic—is that right?

Mr. McCloskey: That is it.

Mr. Carter: Like any other machinery, they sometimes become defective?

Mr. McCloskey: Yes.

Mr. Carter: That is no reflection on the company for putting in the air door, though? You would be glad to have any kind or an air door on there, would you not?

Mr. McCloskey: Yes.

Mr. Carter: It helps you a great deal?

Mr. McCloskey: Yes, in getting the coal when it gets away back.

Mr. Carter: When you have to run back and get the coal?

Mr. McCloskey: It gives you a better chance to reach the coal, because you can keep one foot on the pedal. You do not have to pull your coal ahead, and then grab the chain and get the door open. It is quicker to get the fire in when you have the air door.

Mr. Carter: How long have you been in the service?

Mr. McCloskey: Eight years and four months.

Mr. Carter: Firing all that time?

Mr. McCloskey: I am not firing now. I am a hostler.

Mr. Carter: How much do you get as a hostler?

Mr. McCloskey: \$2.95 for twelve hours' work.

Mr. Carter: That is about 25 cents an hour?

Mr. McCloskey: Not quite twenty-five.

Mr. Carter: Do you think it is a responsible position?

Mr. McCloskey: It is the best I can handle right now, as I am not fit to fire these heavy freight runs.

Mr. Carter: Do you think that after nine years you ought to be pensioned, or given some easier job, running, or something of that kind?

Mr. McCloskey: I figured that I ought to be running, anyhow.

Mr. Carter: You are not running because of demotions?

Mr. McCloskey: That is it.

Mr. Carter: This job of hostlering, is it a responsible position? Do you have to look out for the water, and look out for the safety of the engines, and handle the locomotive?

Mr. McCloskey: Yes, to see that nobody gets hurt, while taking the coal, water, and sand, and putting the engine in the house.

Mr. Carter: You have complete charge of the locomotive, have you?

Mr. McCloskey: After receiving it at the coal shed.

Mr. Carter: Do they require you to have experience as a fireman?

Mr. McCloskey: You must have one year's experience before they will allow you to handle engines, over on that division.

Mr. Carter: One year's experience as a fireman?

Mr. McCloskey: Yes.

Mr. Carter: That is all.

CROSS-EXAMINATION.

Mr. Shean: Where is it you are hostler now?

Mr. McCloskey: At 40th Avenue, Wisconsin Division roundhouse.

Mr. Sheean: Here in Chicago?

Mr. McCloskey: Yes.

Mr. Sheean: How long have you been there?

Mr. McCloskey: Two or three months.

Mr. Sheean: Two or three months?

Mr. McCloskey: Yes.

Mr. Sheean: Was the list of firemen cut where you were firing, or did you prefer to take this job where you would be at home?

Mr. McCloskey: I was not able to stand this heavy freight run that I had, and there was not anything else that I could get that I felt I could stand, so I thought this would be quite as good as any.

Mr. Sheean: You have not lost your road rights, have you?

Mr. McCloskey: No, sir.

Mr. Sheean: You had been on this heavy freight run for how long?

Mr. McCloskey: Seven or eight months.

Mr. Sheean: And before that you had had another run?

Mr. McCloskey: A freight run.

Mr. Sheean: You were not obliged to let go by being bucked here on this run, were you?

Mr. McCloskey: No, sir.

Mr. Sheean: It was simply that after working on that run for seven or eight months the work was hard?

Mr. McCloskey: It was getting the best of me.

Mr. Sheean: And you have taken this other job in the exercise of your seniority?

Mr. McCloskey: Yes.

Mr. Sheean: Retaining the right to go back on the road when something better than the heavy freight run shows up?

Mr. McCloskey: When business picks up, and I can hold anything better.

Mr. Sheean: And in the meantime you get \$2.95 a day while you are holding that place for a better job?

Mr. McCloskey: Yes.

Mr. Sheean: It is 27 days a month, is it?

Mr. McCloskey: Thirty-one days.

Mr. Sheean: 31 days—day or night work?

Mr. McCloskey: Day and night. We change, so it brings it two weeks days and two weeks nights.

Mr. Sheean: How large a force is there there?

Mr. McCloskey: We have four men days, and four men nights.

Mr. Sheean: And you make that arrangement, half taking days and half taking nights?

Mr. McCloskey: Yes.

Mr. Sheean: You make that arrangement, yourselves?

Mr. McCloskey: Yes.

Mr. Sheean: On this run from Proviso to Butler, that is the run you were on for seven months, is it?

Mr. McCloskey: Yes.

Mr. Sheean: That pays the fireman \$4.12 each way?

Mr. McCloskey: That is, if you have an hour overtime; it is \$3.75 for 100 miles, for that grade of engine.

Mr. Sheean: I notice for this trip of 9 hours and 20 minutes, you were paid \$4.12, leaving Proviso at 10:15 A. M., and arriving at 5:50 P. M., and on the return trip leaving at 2:27 A. M. and arriving at 10:52 P. M., \$4.16.

Mr. Carter: Please state that again.

Mr. Sheean: Leaving at 2:27 A. M., and arriving at 10:52 A. M.

Mr. Carter: I thought you said P. M.

Mr. Sheean: Perhaps I did; total time, 9 hours and 53 minutes, and you were paid \$4.16.

Mr. McCloskey: Well, the only way you can get any more than \$3.75 is to have terminal delay. Otherwise, you could not get any more than \$3.75 on that job.

Mr. Sheean: Your total time on the road was from 10:15 in the morning until 5:15 in the afternoon, paying \$4.12, and then from 2:27 in the morning until 10:52 in the morning on the road, you got \$4.16?

Mr. McCloskey: On this trip coming in, we have cars that go over to what they call the Galena Division, on the North-Western. The rest of the cars are transferred across for the Indiana Harbor Loop. We have to take these Galena cars, Iowa cars, as we call them, across on the other side; so we get paid from the time we arrive at Lake Street—that is the entrance of the yard,

until we cut the engine off at this yard No. 3, where the Galena Division receives these cars.

The Chairman: We will suspend at this point.

(Thereupon, at 12:30 o'clock P. M., a recess was taken until 2:30 o'clock P. M.)

AFTER RECESS.

H. H. McCloskey was recalled for further examination and having been previously sworn, testified as follows:

Mr. Sheean: There is just a question or two more I wanted to ask. Mr. McCloskey, on this round trip that you have described here I think you said that the coal shed, the place where you ordinarily took coal was temporarily out of commission?

Mr. McCloskey: Yes, sir, it burned down.

Mr. Sheean: Been rebuilt since that time?

Mr. McCloskey: It has, yes, sir.

Mr. Sheean: And just at the time these trips were on that coal shed was out of commission?

Mr. McCloskey: Yes, sir.

Mr. Sheean: How long did that continue before they got a new coal chute at the usual place?

Mr. McCloskey: From July to September, I believe.

Mr. Sheean: And here in the latter part of August when this run was made you were taking coal at what point?

Mr. McCloskey: Blodgett and St. Francis.

Mr. Sheean: Temporarily?

Mr. McCloskey: Well, St. Francis is a regular coaling station.

Mr. Sheean: Well, that is on the return trip?

Mr. McCloskey: No, sir, going north.

Mr. Sheean: Going north?

Mr. McCloskey: Yes, sir.

Mr. Sheean: Now, on that round trip you burned about 24 tons of coal?

Mr. McCloskey: Yes, sir.

Mr. Sheean: And that is the usual consumption, is it, for a full tonnage train on that trip?

Mr. McCloskey: Yes.

Mr. Sheean: It runs about that?

Mr. McCloskey: From 24 to 26 tons.

Mr. Sheean: You had full tonnage both ways, 90 cars?

Mr. McCloskey: Well, we had the car limit, but we did not have the tonnage. Our tonnage over there is 90 cars, or 4,500 equated tonnage. We have the equated tonnage over there.

Mr. Sheean: Well, when you have 90 cars that is also the tonnage limit?

Mr. McCloskey: That is the car limit.

Mr. Sheean: The car limit?

Mr. McCloskey: Yes, sir.

Mr. Sheean: And you had the 90 cars both directions on this trip?

Mr. McCloskey: I believe we did.

Mr. Sheean: Now, this pan that is called a self-dumping pan here, you have fired, I suppose, before, or have you ever worked when the ash pan was cleaned out with a hoe?

Mr. McCloskey: Yes, I have.

Mr. Sheean: And there is quite a difference between the old way of taking out the fire and what they call the dump ash pan, isn't there?

Mr. McCloskey: The only thing is for the safety, otherwise it is not much relief.

Mr. Sheean: Well, in any event, the dump pan is the pan that is required under the Federal statute now?

Mr. McCloskey: I believe it is.

Mr. Sheean: And does away with the necessity of the fireman going under the engine and cleaning the fire?

Mr. McCloskey: Yes.

Mr. Sheean: I think you described the operation as that of applying a lever to it, a wrench.

Mr. McCloskey: A wrench, yes, sir.

Mr. Sheean: And the dumping of the ash is accomplished without endangering the fireman?

Mr. McCloskey: Well, only in the wind. In windy weather the dust blows onto you. You cannot get out of the way of it.

Mr. Sheean: But that has taken the place of the old hoe?

Mr. McCloskey: Yes, it has.

Mr. Sheean: There are younger men in the service than you, on the North Western Line, on the seniority list, who are running suburban passenger trains as engineers, aren't there?

Mr. McCloskey: No, sir, not that I know of.

Mr. Sheean: This position that you hold now was taken in the exercise of seniority?

Mr. McCloskey: Yes, sir.

Mr. Sheean: It was all that was open at that time?

Mr. McCloskey: Well, on our road we have a standing bid for jobs, and whenever any of those jobs open up on that bid we have in, you are assigned to them, and you must take it or else go on the extra board for thirty days.

Mr. Sheean: I don't follow you exactly, as to standing bids. You put in your bid for a job?

Mr. McCloskey: You have a list, and your run that you have in preference you put on top, and so on down below.

Mr. Sheean: And if you catch one of those in the order of your preference, you are required to elect to take it?

Mr. McCloskey: Yes, sir.

Mr. Sheean: I think that is all.

× RE-DIRECT EXAMINATION.

Mr. Carter: Mr. McCloskey, I understood you to say that you had given up this high paid freight run to take a lower paid hostler's job. Is that right?

Mr. McCloskey: Yes, sir.

Mr. Carter: Do I understand you to say it was because you did not feel you were physically able to continue firing the freight run that you would be entitled to?

Mr. McCloskey: Yes, sir.

Mr. Carter: That is after nine years of service?

Mr. McCloskey: Yes, sir.

Mr. Carter: Now, according to the observer, Mr. Harvey, on this trip, you were not over 2 hours and 28 minutes, out of 9 hours and 28 minutes—that is, you performed no physical labor for 7 hours and 52 minutes, out of 9 hours and 28 minutes. Now, if Mr. Harvey was right, do you think that loafing 7 hours and 52 minutes out of 9 hours and 20 minutes would exhaust you and make you feel that you had to give up the run and take the job of hostling?

Mr. McCloskey: No, sir, I do not.

Mr. Carter: You think it was a hard job, and you worked hard?

Mr. McCloskey: Yes, I do.

Mr. Carter: Do you believe that the railroads should permit firemen and engineers to take hostlers' jobs, so as to provide for disabled engineers and firemen?

Mr. McCloskey: I really do believe it.

Mr. Carter: In your case it has proven a great relief to you after nine years of service?

Mr. McCloskey: Yes.

Mr. Carter: Suppose the North Western, in the goodness of its heart for the man who is coming over from the next job, should provide a job for him instead of the old engineers and firemen, do you think it would be goodness of heart, or an attempt to get cheaper labor?

Mr. McCloskey: It would look as if they were trying to get cheaper labor.

Mr. Carter: As a hostler, I understood you to say that you work 31 days and 12 hours a day?

Mr. McCloskey: Yes.

Mr. Carter: I have made a computation that this would be 372 hours for \$91.45. Is that about right?

Mr. McCloskey: That is about right.

Mr. Carter: Or about $24\frac{1}{2}$ cents an hour?

Mr. McCloskey: Yes.

Mr. Carter: That is, during a month of 31 days you actually work $46\frac{1}{2}$ days of 8 hours each, the way I have divided it. Is that about right?

Mr. McCloskey: I have never figured it up.

Mr. Carter: But if you worked 8 hours a day, like any other craft, at $24\frac{1}{2}$ cents an hour you would get \$1.96 for a day of 8 hours of hostlering, would you not?

Mr. McCloskey: I never figured it up.

Mr. Carter: Multiplying $24\frac{1}{2}$ by 8, I make it \$1.96. I do not know whether that is right or not. I am not much at figures anyhow. But you would not be getting very much money if you were working 8 hours.

Mr. McCloskey: No, sir.

Mr. Carter: Was this the same observer who was with Mr. Wilke and Mr. Roberg?

Mr. McCloskey: I believe it was.

Mr. Carter: The same name?

Mr. McCloskey: Yes.

Mr. Carter: And you all agree apparently that you worked harder than these reports would indicate.

Mr. McCloskey: I certainly did.

Mr. Carter: You have run engines at times, have you not?

Mr. McCloskey: Yes, I have.

Mr. Carter: Did you ever have a lubricator pipe break while you were running an engine?

Mr. McCloskey: Yes, I have.

Mr. Carter: What did you do? Did you stop the train?

Mr. McCloskey: No, I did not.

Mr. Carter: What did you do?

Mr. McCloskey: When I was running an engine one time, I had a lubricator pipe break 20 miles outside of Chicago. It appeared that the pipe had been broken when the engine came in, and it was fixed up in the roundhouse. The way it looked, a little putty was put on the place where the pipe was cut off and under the cup, and the jacket placed down on that. When the engine started moving along, it jarred this putty loose, and all of a sudden I got a spurt of steam out of the right side of the jacket. I finally located what it was, and kept right on going though.

Mr. Carter: How much oil did you use, in trying to oil through the relief valves?

Mr. McCloskey: I used the balance of the 8 pints that we have in our can.

Mr. Carter: Did they call you to task for using that much oil in trying to oil through the relief valve?

Mr. McCloskey: Yes, they did.

Mr. Carter: They wanted to know why you used so much oil?

Mr. McCloskey: Why I used so much oil on such a short trip of a few hours.

Mr. Carter: When you explained, I suppose it was all right?

Mr. McCloskey: I was answering correspondence for quite a while there on that.

Mr. Carter: They did not ask you why you did not set out the train, did they?

Mr. McCloskey: No, sir.

Mr. Carter: That is all.

Mr. Sheean: That is all.

(Witness excused.)

CHARLES DADY was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and place of residence.

Mr. Dady: Charles Dady, Escanaba, Mich.

Mr. Carter: What is your occupation?

Mr. Dady: Locomotive engineer.

Mr. Carter: How long have you been in the service of the North Western Railroad?

Mr. Dady: Twenty-eight years next July.

Mr. Carter: How long have you been an engineer?

Mr. Dady: Since May, 1900.

Mr. Carter: About 14 years as a fireman and 14 years as an engineer?

Mr. Dady: The first three or four years, probably, after I was promoted there were times during the year when I was obliged to fire.

Mr. Carter: Backwards and forwards between firing and running?

Mr. Dady: Yes.

Mr. Carter: Were you one of those engineers who held the job of passenger fireman and did all your running as a passenger fireman, or were you promoted and demoted as occasion demanded? It has been stated here in evidence that engineers on the extra list not only made money as engineers, but that they also do firing and vice versa.

Mr. Dady: Well, when I was promoted I ran a switch engine. I was promoted in May and I ran a switch engine until late in the fall, November.

Mr. Carter: Then you were demoted?

Mr. Dady: Then I was demoted and firing until the following spring, March or April; I might have got a day or two on a switch engine running.

Mr. Carter: How many trips?

Mr. Dady: I would not make any estimate of how many they were.

Mr. Carter: But, on the North Western, is it not the prac-

tice of having no extra list of engineers, that is, the passenger firemen do all the extra running?

Mr. Dady: No, sir.

Mr. Carter: Have you noticed this report of the record of individual trips of Fireman Busby, and Fireman Gibbs, on two certain trips in August, last?

Mr. Dady: I have gone over those trips on that sheet you have before you there.

Mr. Carter: You were the engineer on both of those trips?

Mr. Dady: Yes, sir.

Mr. Carter: Then there is another trip here of Mr. Peters; three trips, is that right?

Mr. Dady: I made three trips, yes.

Mr. Carter: Does the record of coal consumed by these firemen agree with your judgment in the matter?

Mr. Dady: No, sir.

Mr. Carter: Do you think they burned a great deal more coal than is shown here?

Mr. Dady: Yes, sir.

Mr. Carter: It is shown here that they worked very little of their time. They were at ease about two-thirds of their time. For instance, Mr. Busby, or Bushy—what is his name?

Mr. Dady: Bushy.

Mr. Carter: Bushy instead of Busby. Mr. Bushy only was performing actual manual labor 2 hours and 30 minutes out of 13 hours and 25 minutes on duty. According to your recollection of the matter, is it anything like that?

Mr. Dady: No, sir.

Mr. Carter: About how much work did the fireman do on these trips, as you remember?

Mr. Dady: I kept no accurate accounting of the time, neither did I pay any very particular attention to it, but from my knowledge of that trip, and from all other trips, the fireman on an eastbound ore train between Stambaugh and Escanaba, is busy a good share of his time. I made a mental estimate, and I made liberal allowances on the other side, and all told, the time when he was not busily engaged about some duty or other, would probably approximate two hours and 30 minutes.

Mr. Carter: Out of the 13 hours and 25 minutes?

Mr. Dady: Yes, sir.

Mr. Carter: These test trips, were they exceptionally favorable trips?

Mr. Dady: Yes, sir.

Mr. Carter: Will you describe them?

Mr. Dady: Well, the first trip we had, as I remember, was a trip east. It was started in daylight, that is, the trip began in daylight and ended in daylight, which made it favorable. In our climate, we have notoriously cold nights. You who are familiar with railroad conditions, know that the rails are worse at night than in the daytime. So that that is two reasons that made the run east particularly favorable.

Mr. Carter: They were all three favorable trips, were they not?

Mr. Dady: Yes, sir.

Mr. Carter: Now, did they pull, easy?

Mr. Dady: Why, the trips east were about average trips, so far as the pulling of the train was concerned.

Mr. Carter: Well, did you not run more water tanks than usual on these trips?

Mr. Dady: On the trips shown west, where we made such remarkably good time, I ran one water tank that is more often stopped at than not, and I ran another water tank or water spout, that I do not believe has ever been run with 75 cars, before or since.

Mr. Carter: These cars seemed to be well lubricated, did they?

Mr. Dady: The train ran uncommonly easy. I remarked to one of the men accompanying us on the trip that I believed the cars were oiled, and they laughed at me. I took it pleasantly. I knew nothing about what these test trips were for at the time. It was only afterwards it was brought to my attention what they were for.

Mr. Carter: Well, the engines were in first class condition?

Mr. Dady: Yes, sir.

Mr. Carter: Were these test trips a fair example of the average work of firemen over this same territory?

Mr. Dady: No, sir.

Mr. Carter: Do you sometimes stall on the grades there?

Mr. Dady: I would say that I stalled about 50 per cent of the trips, either going or coming, during this past summer.

Mr. Carter: There was nothing like stalling on these trips, was there?

Mr. Dady: Well, it was a showdown on the middle portion of the trip going east.

Mr. Burgess: Mr. Carter, what do you mean by stalling?

Mr. Carter: Moving over the side of a hill, and the resistance of the train being greater than the power of the locomotive, the locomotive comes to a standstill.

Mr. Burgess: That is what you mean by stalling?

Mr. Dady: Yes.

Mr. Carter: Then what do you do when you are stalled on a hill?

Mr. Dady: Double to the first available point.

Mr. Carter: And when you double, you have the train cut in two and take part of the train over, and then come back after the other part of the train?

Mr. Dady: Yes.

Mr. Carter: Now that is a usual occurrence on that division, is it not?

Mr. Dady: How is that?

Mr. Carter: That is a usual occurrence on that division in that direction, doubling these hills?

Mr. Dady: Very common.

Mr. Carter: But in these trains there was no doubling done.

Mr. Dady: No doubling done.

I want to back up a little bit. On the second trip coming east with a loaded train, coming into a junction point, Stager, due to a defective coupling or pin, the train parted, and by backing the front portion of the train against the back portion, with the air set on the back portion, enabled me to get all the slack, and I was enabled to pull the front portion into the first station, Stager. When I went back for the rear portion—and incidentally we had two or three cars less than our usual tonnage, for the reason the cars were not at the starting terminal to make a full train—when I went back for the rear portion, because of being unable to get the slack, I could not pull the rear portion of less than half the usual train into Stager, being deprived of the run or momentum that we usually have.

Mr. Carter: That is, starting on a steep grade, it is very difficult to start.

Mr. Dady: Yes.

Mr. Park: Mr. Dady, are you trying to make the impression on the board that this was a fictitious test, or one that had been jobbed in some way? That is, the cars had been oiled especially?

Mr. Dady: On the west-going trip I believed at the time, and I still believe that the cars were recently oiled.

Mr. Park: For the purpose of making a test in favor—

Mr. Dady: No, I wouldn't say that. I will make it clear to you how the information came to me. Two or three days after this trip, the fireman who had been with another man in the pool—my fireman, as I remember, this Bushy—one of these men mentioned, his wife had died this time and they put another fireman on with me. This was three or four days after this test trip west. And this fireman said to me up in the yard, when we were pumping up the air in our train, he said, "You had a test train the other day?" "Why, yes," I said, "we had two or three of the company's representatives with us." Incidentally, I want to say that is not uncommon up there, not only at this time but at other times in the summer, and in previous summers I have had a couple of the officials along with me and riding over the road. But, coming to the point I was making, this fellow said to me, "You had a test train out the other day." I said, "Yes, I guess so. I had such and such gentlemen with me," naming them. He said, "Did you know that the cars were oiled?" I says, "No, but I suspected it. I told one of the officials of the company with me that I thought the cars were oiled, and it was in good part between him and me when I said it." To be explicit, I says, "Mr. Cady, I believe those cars are oiled," and he laughed at me, but it was pleasant between both of us.

Mr. Park: Coupled with the phenomenal ease with which you pulled the train.

Mr. Dady: How is that?

Mr. Park: I say that coupled with the phenomenal ease with which you pulled this train—

Mr. Dady: No. To go further into what I was saying; this fireman said to me that the information was imparted to him the following day after my making this test trip, he was going out with the man who had been his regular engineer, and one of the car repairers told him, "You don't stand in, like

Dady." He says, "Why." "Why," he says, "Dady got 100 cars out of here the other day, and the journals were oiled on the entire train." One of the car repairers told him that.

Mr. Park: Did he mention the name of the car repairer?

Mr. Dady: No, he didn't. I don't know as he knew.

Mr. Park: What was his name?

Mr. Dady: His name was Hoy.

Mr. Park: He is a fireman?

Mr. Dady: Yes.

The Chairman: What do you mean by the term "oiling the cars?"

Mr. Dady: Oiling.

The Chairman: Oiling the cars. What does that mean?

Mr. Dady: Why, it is possible to freshly pack all the boxes, and you can make quite a difference in the running of the car by renewing the packing. If you ever operated a bicycle or a mechanical contrivance of any kind, you know that fresh oiling makes it run easier.

The Chairman: I never had any exercise of that kind. That is the reason I asked you that question.

Mr. Carter: Do you usually or often take coal or reduce tonnage in order to get over that division?

Mr. Dady: Why, our first regular coaling station on those lines is Antoine, 53 miles away. But sometimes, due to the cars pulling hard, due to gripping more or less on the hills, for the first 23 miles, due to various things that may happen, we can see that we are not going to be able to complete the 53 miles with what coal we have left in the tank when we get to Powers, which is 23 miles from the starting terminus. There is a primitive coaling apparatus at Powers, and it is not uncommon, neither is it a daily occurrence, but it frequently happens, that it is necessary to take a ton or two tons of coal 23 miles out of Escanaba in order to take our regulation tonnage through to Iron Mountain or Antoine, or in the event that we don't do that, we have to make an extra reduction at Curry, ten miles east of Iron Mountain. In any event, we make a reduction of 25 cars at Curry. But it is sometimes necessary, because of the scantiness of coal, to make a further reduction, 35, or in some cases even more, in order to complete the first 53 miles.

Mr. Carter: But, Mr. Dady, according to this report, you

burned less than 9 tons, only a little over 8 tons a trip here.

Mr. Dady: That is why I say those were not fair trips.

Mr. Carter: How much would you ordinarily burn?

Mr. Dady: One trip with another, from what I know now about the capacity of the tanks, I would say that one trip with another in either direction, we burned very close to 14 or 15 tons of coal.

Mr. Carter: And you think these trips you burned a great deal more than is shown here, which is only a little over 8 tons?

Mr. Dady: Yes.

Mr. Carter: Now, Mr. Dady, this report here says they had automatic ash pan dumpers. What do you understand by the word automatic?

Mr. Dady: Mechanically operated.

Mr. Carter: Well, "mechanically." A machine can be mechanically operated and not be automatic. For instance, you pull your train by mechanically operating the locomotive, but the locomotive does not work automatically, does it?

Mr. Dady: No.

Mr. Carter: Is it not a fact that the fireman has to do work of some character, some physical labor, to clean the ash pan?

Mr. Dady: Why it is opened by man power, by the strength of his arm; sometimes with the assistance of the engineer.

Mr. Carter: It does not dump itself without any assistance?

Mr. Dady: No, sir.

Mr. Carter: Were there extremely favorable weather conditions when these trips were made?

Mr. Dady: They were ordinary conditions such as prevailed at that time of year.

Mr. Carter: I understood you to say you have been 27 years and 8 months in the service of the North Western Railroad.

Mr. Dady: I commenced about July 10, 1887.

Mr. Carter: And fourteen years you have been running?

Mr. Dady: The greater portion of the time. I was promoted in May, the first day of May, 1900.

Mr. Carter: You never expect to fire again, do you?

Mr. Dady: No, sir.

Mr. Carter: You have no personal interest, so far as firing is concerned?

Mr. Dady: No, sir.

Mr. Carter: Do you believe as an engineer of 24 years' experience, that a fireman's duties are exceedingly hard and laborious?

Mr. Dady: Put that question again.

Mr. Carter: As an engineer of 24 years' experience, do you believe that the labors of a fireman are exceedingly laborious?

Mr. Dady: Yes.

Mr. Carter: Hard work?

Mr. Dady: Yes, sir.

Mr. Carter: Do you think it is fair to a fireman to assume he loaf's two-thirds of his time, as is done on these exhibits, or these test trips?

Mr. Dady: Why those test trips, as I have stated before, and as I am willing to state again, I don't believe they were fair trips, but I will not say on the other hand that I believe they were premeditatedly unfair trips. I don't think that was the case, but I do know those should not be taken as an average of the trips.

Mr. Carter: That is the question I asked, Mr. Dady. Do you believe these trips here are fair to the firemen as typical of the work they performed?

Mr. Dady: No, I think they were anything but fair.

Mr. Carter: During your fourteen years as an engineer, and 14 years as a fireman, have you had any experience with brick arches falling down?

Mr. Dady: Very limited.

Mr. Carter: Did you ever have one fall down with you?

Mr. Dady: I have had portions of one fall down with me.

Mr. Carter: You did not set out the train?

Mr. Dady: No, sir.

Mr. Carter: If a lubricator cup became deranged, you could get in without setting out the train?

Mr. Dady: Yes.

Mr. Carter: About the coal sliding down, 70 per cent of it shuts against the front gate, without any mechanical device, has it been your experience that a fireman has to pull down a

large portion of the coal unless he takes coal again very quickly.

Mr. Dady: On the more modern large power, yes, sir.

Mr. Carter: There is more coal to shovel down on a big, modern engine than there used to be on the smaller engines?

Mr. Dady: Yes.

Mr. Carter: A great deal more?

Mr. Dady: Yes.

Mr. Carter: About what size tanks do they use now?

Mr. Dady: On our most modern, up-to-date engines that we have on our division, the capacity of the tank is about 15 tons.

Mr. Carter: About what was the capacity of the tank when you went to firing 28 years ago?

Mr. Dady: Well, I would say seven or eight tons.

Mr. Carter: And the larger the tank the more you would have to shovel ahead if you burned the tank of coal?

Mr. Dady: Yes, sir.

Mr. Carter: How far would the big, modern engines get with the little tanks you used to use?

Mr. Dady: Not very far.

Mr. Carter: Would not that of itself indicate that they are burning a great deal more coal by having it put in tanks nearly twice as large, or quite twice as large?

Mr. Dady: Naturally so.

Mr. Carter: They have not taken out any coal chutes since they had the little tanks, have they?

Mr. Dady: How is that?

Mr. Carter: Have they fewer coal chutes now than they used to have away back when you were firing?

Mr. Dady: Well, yes, but it would not make any difference with this proposition. It was the small traffic. Now there are some coal chutes that they have abandoned, like at Florence. There they used to have switch engines, and they have abandoned them and discontinued the use of that. But road engines passing through Florence never took their coal there, within my memory.

Mr. Carter: That is all.

CROSS-EXAMINATION.

Mr. Sheam: Mr. Dady, these trips were made with the tonnage trains, were they not, each of them?

Mr. Dady: With the tonnage trains, with the exception of one of the trips, when we were three cars shy of the full train, for the reason that they did not have them in the terminal to fit us out.

Mr. Sheean: But two out of the three were full tonnage and the third one was what tonnage there was to go?

Mr. Dady: Yes.

Mr. Sheean: I note that this particular report gives the actual number of scoops that were put in by the fireman. You did not keep account of the scoops?

Mr. Dady: No, sir.

Mr. Sheean: Who were the men who did that on these trips?

Mr. Dady: On one of these trips I do not know that anybody did it. I did not see him doing it. On two of the trips, the general foreman, as I will term him; he was foreman of the roundhouse, machine shops, boiler shops and such as that. The first trip, the master mechanic made with us.

Mr. Sheean: What is his name?

joking way, that the first trip had worn him out, that he was

Mr. Dady: Mr. Becker, but it was given to me in a slightly tired out by that trip and so did not make any more.

Mr. Sheean: Who was with you on the second trip?

Mr. Dady: The traveling engineer.

Mr. Sheean: What was his name?

Mr. Dady: Michael Quinn.

Mr. Sheean: Did Quinn ride all the way through with you?

Mr. Dady: Yes.

Mr. Sheean: On all three trips?

Mr. Dady: Yes.

Mr. Sheean: He is the traveling engineer of that division?

Mr. Dady: Yes.

Mr. Sheean: In addition to Mr. Quinn, there was some one who counted the scoops of coal?

Mr. Dady: In the first instance, I did not know of anybody counting the coal.

Mr. Sheean: Was there some other man rode in the cab with you, on the engine?

Mr. Dady: In which instance?

Mr. Sheean: On any of the trips. I just want to get at

whether Quinn was the only man who rode with you and the fireman on the engine.

Mr. Dady: No, on each trip there was either Quinn and the master mechanic, or Quinn and the general foreman.

Mr. Sheean: That is, there were two men in each case?

Mr. Dady: Yes.

Mr. Sheean: Throughout the entire trip?

Mr. Dady: Yes.

Mr. Sheean: As to just how many scoops of coal were put in on those trips, you do not know?

Mr. Dady: I know nothing about it.

Mr. Sheean: And you have no record as to the tons of coal?

Mr. Dady: I have a pretty good memory here in my head as to the tons of coal.

Mr. Sheean: Just where you put on coal and where you took it off?

Mr. Dady: Yes.

Mr. Sheean: But in no case was it either measured by scoops, or baskets, or anything else?

Mr. Dady: No, sir; and I want to add here that I believe a measurement of that kind is absolutely useless. Experience has demonstrated that it is. It is a common thing, with the coal tickets we turn in, that our coal sheds are 100 tons of coal a month short, in the larger coal sheds.

Mr. Sheean: On your coal tickets?

Mr. Dady: On the coal shed man's report.

Mr. Sheean: So that taking some reasonable measure, whether it is in the way of shovel or basket, or anything else, gets a good deal closer result than the mere guess or coal tickets, does it?

Mr. Dady: A scoopful measure is absolutely useless in my opinion.

Mr. Sheean: Then there is not any accurate way except the actual weighing, in each case?

Mr. Dady: I will tell you how I arrive at conclusions. A good many years ago, when there was a more accurate accounting of the coal consumed, we took coal by bucket. If the coal sheds were running short, there was a white mark painted on the inside or outside of the bucket, for the coal shed man to cut down

the coal to that white mark. They were in half ton buckets. Some eight or ten or twelve years' experience in taking coal personally, dumping it myself, I learned to get a pretty good idea of what a ton of coal is, as allowed us by the railroad company.

Mr. Sheean: Have you a recollection now as to just where you took on coal, and how much you took on each of these trips?

Mr. Dady: I could not say exactly, but the capacity of these tanks is 15 tons. I have a very distinct recollection that we burned quite a little better than half a tank of coal on the first 53 miles of the trip, and on the last 37 miles of the trip we burned a trifle less than half a tank, so you can put two and two together, and you will see that there were about fourteen or fifteen tons of coal consumed on the trip.

Mr. Sheean: From the time that this observation was made, in August, 1914, from that time on, when was the first that you talked with anyone about what coal was taken on, or used on the trip?

Mr. Dady: Why, I would not like to answer that question directly. It might have been called to my attention within a couple of weeks. Not for the purposes of these negotiations, though. It might have been called to my attention within a couple of weeks.

Mr. Sheean: As to what was burned on that trip?

Mr. Dady: Yes.

Mr. Sheean: And who called your attention to it at that time?

Mr. Dady: Oh, somebody might have asked me how much we used on this noted trip of 7 hours and 30 minutes from the time we lined up at the last switch in Escanaba until we were in Stambaugh yard. That was a very much talked of trip, because it was such a fast trip.

Mr. Sheean: On that trip, at the time when you made it, was there any suggestion made by anyone, of running any tank, or did you just make the run yourself?

Mr. Dady: I made the run myself; I was the captain.

Mr. Sheean: You were the captain?

Mr. Dady: Yes.

Mr. Sheean: And Mr. Quinn and the other observer there, were simply observers?

Mr. Dady: Yes.

Mr. Sheean: You ran that tonnage train in the way you thought was the proper way to run it?

Mr. Dady: Yes.

Mr. Sheean: Making the best time that you could with it?

Mr. Dady: On that tonnage train, another feature that made it easier, they put a first class passenger train into clear for us, something uncommon, and two other second class trains that had the right of way over us, were put into clear, that I remember of.

Mr. Sheean: That was with engine 1,753?

Mr. Dady: Yes, sir.

Mr. Sheean: The other trip that you made was with engine 1,470?

Mr. Dady: The trip east?

Mr. Sheean: Yes.

Mr. Dady: The first trip east was with engine 1,470.

Mr. Sheean: And both of those engines you thought were in unusually good condition?

Mr. Dady: Yes, sir.

Mr. Sheean: Did you make any remark of that, either to Mr. Quinn or anybody else at that time?

Mr. Dady: What first called my attention to the condition of 1,470, was that the conductor about a week previous to this, had spoken of it. Those engines, you understand, were new on that division last summer, and I don't know how many of them we had, but quite a lot, and the engines were being run in the pool, first in first out, no regular engines assigned to any man, but this 1,470 I had not had hitherto, not meaning this trip, but a trip some weeks previous to that. The conductor that came out with me as we went from the lower yard up to the yard where we got our train, said to me, "We have a good engine this morning." I said "Is that right?" I said, "She does sound good to me." He said, "The despatcher tells me that she makes Sturgeon oftener than any other engine we have." The train despatcher had called the conductor's attention to the fact that that engine at that particular time had the reputation in the general offices of having made the hill oftener than any other engine.

Mr. Sheean: And with that engine you made this run of 90 miles in 13 hours and 25 minutes?

Mr. Dady: Yes, sir; on that first trip east.

Mr. Sheean: That is on 1470?

Mr. Dady: Yes.

Mr. Sheean: That is a shorter length of time than ordinarily at that time of the year that you took to make that 90 miles?

Mr. Dady: That is about an average.

Mr. Sheean: That is about an average?

Mr. Dady: That is perfectly fair average time on that.

Mr. Sheean: Thirteen hours and 25 minutes?

Mr. Dady: Yes. It sometimes is made in quite a little less, and sometimes we are tied up on the road and they have to come out and tow us in, but that is fair.

Mr. Sheean: Well, then, there wasn't anything about the condition of that engine that enabled you on that run to go over the road any more rapidly than usual?

Mr. Dady: Why, even though I could have gotten over the road more rapidly, the speed restrictions would not permit us, over certain portions of the road, to go faster. Where the conditions of the grade would not permit fast runs, it was out of the question, because of the rules, and as a matter of common sense and safety, to go faster.

Mr. Sheean: Well, then, 1753 made the trip eastbound in 12 hours and 10 minutes, and the other way in 8 hours and 47 minutes, as shown here on the two days that you ran it, Mr. Dady?

Mr. Dady: Yes.

Mr. Sheean: Now, I don't see the train in which you speak of 7 hours and something.

Mr. Dady: Well, that is 8 hours and 47 minutes. We were ordered for 8:30 that morning. I remember more of the details of that trip than any other. You see, we were here credited with leaving there at 8:43. Now, from the time that we lined up the last switch in the yard, that is, the rear of the train passed over it, and the head brakeman set up the switch in Stambaugh yard, was 7 hours and 30 minutes. The difference between the 7 hours and 30 minutes, and 8 hours and 47 minutes, is the difference between the time it took us out of

the yard and the difference in the time it took us to dispose of the train. But the actual running time for the 90 miles, was 7 hours and 30 minutes.

Mr. Sheean: The time of departure, 8:43 A. M., time of arrival, 5 P. M.

Mr. Dady: That is approximately correct. Correct from one point of view. But a notation that is not made there is: we were ordered for 8:30 A. M. that morning, necessitating the fireman and me being around at 7:30 A. M. We are required by the rules to be over the turn table for that service, thirty minutes before leaving time.

Mr. Sheean: Well, what I don't follow you on, Mr. Dady, is: time of departure 8:43 and time of arrival 5 P. M. I don't see where the seven hours comes in on that.

Mr. Dady: Well, but I have just tried to explain to you that 8:43 is the time of departure, but we are up here three-quarters of an hour in the yard, you see.

Mr. Sheean: Yes.

Mr. Dady: Those figures are correct for any purpose that I put them to, or that you used to illustrate this matter with here. I cannot see anything to the contrary of those figures.

Mr. Sheean: 8:43 A. M. time of departure, and arrived at 5 P. M.

Mr. Dady: We will say that is correct.

Mr. Sheean: I thought you said something about making it in seven hours.

Mr. Dady: The running time between the two point, between Escanaba, after we had lined up the last switch, and our arrival in Stambaugh yard, was 7 hours and 30 minutes that day. Now, when we arrive in Stambaugh yard there is more or less fussing to do to get the train out of the way.

Mr. Sheean: These engines were new engines on that division, were they?

Mr. Dady: They came along in the early spring.

Mr. Sheean: You said in reply to a question of Mr. Park, that it was not uncommon on that division to make tests; that making tests was not an uncommon thing. That has been going on for some years, has it?

Mr. Dady: Why, during the summer months the ore business is, in many summers at least, a very important business,

it furnishes the bulk of all our business for the entire year, I believe, and the company pays very particular attention to the business, and most all of the time of the traveling engineer and the trainmaster is spent in riding those ore trains up and down the road.

Mr. Sheean: During the summer months?

Mr. Dady: During the summer months.

Mr. Sheean: I think that is all.

Mr. Burgess: Mr. Dady, I find myself somewhat confused relative to these observers. If I recall your testimony correctly, you stated that either the Traveling Engineer and the General Foreman, or the Traveling Engineer and the Master Mechanic, rode with you on all of these test trips, did you not?

Mr. Dady: That is on the trip east I had the Traveling Engineer and the Master Mechanic.

Mr. Sheean: Well, now, on that particular trip do you know whether either of those gentlemen had a stop watch?

Mr. Dady: Why, I presume that one of them did, but I did not see him operating it.

Mr. Burgess: And the same would be true of the next trip?

Mr. Dady: The next trip the stop watch was being operated all the time, or this clicker, whatever it is, and one of the gentlemen was continually taking notes, and I pleasantly remarked to him, since this thing was called to my attention—as his report on that trip shows 2 hours and 30 minutes of labor, something of that kind—and the best of good feeling exists between him and myself, but when this was called to my attention, I said to him: “Charlie, you were more than 2 hours and 30 minutes using your pencil in taking your notes.”

Mr. Burgess: Now, Mr. Dady, in regard to this 7 hour and 30 minute trip.

Mr. Dady: So as to agree with the figures it would be better to call it 8 hours and 47 minutes.

Mr. Burgess: Well, I want to get clear on it. This 7 hours and 30 minutes was from the time you left the yard at Escanaba until you arrived at Stambaugh yard, is that right?

Mr. Dady: Yes.

Mr. Burgess: Well, now, before leaving the yard at Escanaba, there was some time consumed in preparing the engine, was there not?

Mr. Dady: Yes, sir.

Mr. Burgess: What is the rule on your road relative to reporting for duty, that is, how much time do you have to give to get the engine ready?

Mr. Dady: Well, you are expected to be over the turntable before leaving time.

Mr. Burgess: And when does your time begin?

Mr. Dady: In this particular ore service, our time begins at the time we leave the turntable.

Mr. Burgess: The time begins at the time you leave the turntable?

Mr. Dady: Conditions are such that it is necessary for us to be around at least thirty minutes before that time begins.

Mr. Burgess: Well, do you have your engine prepared when you leave the turn table?

Mr. Dady: We are ready to do business.

Mr. Burgess: Now, how much time does it take to prepare your engine?

Mr. Dady: Well, to do it as we ought to do it, it would take thirty minutes.

Mr. Burgess: And for that you do not receive any pay, do you?

Mr. Dady: No, sir.

Mr. Burgess: So that if it takes thirty minutes to prepare the engine and you have to leave the turn table thirty minutes before the time due to depart on the train, there would be one hour there that you give, of your own time?

Mr. Dady: No, I won't say that, in connection with this particular service.

Mr. Burgess: Well, explain it to us.

Mr. Dady: Well, take that trip, for example. I am ordered to leave at 8:30. I must be across the turn table at 8 o'clock. In order to be over the turn table at 8 o'clock I must be on duty before that: there isn't any rule requiring that, the rule simply requires that I have my engine ready and all supplies and necessary equipment on, and that I have looked her over and know that she is in condition to do business, and to be out on that table thirty minutes before leaving time. And to accomplish that, I could possibly do it in three minutes, but if there was some delay, or something went wrong, I would be held accountable for it. So

that I am ordered for 8:30. The rules require that I be over the turn table at 8 o'clock. This would necessitate me being around at 7:30.

Mr. Burgess: To leave at 8:30?

Mr. Dady: Yes.

Mr. Burgess: And your time would begin when you leave the turn table?

Mr. Dady: Yes, at 8 o'clock. Then there is a further time at the end of the trip that we are supposed to look our engine over, write out coal tickets, oil tickets, make a coal report of the amount of coal consumed, and that sort of thing; that would take pretty close to thirty minutes to do it and do it right.

Mr. Burgess: And do you receive any pay for that?

Mr. Dady: No.

Mr. Burgess: So then there are thirty minutes in the beginning of the trip, and about thirty minutes at the completion of the trip, for which you do not receive any pay?

Mr. Dady: Yes, sir.

Mr. Burgess: Now, Mr. Dady, relative to brick arches, did I understand you to say that occasionally a brick had fallen down?

Mr. Dady: Yes, sir; and two bricks and three bricks, but I do not consider that a very serious proposition at all, especially on a freight train.

Mr. Burgess: You do not consider that as serious?

Mr. Dady: Not in any way as a serious proposition on a freight train.

Mr. Burgess: To the engine?

Mr. Dady: Not on a freight train.

Mr. Burgess: You could pull the freight train in all right?

Mr. Dady: I could handle that proposition very easily.

Mr. Burgess: And you did pull it in all right?

Mr. Dady: Yes, sir.

Mr. Burgess: Do you know of any other engineer, at any time on the road during your fourteen years' experience, that set his train off because a brick, or two or three or more bricks fell down?

Mr. Dady: Not in freight service, nor do I know of it having happened in passenger service, but I can see, or I can conceive of a possibility in passenger service of a man, in order to

avoid some delay that might occur in connection with it, turning the engine in at a place where he could take out another one.

Mr. Burgess: Now in regard to this exceptionally fast run that you made, which I understand you say attracted some attention——

Mr. Dady: A good deal—marked attention.

Mr. Burgess: On that particular trip, did I understand you to say that they ordered a passenger train to take a sidetrack?

Mr. Dady: Yes.

Mr. Burgess: Did they order any other train to take a side track?

Mr. Dady: Whether they ordered them or not, I know that they were on the passing track to clear, which was uncommon under the circumstances, they having the right of way.

Mr. Burgess: Did the freight trains and this passenger train have time card rights, superior to the rights of the train you were hauling?

Mr. Dady: Either time card rights or rights by rule of direction.

Mr. Burgess: A passenger train would be required to receive orders before she would take the side track for a freight train, would she not?

Mr. Dady: Yes, which was the case.

Mr. Burgess: So that on this test train, where the time from terminal to terminal was very short, you practically had a clear track?

Mr. Dady: Yes.

Mr. Burgess: And that would naturally reduce the coal consumption, would it not?

Mr. Dady: Yes.

Mr. Burgess: Since that time, have you ever pulled a train where they sidetracked a passenger train for you?

Mr. Dady: Oh, yes.

Mr. Burgess: Is it a usual thing on that road to sidetrack passenger trains for freight trains?

Mr. Dady: Not unless there is a good reason.

Mr. Burgess: In the usual and ordinary railway practice, a freight train takes the side track for the passenger train on your road?

Mr. Dady: Yes.

Mr. Burgess: That is all.

RE-CROSS EXAMINATION.

Mr. Sheean: You have just assented to a statement of Mr. Burgess that naturally this run in this short time would reduce the coal consumed. According to the report made by Mr. Quinn here, as to the scoops of coal shoveled, this report shows that on your long trip, which took 13 hours and 25 minutes, the scoops of coal shoveled were 937, while on the short trip, made in 8 hours and 47 minutes, the scoops of coal were 927, which shows, according to his observation, that they shoveled within ten, as many scoops on this short trip as they did on the trip that took 13 hours and 25 minutes.

Mr. Dady: But time is a factor in the burning of coal.

Mr. Sheean: Yes, I thought so, and I thought perhaps you answered a little hastily when Mr. Burgess said, "Well, naturally, clearing the right of way and letting them run very fast and in shorter time, naturally that would reduce the coal consumption." Now when you go along rapidly——

Mr. Dady: They were in different directions. There was only one trip west.

Mr. Sheean: Yes.

Mr. Dady: Now this fast trip was a west trip.

Mr. Sheean: Yes.

Mr. Dady: The other two trips were east trips.

Mr. Sheean: But it does not necessarily follow, I think, does it, that because a trip is made fast, that reduces the coal that is shoveled? You shovel the coal faster when the trip is being made faster?

Mr. Dady: There are several elements that enter into that. It is well known by all men of experience that when a train is moving it is easier to keep her moving, than a train dragging along. I presume that your knowledge does not go that far in those things, but any mechanical man or man of experience will bear me out in that.

Mr. Sheean: Is it not true that the length of time on the road may not have any necessary relationship to the number of scoops of coal that are consumed in making the trip?

Mr. Dady: That is very technical, and if you and I went into that for a week, we would not come any nearer to arriving at a conclusion.

Mr. Sheean: Probably not. I can understand the scoops—that if a man counts the actual number of scoops, and keeps an actual account of them, there cannot be very much dispute about that. According to the report here, this is reported in scoops of coal shoveled. You made no such observation or count yourself?

Mr. Dady: No.

Mr. Sheean: While you say it is not at all accurate or reliable, what is your judgment, and what would you say as to the number of pounds of coal in an ordinary scoop?

Mr. Dady: I would not make any estimate at all.

Mr. Sheean: Would you say 10 or 20?

Mr. Dady: Coal coming from the same mine, a scoop of it would vary several pounds, dependent upon whether it was wet slack or coarse lump. You can see that.

Mr. Sheean: Yes, but on the kind of coal that the fireman on these trips was shoveling—on these trips last August, the weather was clear, I believe, I think you said it was ideal—so that it was not wet or sticky, or anything of that kind.

Mr. Dady: The prevailing weather at that time could have no considerable effect on the condition of the coal, because the coal might have been in the shed a day, or it might have been there a week.

Mr. Sheean: The actual coal that you did have—not what might have been, but the actual coal that you saw put in the firebox on these trips—within what spread would that run, in sticking a scoop into that coal and firing it? How long in pounds and how high in pounds would that run?

Mr. Dady: If I am not forced to, I will decline to make any estimate on that, because I do not consider it any good.

Mr. Sheean: I do not want to insist on your making any estimate, but putting the low amount and the high amount, what would you say?

Mr. Dady: I do not like to talk about something I do not know anything about.

Mr. Sheean: And you have never had occasion at all to give any judgment as to whether ten pounds is too low or 20 pounds too high?

Mr. Dady: As I explained a minute ago, it would vary as to the quality of the coal. We have occasionally what we term

Illinois coal when we get out of Green Bay, and that is lighter than eastern coal. In bulk I would be willing to try it out with you. I think I would come pretty near hitting it in that case.

Mr. Sheean: But you do not believe that you could—

Mr. Dady: On the scoop business, I have no faith in it.

Mr. Sheean: All right.

Mr. Dady: And the results have shown that it is in no way dependable. I said to you a moment ago that the coal sheds run short. Understand these scoop tests are ordinarily conducted by the Motive Power Department, by a representative of that department. The Operating Department in recent days has the accounting of the coal. The coal is weighed in cars ordinarily and put up in the coal shed. That weighing of the amount of coal put into the shed is fairly well known and the result is approximately correct. Now in giving out tickets the coal shed men may run 100 tons short. Occasionally, I believe, they overrun. That is, they will have more tickets than the amount of coal that has been put in the shed, but it is a standing joke with every man who knows anything about it, including officials, that coal accounting is not accurate.

Mr. Sheean: That is, you say it is accurate as to what goes into the coal sheds, and what is burned by all the locomotives; but whether the right amount is charged to each man, or some men are charged with the wrong amount, there is no exact accuracy on that?

Mr. Dady: No, sir.

Mr. Sheean: But as to the total amount of coal consumed by all the locomotives, that is accurate?

Mr. Dady: About.

Mr. Sheean: That is all.

(Witness excused.)

H. I. TRAMBLIE was called as a witness in rebuttal, and after having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and address.

Mr. Trambly: H. I. Trambly, McCook, Nebraska.

Mr. Carter: What is your occupation?

Mr. Trambly: Locomotive fireman.

Mr. Carter: By what road are you employed?

Mr. Trambly: The Burlington.

Mr. Carter: The Chicago, Burlington & Quincy?

Mr. Trambly: Yes.

Mr. Carter: I have a test trip here made by Engineer I. F. Davis and Fireman H. I. Trambly. Are you the Mr. Trambly who is referred to?

Mr. Trambly: Yes.

Mr. Carter: Have you examined the record of this test trip?

Mr. Trambly: I have.

Mr. Carter: Did you notice that on this test trip it was not a very heavy train?

Mr. Trambly: I believe the tonnage was something under 1,500.

Mr. Carter: How much?

Mr. Trambly: Something under 1,500 tons.

Mr. Carter: It is reported here as 1,446 tons.

Mr. Trambly: Yes, I believe that is about correct.

Mr. Carter: What is the rating of this engine, or do you know?

Mr. Trambly: It is 2,200 tons.

Mr. Carter: You think it is 2,200 tons?

Mr. Trambly: Yes.

Mr. Carter: And you had less than 1,500 tons on this trip?

Mr. Trambly: Yes.

Mr. Carter: The weather conditions were favorable to the trip, were they?

Mr. Trambly: The weather conditions, as far as I observed, were ideal; they could not have been better.

Mr. Carter: I note that you are credited with working 4 hours 20 minutes out of 11 hours, and resting, that is, performing no physical labor for the remaining hours. Is that your recollection of the trip?

Mr. Trambly: No, sir.

Mr. Carter: Do you think you worked pretty well on that trip all the way across?

Mr. Trambly: Yes, I was busy as long as the engine was in motion.

Mr. Carter: They say you burned 21 tons of coal. What is your recollection?

Mr. Trambly: Well, it seems to me there was quite a bit more than that. Of course there is no way of measuring it accurately.

Mr. Carter: Was it weighed by the observer?

Mr. Trambly: No, sir.

Mr. Carter: Why do you think there were more than 21 tons burned?

Mr. Trambly: It is the judgment of the engineer, Mr. Davis, and myself.

Mr. Carter: Was there any discussion about the amount of coal that you burned—any discussion with the observer?

Mr. Trambly: When we got to Akron, Colorado, I asked the observer, Mr. Willsie, how much coal I had burned, and he consulted his memorandum and said that we had burned something like 27 tons.

Mr. Carter: Mr. Willsie said you had burned something like 27 tons?

Mr. Trambly: Yes.

Mr. Carter: He told you and the engineer that?

Mr. Trambly: Yes.

Mr. Carter: And what did you and the engineer say to Mr. Willsie?

Mr. Trambly: We both considered that that was a very short estimate, that it was probably over that.

Mr. Carter: And here he reports only 21 tons. You and the engineer remember that, do you?

Mr. Trambly: Yes.

Mr. Carter: Did you fire the engine all the way, or did somebody help you fire the engine on this trip?

Mr. Trambly: The engineer fired about 15 miles, and the head brakeman fired about the same distance.

Mr. Carter: What were you doing?

Mr. Trambly: During that time I was resting.

Mr. Carter: They helped you out?

Mr. Trambly: Yes.

Mr. Carter: Was the work hard enough to cause the engineer and brakeman to help you out of their own accord?

Mr. Tramblié: I believe, under the circumstances, I could not have made the terminal unless they had.

Mr. Carter: But, according to this statement, you were not working on this trip, but you were loafing. Why would the engineer help you fire, and the brakeman come and help you fire if you did not have anything to do?

Mr. Tramblié: I could not answer that, sir. I do not know why they would.

Mr. Carter: There was really more work than you could do, and the engineer wanted to help you out.

Mr. Tramblié: I think that was the only reason why he did.

Mr. Carter: And the brakeman also?

Mr. Tramblié: Yes.

Mr. Carter: And yet, according to these statements, you were resting in the gangway or on your seat box about 7 hours out of the 11? About 6 hours and 40 minutes out of the 11 hours you were resting; but the engineer was firing there for you, and so was the brakeman, because you had no rest and they had to give you rest?

Mr. Tramblié: Yes.

Mr. Carter: Is it a fact that on the Burlington road the fireman is often given assistance by engineers and brakemen?

Mr. Tramblié: The only place where I have had experience is on the McCook division, but there on the O-1 engines it is very seldom that they are not given assistance by either the engineer or the brakeman.

Mr. Carter: Do you believe it is necessary?

Mr. Tramblié: I believe it is in most cases.

Mr. Carter: Do the engineers and brakemen believe it is necessary in order to help you?

Mr. Tramblié: I do not know whether they believe it is necessary or not, but they always do it.

Mr. Carter: Would you consider it economical for the railroad to hire somebody to help the fireman perform this work, so long as the engineer and brakeman do it for them? Would it be a waste of the company's money?

Mr. Tramblié: If the engineer and brakeman will do it, I should consider it would be a waste of the company's money to hire a man.

Mr. Carter: But you think that somebody has got to help you?

Mr. Trambly: Yes, that is positive—some one has got to do part of the work.

Mr. Carter: Do you find the heat of the fire is very bad out there?

Mr. Trambly: Yes.

Mr. Carter: What protection do you use against the heat of the fire?

Mr. Trambly: An asbestos pad.

Mr. Carter: I have something here that was sent in by other people who are not present, but maybe you can explain what it is. This was sent in by a fireman from the Santa Fe and has been used two trips. He puts it around himself in this way. Is that the way you wear your asbestos pad?

Mr. Trambly: Yes.

Mr. Carter: Do you see how that is scorched in two trips?

Mr. Trambly: Yes.

Mr. Carter: Is that your experience?

Mr. Trambly: Yes.

Mr. Burgess: I wish you would come out where the Board can see that. I would like to see it myself.

Mr. Carter: I will let you put it on. I do not know how to put it on. How do you put that on?

Mr. Stone: You tie it around your waist, don't you?

Mr. Trambly: That is the way I always do, and this is the way it is worn. It is fastened on any way you want to fasten it, with safety pins, or any way.

Mr. Carter: Here is one that was fastened with safety pins. This was used one trip, and is sent in by a Colorado & Southern man. How long would this last you—not very long, would it?

Mr. Trambly: Well, not over about three or four trips. It would be burned so that it would be useless.

Mr. Carter: And you use asbestos?

Mr. Trambly: Yes.

Mr. Carter: An asbestos pad will last quite a while?

Mr. Trambly: Yes, it will last until it is worn out.

Mr. Carter: Do you believe it is necessary for firemen to use these, firing these big engines?

Mr. Trambly: It is necessary to use either a pad of some kind, or burn your clothing.

Mr. Carter: Does it get hot against the skin, where it burns the cloth like that?

Mr. Trambly: Yes, as a rule you cannot let your clothing against your skin at all. I have had to hold it out like that until it cooled, lots of times.

Mr. Carter: To keep from blistering the skin?

Mr. Trambly: Yes.

Mr. Carter: I guess that is all.

CROSS EXAMINATION.

Mr. Sheean: On this run, or on that division you burn lignite coal, don't you?

Mr. Trambly: Yes.

Mr. Sheean: That is, lignite mine run?

Mr. Trambly: Yes.

Mr. Sheean: And the coal that was burned on this test trip was the usual and customary coal?

Mr. Trambly: Yes, I believe it was.

Mr. Sheean: Who, beside Mr. Willsie, was on the train during the run?

Mr. Trambly: I believe Mr. Woody.

Mr. Sheean: Who is Mr. Woody?

Mr. Trambly: I don't know who he is, but I think he is Mr. Willsie's assistant.

Mr. Sheean: And he rode through the entire trip?

Mr. Trambly: Well, perhaps for a few miles he might not have been on the engine, but practically the entire trip.

Mr. Sheean: Practically the entire trip?

Mr. Trambly: Yes.

Mr. Sheean: Was he present at the time of the conversation when you and the engineer and Mr. Willsie discussed how much coal had been burned?

Mr. Trambly: I don't remember.

Mr. Sheean: You don't remember as to that?

Mr. Trambly: No, sir.

Mr. Sheean: Just where was it that this conversation took place?

Mr. Trambly: It was in the Akron yard, just before I got off the engine.

Mr. Sheean: After your arrival there?

Mr. Trambly: Yes.

Mr. Sheean: And you knew that some observation was being made, as to how much coal was being burned on the trip?

Mr. Trambly: Yes, I knew he was keeping track of the amount.

Mr. Sheean: What was the name of the brakeman who shoveled part of the coal on that trip?

Mr. Trambly: I don't recall.

Mr. Sheean: But it was one of the brakemen on the train that you were hauling that day?

Mr. Trambly: Yes, the head brakeman.

Mr. Sheean: The head brakeman on that train?

Mr. Trambly: Yes.

Mr. Sheean: Do you remember at what point on the road it was that he did any of the shoveling?

Mr. Trambly: The brakeman, if I remember right, took the engine, that is started to fire, at Stratton, and fired to Benkleman. That is about eighteen miles.

Mr. Sheean: You knew that the Burlington schedule prohibited calling on brakemen to do that, didn't you?

Mr. Trambly: Yes—well, I don't know that it prohibits them firing. Their schedule, I believe, provides that they are not required to shovel down coal. It does not forbid them to do it, that I know of.

Mr. Sheean: Who asked the brakeman to do this?

Mr. Trambly: Nobody.

Mr. Sheean: That is the only run on which you were a fireman, on which any observation was made as to the amount of coal consumed?

Mr. Trambly: Yes.

Mr. Sheean: How long have you been firing?

Mr. Trambly: Five years and seven months.

Mr. Sheean: On this same division?

Mr. Trambly: Yes.

Mr. Sheean: And they have always burned lignite there?

Mr. Trambly: Yes.

Mr. Sheean: This was an E-4 engine, I believe, was it not?

Mr. Trambly: It is an O-1, as we rate them.

Mr. Sheehan: An O-1?

Mr. Trambly: Yes.

Mr. Sheehan: What was the weight on drivers?

Mr. Trambly: It is approximately 200,000 pounds. I don't know just exactly what it is—perhaps slightly under that.

Mr. Sheehan: How long have you had them on that division?

Mr. Trambly: About three years.

Mr. Sheehan: I take it that you did not keep any track of how many fires you put in?

Mr. Trambly: No, sir, I did not.

Mr. Sheehan: Or how many shovels of lignite were put in?

Mr. Trambly: No, sir.

Mr. Sheehan: About how many scoops of lignite are put in to a fire?

Mr. Trambly: That varies a great deal, according to the speed of the train and the way the engineer is working the engine.

Mr. Sheehan: But you cannot give us any judgment either as to the number of scoops or the number of fires you put in on the trip?

Mr. Trambly: No, sir, I have no record of that at all.

Mr. Sheehan: You do know that upon the trip the time was taken of the time it actually took to put in the fires. You knew that at the time?

Mr. Trambly: How do you mean?

Mr. Sheehan: You were told, were you not, that it was being done?

Mr. Trambly: No, I did not know that he was timing me with a stop watch. I knew he was keeping track of the coal, but I did not know he was timing me.

Mr. Sheehan: But you knew he was keeping track of the amount of coal?

Mr. Trambly: Yes.

Mr. Sheehan: Or the number of scoops of coal?

Mr. Trambly: Yes.

Mr. Sheehan: And at the time you inquired, or when the discussion came up, as to how much coal had been shoveled, did

you make any inquiry as to the number of scoops of coal which had been put in?

Mr. Trambly: No, sir, I don't believe I did, not that I recall. I don't believe he mentioned the number of scoops. He might have, but I don't recall it.

Mr. Sheehan: From that time until this proceeding has been on here, you never talked with anyone, or had any occasion to speak of this occurrence, since then?

Mr. Trambly: No, sir, I have not.

Mr. Sheehan: That is all.

Mr. Burgess: What is lignite coal?

Mr. Trambly: It is a very light coal, which burns with very little ash. If an engine is properly drafted, the fire will consume nearly all of it. There might perhaps be five per cent ash. I don't believe it will run much over that.

Mr. Burgess: Is the coal inclined to clinker?

Mr. Trambly: Yes, it clinkers very easily.

Mr. Burgess: Mr. Carter, pardon me just a moment. Before the witness leaves the stand, I wish to ask about that pad which you have there. I did not quite understand. Is that an asbestos pad?

Mr. Carter: This is a canvas pad. This was used one trip on the Colorado & Southern, and this other one was used two trips on the Santa Fe. We have the letters accompanying them; but this witness says he used asbestos.

Mr. Shea: Is that one there burned through on both sides?

Mr. Carter: This one was used one trip and this one two trips. You see he had a double pad here, double thickness, and it is scorched through only one thickness. The witness says on the Burlington he uses asbestos.

Mr. Burgess: That is worn over the clothing?

Mr. Trambly: Yes.

Mr. Burgess: That is all.

Mr. Shea: How does a fireman usually dress when he is firing one of these large locomotives?

Mr. Trambly: The most of them strip down to their underwear and then put on a suit of overalls. In the summertime, we have just very light underwear and a pair of overall trousers, and a light sateen shirt, or some other light, thin material, that will not hold heat.

Mr. Shea: But unless you use one of these pads as a protection, the heat is liable to blister the skin?

Mr. Trambly: Yes; and not only that, but it will burn your clothes. A suit of overalls would not last over one trip.

Mr. Shea: What do you have to pay for a suit of overclothes?

Mr. Trambly: A dollar a garment.

Mr. Shea: Two dollars for the suit?

Mr. Trambly: Yes.

Mr. Shea: That is all.

Mr. Burgess: What does an asbestos pad cost?

Mr. Trambly: We pay one dollar for them. I believe some places sell them cheaper, but we have to pay a dollar in McCook.

Mr. Carter: Please talk louder.

Mr. Trambly: I say, an asbestos pad costs one dollar.

Mr. Burgess: Of course, the expense of the asbestos pad is borne by the fireman?

Mr. Trambly: Yes.

Mr. Burgess: The company does not furnish them.

Mr. Trambly: The company will furnish a canvas pad. If you will go to the store room you can draw a yard of canvas, for a canvas pad, but you will have to do that every week, if you want to keep supplied, and that gets rather monotonous.

Mr. Burgess: But the company will not furnish an asbestos pad?

Mr. Trambly: Well, there has never been anything said about it, so, of course, I couldn't say that they would not furnish it but I don't suppose they would.

Mr. Carter: On this trip, Mr. Trambly, if you hadn't had the assistance of the fireman or brakeman, could you have gotten over the road as rapidly as you did?

Mr. Trambly: Well, as far as we went perhaps I could, but I doubt if we could have gotten to the terminal.

Mr. Carter: Did you ever hear of a fireman playing out on a trip, on account of the exhaustive labor?

Mr. Trambly: Why, I have done that myself, and I know of another man.

Mr. Carter: I want to read from the record, page 5,716:

"Mr. Phillips: It has never come to your attention that firemen do play out on the road, as we call it.

“Mr. Trenholm: I have no recollection of it, Mr. Phillips.

“Mr. Phillips: And that brakeman, or engineers, or some other member of the train crew helped them in getting in?

“Mr. Trenholm: Oh, I think I have heard of firemen being taken sick on the road.

“Mr. Phillips: Not taken sick. I suppose they do get sick at times, too.

“Mr. Trenholm: I have never heard, Mr. Phillips, of a man actually playing out.”

You say you have heard of men playing out on the road, on account of exhaustive labor?

Mr. Tramblic: Yes, sir, I have done it myself.

Mr. Carter: That is all.

(Witness excused.)

O. H. HOUSE was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and place of residence.

Mr. House: O. H. House, McCook, Nebraska.

Mr. Carter: What is your occupation?

Mr. House: Locomotive fireman.

Mr. Carter: On what railroad?

Mr. House: The Chicago, Burlington & Quincy.

Mr. Carter: Are you the same House that has two tests here on September 24th and 25th, reported?

Mr. House: Yes.

Mr. Carter: Both of these trips, one from McCook to Akron and the other from Akron to McCook. Is that right?

Mr. House: Yes.

Mr. Carter: The first trip shows that you were actually engaged in manual labor 4 hours and 13 minutes out of 11 hours and 15 minutes, or 7 hours and 2 minutes of the trip you were performing no physical labor. Is that your recollection of this trip?

Mr. House: No, sir, it is not.

Mr. Carter: You worked pretty hard all through the trip, did you?

Mr. House: I think I was working at least half the time the engine was in motion.

Mr. Carter: That is, you were firing?

Mr. House: Yes, sir.

Mr. Carter: Were you performing other duties besides?

Mr. House: Yes, sir. When not engaged in firing, I was cleaning off the deck, and keeping a lookout for signals.

Mr. Carter: Now, the return trip, the eastbound trip, was on the declining grade, was it not?

Mr. House: Yes, sir.

Mr. Carter: On this trip, you loafed 12 hours and 40 minutes out of 14 hours. You didn't do anything for 12 hours and 40 minutes. Is that true?

Mr. House: According to my judgment, I think I was busy more time than that.

Mr. Carter: The eastbound trips are usually lighter, are they not?

Mr. House: Yes, sir, from Akron to McCook they are.

Mr. Carter: You are credited on the westbound trip, that is, from McCook to Akron, with burning 24 tons. That is about right, is it not?

Mr. House: Well, according to my estimate of it, I think it is a little short.

Mr. Carter: But it was 24 tons, anyhow?

Mr. House: Yes, it was all of that.

Mr. Carter: You burned that 24 tons in 3 hours and 13 minutes, according to observation.

Mr. House: Yes, sir, according to observation that was all the time we used.

Mr. Carter: That is between 7 and 8 tons an hour. That is going some, is it not?

Mr. House: We must have been pretty busy.

Mr. Carter: Do you think when you burned 24 tons on that trip, when you leave at 11:25 in the morning and get in at 9:25 at night, a ten-hour trip, and you burned 24 tons, you have worked pretty hard all the way across?

Mr. House: Yes, I consider I have worked very hard.

Mr. Carter: Do these engines sometimes burn coal so fast that one man can hardly keep the coal in there?

Mr. House: Yes, sir. I have known them to burn coal so fast one man couldn't supply coal for the fire box, and keep up steam pressure.

Mr. Carter: Well, on this trip, when you had nothing to do, according to this statement, did you have anybody assist you fire?

Mr. House: Yes, sir.

Mr. Carter: How did you do that? How did you keep coal in the fire box, firing so fast?

Mr. House: The engineer fired at the same time I did.

Mr. Carter: The two of you fired the locomotive at the same time?

Mr. House: Yes.

Mr. Carter: On the same trip?

Mr. House: Yes.

Mr. Carter: Do you mean to say the engineer fired left-handed from his side of the engine, and you fired right-handed from your side of the engine?

Mr. House: He fired right-handed.

Mr. Carter: You fired one side and he the other?

Mr. House: Yes.

Mr. Carter: Would it be like two blacksmith's helpers pounding iron at the same time?

Mr. House: Exactly.

Mr. Carter: And it took you and the engineer, both, to fire this engine on that trip, at times?

Mr. House: Yes.

Mr. Carter: And according to this statement you weren't working?

Mr. House: He says not.

Mr. Carter: What was the engineer doing anyhow?

The Chairman: I didn't catch that.

Mr. Carter: He said, on account of the coal to be consumed, at one time the engineer both got down and he and the engineer both fired the engine, at the same time.

The Chairman: The point I was trying to ascertain was this, as to whether this was the time they made the test trip?

Mr. Carter: Yes. That is when he was loafing practically all the time.

Now, did the engineer get down and do this just for fun, or did he think it was necessary for him to help you?

Mr. House: I know it was necessary, to keep the maximum steam pressure.

Mr. Carter: It is not unusual for the engineer to get down and help you get in coal?

Mr. House: I have often done it.

Mr. Carter: Where did this occur, between Eckley and Schramm?

Mr. House: Between Eckley and Schramm.

Mr. Carter: Why did he do it? Did you have a short time for passenger trains?

Mr. House: Yes, sir.

Mr. Carter: And for six miles, when this engine was working so hard trying to make the station for a passenger train, you and the engineer both fired at the same time?

Mr. House: Yes, sir.

Mr. Carter: And yet this is the test trip, when you didn't work. Ordinarily, does an engineer or a brakeman help the fireman on this trip?

Mr. House: We very seldom make a trip over the road without assistance from either the engineer or brakeman.

Mr. Carter: You saw those aprons. I don't know where they are now. You saw those aprons?

Mr. House: Yes.

Mr. Carter: Do you use aprons of that kind out there?

Mr. House: Yes, sir. I ordinarily use an asbestos pad, though.

Mr. Carter: They would burn that way, if you did not use asbestos?

Mr. House: Yes, sir.

Mr. Carter: Does the fire box door get very hot sometimes?

Mr. House: Yes, sir.

Mr. Carter: The heat from the fire box door. Now, I notice something very peculiar about this report here. The last three trips are all from Akron to McCook. Now, one trip on which you were, you had 3,961 tons, I think, and you burned 7 tons of coal; and the next fireman came out, and he only had 1,793, which was less than one-half, and he burned 7 tons of coal; and the next man, he had 2,780 tons, and he burned 7 tons of coal. Does it indicate that it does not make any difference whether you have a big or a little train; you always burn seven tons of coal? Is that right?

Mr. House: No, sir. That never has been my experience.

Mr. Carter: Do you believe it is practical to burn the same amount of coal going over the same division, one time with 1,793 tons, and another time with 3,961 tons, both times burning exactly 7 tons of coal?

Mr. House: No, sir; I don't believe it would work that way, unless with the small train there would be a bad stormy day, and the wind blowing hard.

Mr. Carter: Well, do you believe it is possible to burn exactly 7 tons of coal on those three trains?

Mr. House: No, sir, I do not.

Mr. Carter: Now, train extra on September 25, Akron to McCook; and another extra on September 27, Akron to McCook; and another extra on September 28, Akron to McCook; the first extra had 3,961 tons; the next one had only 1,793 tons; and the last one had 2,780 tons, all with the same locomotive, and each trip they burned exactly 7 tons. Does that sound reasonable?

Mr. House: No, sir, it does not.

Mr. Carter: Well, how much did you burn when you were on this heavy trip?

Mr. House: The first trip going west, do you mean?

Mr. Carter: Yes, the extra here, from Akron to McCook on September 25.

Mr. House: I would imagine—

Mr. Carter: You were fourteen hours going over the road. You understand you only worked 1 hour and 20 minutes.

Mr. House: As far as I can remember, I imagine it was in the neighborhood of from 8 to 10 tons. I don't remember exactly.

Mr. Carter: Well, according to this test made by Mr. Willsie, you burned 7 tons in 1 hour and 13 minutes. Do you think it is possible?

Mr. Sheean: Well, did Mr. Willsie say he burned it in 1 hour and 13 minutes?

Mr. Carter: Maybe I am mistaken.

Mr. Sheean: He said he was on the road over 14 hours. I suppose he burned it during those 14 hours.

Mr. Carter: Well, read A.

Mr. Sheean: Yes.

Mr. Carter: How much?

Mr. Sheean: One hour and 13 minutes.

Mr. Carter: Now, of the 14 hours—

Mr. Sheean: I was just trying to make clear to you, Mr. Carter, that the matter of putting the coal into the fire box, and the length of time it took to burn the coal, were two different propositions. Your question was that it only took 1 hour and 13 minutes to burn the coal.

Mr. Carter: Oh, I beg your pardon. It only took that long to put the coal into the fire box. It took 1 hour and 13 minutes to put it in, and 14 hours to burn it, is that right?

Mr. House: I imagine it burns quicker than that.

Mr. Carter: But he says you only burned 7 tons on that trip, and he says this man Walter, who had less than half the tonnage, going in the same direction the next day, burned the same 7 tons; and the next day—well, that had already been burned; another 7 tons. And the next day, a man named Bowen, he had 2,788 tons of freight, and he burned 7 tons. Well, I guess that is all.

CROSS EXAMINATION.

Mr. Sheean: Mr. House, do you think there is any difference at all in the amount of coal that is consumed as between fast and slow trains, in making this run? I mean between Akron and McCook.

Mr. House: No. On slower trains, of course, there is more time consumed during the trip.

Mr. Sheean: More time during the trip. And during the same period of time, then, on a passenger train, you burn more coal in the same period of time, don't you?

Mr. House: On a faster train, during the same period of time?

Mr. Sheean: Yes, that is more—

Mr. House: The same tonnage, you mean?

Mr. Sheean: No, not the same tonnage. Mr. Carter has called attention to the fact that these two trains here that burned the same amount of coal, were vastly different in tonnage, that one had a tonnage of 3,161, and the other a tonnage of 1,793. But the lighter tonnage train was on the road only 6 hours and 45 minutes. The train which runs more rapidly between those terminals consumes coal more rapidly per hour, does it not?

Mr. House: Well, if it has to be pulled the full length of the distance, it does.

Mr. Sheean: And you do agree with some of the witnesses, who have testified that a passenger fireman puts more coal in in an hour than one on a drag freight train?

Mr. House: Yes.

Mr. Sheean: That is pretty generally true, is it not?

Mr. House: Yes.

Mr. Sheean: So there is nothing at all startling about the fact that a train on the road quite a different period of time, and also having quite a different amount of tonnage, those two trains may consume the same amount of coal, the lighter tonnage train being on the road a much shorter time than the heavier train.

Mr. House: I suppose it could be possible.

Mr. Sheean: Well, now, on both of these trips, Mr. House, that you made, both east and westbound, Mr. Willsie and Mr. Woody rode on the engine the entire trip.

Mr. House: Practically all the way.

Mr. Sheean: You knew that the number of scoops of lignite that was being put into the fire box was being counted?

Mr. House: Yes, sir; I understood so.

Mr. Sheean: And you knew the time was being taken, as to how much time was being consumed in doing that work?

Mr. House: I understood that that was what they were doing.

Mr. Sheean: On the trip both ways?

Mr. House: Yes, sir.

Mr. Sheean: You fired this westbound trip, and consumed 24 tons of coal. That is westbound, is it, from—the westbound is the heavy?

Mr. House: Yes, sir, from McCook to Akron.

Mr. Sheean: Twenty-four tons of coal, about, were consumed on that trip?

Mr. House: That is shown on that up there. I think it was 26.

Mr. Sheean: On just what do you base the statement that it was 26 rather than 24?

Mr. House: On my judgment.

Mr. Sheean: Do you remember where lignite was taken on?

Mr. House: At Denkleman and at Ray.

Mr. Sheean: And how much was put on?

Mr. House: I think it was 8 tons at Denkleman and about 8 tons at Ray.

Mr. Sheean: That is your recollection now?

Mr. House: Yes.

Mr. Sheean: And when you were asked as to what your recollection was as to just how much coal went in here, how long after the occurrence took place, that is, until a week or so ago, were you ever asked by anyone how much coal was put on this engine, on the 24th day of September, 1914?

Mr. House: It was talked of. Of course, various firemen would ask me how much coal I burned, and it was impressed on my memory that way.

Mr. Carter: Everybody knew it was a test trip, didn't they?

Mr. House: They certainly did.

Mr. Sheean: And did they talk with Mr. Willsie and Mr. Woody as to what the coal consumption was on that trip?

Mr. House: I asked one of them, I don't remember which it was, how many scoops of coal we burned.

Mr. Sheean: And how many was it?

Mr. House: Two thousand, nine hundred and sixty scoops.

Mr. Sheean: And on the return trip did you make any similar inquiry?

Mr. House: No, sir, I did not.

Mr. Sheean: Now, you put all of the coal into the fire box on that westbound trip, excepting this six miles when you were running to keep ahead of a passenger train?

Mr. House: No, sir; the engineer fired some distance, I don't remember just how long, when I ate my lunch; and Mr. Willsie fired part of the day.

Mr. Sheean: While you were eating lunch?

Mr. House: No, Mr. Willsie didn't fire when I was eating lunch.

Mr. Sheean: When was it Mr. Willsie fired?

Mr. House: It was between the towns of Yuma and Otis.

Mr. Sheean: And while you were eating your lunch the engineer kept up the fire?

Mr. House: Yes.

Mr. Sheean: And then you both fired over this distance of six miles, in order to avoid going into a siding?

Mr. House: It was a case of wherever we went there was a solid passenger train. It was the first passenger train, when we met them.

Mr. Sheean: You were trying to avoid delay?

Mr. House: Get as far as we could. Save delay on our train and get on.

Mr. Sheean: And over a distance of six miles you both fired?

Mr. House: Yes, sir.

Mr. Sheean: Now, you have given all the assistance that was given you on that trip—described all the assistance that was given you?

Mr. House: I think so.

Mr. Sheean: And the remainder of this 24 or 26 tons, whichever it was, you fired?

Mr. House: Yes.

Mr. Sheean: That is all.

RE-DIRECT EXAMINATION.

Mr. Carter: Did you ever fire a fast passenger train, a heavy passenger?

Mr. House: Yes, sir.

Mr. Carter: On account of the high speed and the heavy train, you burn coal very rapidly, do you not?

Mr. House: Yes, sir.

Mr. Carter: Do you think that a passenger fireman should receive a higher rate of wages per hour, considering the hours he is on duty, than a freight man?

Mr. House: I think he works considerably harder during the period of time he works, than a freight man does.

Mr. Carter: He does almost a day's work in the five hours he works, doesn't he?

Mr. House: He does a full day's work in three hours.

Mr. Carter: About as hard work as a man can imagine?

Mr. House: Yes, sir.

Mr. Carter: Now how many scoops of coal did you say that was reported?

Mr. House: I think it was 2,960 scoops, as nearly as I can remember.

Mr. Carter: Well, it would depend entirely on how much method, would it not?

coal was in a scoop, as to how much coal you burned by that

Mr. House: Yes, sir.

Mr. Carter: If it was 18 pounds it would be 26.24. If it was 16 pounds it would be 23.68 tons. Now, is it a fact that you get exactly the same amount of coal on a scoop shovel every time you reach for coal?

Mr. House: No, sir.

Mr. Carter: Are there any two scoops of coal that will weigh within a pound of each other ordinarily?

Mr. House: No, there are not.

Mr. Carter: It would depend upon the rapidity of firing, would it not?

Mr. House: Yes, sir, and the nature of the coal.

Mr. Carter: And the nature of the coal, and the distance of the coal?

Mr. House: Yes, sir.

Mr. Carter: Now, it was brought out here that because this train was light and only had 1,793 tons, against 3,900 tons, and made the trip in 6 hours and 45 minutes instead of 14 hours, that you burned the same amount of coal. Now suppose we would get that down to a light engine and run over the road as fast as you could, would it still burn the same number of tons of coal?

Mr. House: No, sir, I don't think so.

Mr. Carter: That is all.

Mr. Sheean: That is all.

Mr. C. W. WEIDITZ was called as a witness in rebuttal and having been first duly sworn testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and place of residence.

Mr. Weiditz: C. W. Weiditz, Sheridan, Wyoming.

Mr. Carter: What is your employment at the present?

Mr. Weiditz: Locomotive fireman.

Mr. Carter: By what road are you employed?

Mr. Weiditz: C., B. & Q.

Mr. Carter: Are you the same Weiditz that made a test trip with Mr. Willsie?

Mr. Weiditz: Yes, sir.

Mr. Carter: On October 4th, 1914?

Mr. Weiditz: Yes, sir.

Mr. Carter: You have examined the details of that trip?

Mr. Weiditz: I have.

Mr. Carter: Now will you describe that trip? According to this report of Mr. Willsie, you left Edgemont at 12 o'clock noon and you got into Gillette at 11:55 P. M. Now what did you actually do?

Mr. Weiditz: We left Edgemont, S. D., at 12 o'clock noon, and we went as far as Spencer, that is 39 miles, and there we were relieved, that is we met another train there and we traded engines. They took our engine and we took theirs and we went back to Edgemont.

Mr. Carter: And you never did get through then to this place, Gillette, on that trip?

Mr. Weiditz: No, sir.

Mr. Carter: Another fireman went through?

Mr. Weiditz: Yes, sir.

Mr. Carter: Is that shown here on this report?

Mr. Weiditz: It is not.

Mr. Carter: Well, now, how long did you work on this trip, about?

Mr. Weiditz: From the time I left Edgemont till I returned, I worked 5 hours and 15 minutes.

Mr. Carter: Now how much coal did you burn that 5 hours and 15 minutes?

Mr. Weiditz: I should judge about 9 or 10 tons.

Mr. Carter: How many miles?

Mr. Weiditz: Well, there would be 68 miles altogether.

Mr. Carter: 68 miles. Were you pretty busy during the 5 hours you were on that trip?

Mr. Weiditz: Yes, sir.

Mr. Carter: Was the coal pretty fair on that trip?

Mr. Weiditz: Why, it was better coal than we generally get.

Mr. Carter: You noticed that, did you?

Mr. Weiditz: I noticed it, and the engineer called my attention to it.

Mr. Carter: Well, did you bring your engine back, or did your engine go through when you traded engines?

Mr. Weiditz: The engine that we started out with went on through.

Mr. Carter: Well, you missed using that good coal, didn't you?

Mr. Weiditz: I did.

Mr. Carter: And there is where you were unfortunate. This time given here as about the time you worked, I suppose you do not agree with that, 3 hours and 47 minutes putting in coal, out of 13 hours?

Mr. Weiditz: No, sir.

Mr. Carter: And taking all of your manual labor, it was only 4 hours and 27 minutes out of 13 hours and ten minutes. Or that is another figure, isn't it?

Mr. Weiditz: That is another figure.

Mr. Carter: That is a mistake, then. You did not go through on this trip then, did you? I think the report indicates that.

Mr. Weiditz: No, sir, I did not.

Mr. Carter: That is all.

CROSS EXAMINATION.

Mr. Sheean: How far was the run out, I did not follow on that, that you went with the engine?

Mr. Weiditz: That is, the engine we started out with went 39 miles.

Mr. Sheean: And then you got another engine back?

Mr. Weiditz: Yes. We traded engines, and the crew that we met took the engine that we had, and we took theirs and returned to Edgemont.

Mr. Sheean: That was just an arrangement between you and the other crew, was it?

Mr. Weiditz: Well, the other crew got an order from the dispatcher to do so, as it was their regular engine.

Mr. Sheean: Their regular engine?

Mr. Weiditz: Yes.

Mr. Sheean: Changed engineers at Spencer, 39 miles from Edgemont, engineer Wehr. That was the trip, was it.

Mr. Weiditz: That was the engineer we changed engines with.

Mr. Sheean: Fireman Shaefer?

Mr. Weiditz: Yes, sir.

Mr. Sheean: Account of engine 5288 being their regular engine?

Mr. Weiditz: Yes, sir.

Mr. Sheean: That was the trip, was it?

Mr. Weiditz: Yes.

Mr. Sheean: Then you fired on 39 miles of the trip?

Mr. Weiditz: Yes, sir, going up the hill.

Mr. Sheean: Going up the hill. How long did it take you?

Mr. Weiditz: I don't know exactly. About three hours and one-half or four hours, something like that.

Mr. Sheean: And during that three and one-half or four hours do you know how many scoops of coal you put in?

Mr. Weiditz: I do not.

Mr. Sheean: No idea of that at all?

Mr. Weiditz: No.

Mr. Sheean: You kept no record of it in any way?

Mr. Weiditz: No.

Mr. Sheean: And then at that point who was it that relieved you?

Mr. Weiditz: Mr. Shaefer.

Mr. Sheean: Mr. Shaefer took your place?

Mr. Weiditz: Yes.

Mr. Carter: Pardon me. Have you got a different report there, Mr. Sheean, than that which was presented to the Board?

Mr. Sheean: No, this is the one that was filed, Mr. Carter. This is the log attached to it.

Mr. Carter: Does that indicate that there was an error made in the report that was presented to the Board?

Mr. Sheean: No. You only quoted one sheet. The log of each trip is filed on it too, and that is the log here.

Mr. Carter: Then there was an error in making up this report? Isn't that a duplicate of this?

Mr. Sheean: Why, this summarizes all of the trips, Mr.

Carter, and then it is filed here. There was a log of each trip that was filed also.

Mr. Carter: Isn't this an exact copy of the log here, or should it not be, I mean?

Mr. Stone: Isn't this supposed to be a copy of the log?

Mr. Sheean: Yes, except the detail, and that shows that on that particular trip there was a change made of the two men.

Mr. Carter: That would indicate then that the log is perhaps different from the evidence submitted to the Board?

Mr. Sheean: No, the log was filed, Mr. Carter.

Mr. Carter: Was it?

Mr. Sheean: Yes, all of these papers were filed, and we have only taken the summary. But the note shows that on that particular trip "changed engineers at Spencer, 39 miles from Edgemont, Engineer Wehr, Fireman Shaefer, account of engine 5288 being their regular engine."

Mr. Weiditz: Yes, sir.

Mr. Sheean: And during the 39 miles of the trip that you fired, you have no record?

Mr. Weiditz: No, I have no record.

Mr. Sheean: Or cannot give us any idea of how many scoops of coal you put in?

Mr. Weiditz: No.

Mr. Sheean: That is all.

RE-DIRECT EXAMINATION.

Mr. Carter: Do you have hot fireboxes out there the same as the other men talked about?

Mr. Weiditz: Yes, sir.

Mr. Carter: Do you have to use pads?

Mr. Weiditz: Yes, sir, always.

Mr. Carter: What kind of pads do you use?

Mr. Weiditz: Canvas is the only thing we can get hold of.

Mr. Carter: You use canvas instead of asbestos?

Mr. Weiditz: Yes.

Mr. Carter: That is all.

RE-CROSS EXAMINATION.

Mr. Sheean: You would not know, or you are not prepared to say whether the time of firing began at 11:58, and you were through at 1:59, on that 39 miles?

Mr. Weiditz: No, I have no way of knowing.

Mr. Sheean: You could not say whether that was right or not?

Mr. Weiditz: No.

Mr. Sheean: Two fifty-three, I should say, when you got through?

Mr. Weiditz: I have no idea.

Mr. Sheean: And you could not say whether or not during that time you put in 2,735 scoops of coal?

Mr. Weiditz: We were pretty busy changing our supplies, and I do not remember what time it was when we changed engines.

Mr. Sheean: You have no record at the time, and have no recollection now that would enable you to give us any idea as to the number of scoops of coal used?

Mr. Weiditz: No.

Mr. Sheean: That is all.

P. R. JENKINS, was called as a witness in rebuttal and having been first duly sworn testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and place of residence.

Mr. Jenkins: P. R. Jenkins, Beardstown, Illinois.

Mr. Carter: What is your occupation?

Mr. Jenkins: Fireman on the Burlington road.

Mr. Carter: Are you the same P. R. Jenkins who was reported in this test trip here?

Mr. Jenkins: I am.

Mr. Carter: Mr. Jenkins, according to this test trip, you were 15 hours and 15 minutes on duty and the actual manual labor performed was only 4 hours and 29 minutes. Do you believe that is a fair statement?

Mr. Jenkins: I was only on duty 14 hours and 15 minutes, and I was more time working than that, than the four hours and 30 minutes.

Mr. Carter: You were working a good deal more than is shown here?

Mr. Jenkins: Yes, sir.

Mr. Carter: It is shown here that you were at rest, stand-

ing in the gangway or seated on the seat box 10 hours and 46 minutes. That is 10 hours and 46 minutes you did not even look in the firebox. Do you think you rested 10 hours and 46 minutes on this trip?

Mr. Jenkins: No, sir.

Mr. Carter: You worked a good deal more than that, didn't you?

Mr. Jenkins: Yes, sir.

Mr. Carter: Now it is shown here that you burned 17 tons of coal. How much coal do you think you burned?

Mr. Jenkins: 22 tons.

Mr. Carter: Why do you say that?

Mr. Jenkins: Well, because the tanks will hold about 18 tons, and from the starting out point to the first coal chute it was more than two-thirds gone, that would be 12 tons. And then, from there on in, it was quite two-thirds back, and I counted that ten tons. That would make 22 tons.

Mr. Carter: Have you more faith in your judgment of the coal than you would of the scoop shovel scales?

Mr. Jenkins: That is a poor way to weigh coal, I think.

Mr. Carter: Do you think we ought to have scale inspectors if we are going to weigh coal on a scoop? If it is necessary to get accurate weights, as it is in commerce, to have the scales inspected, you do not think it would be fair to the fireman to take an ordinary scoop shovel and weigh it in that, do you?

Mr. Jenkins: No, sir.

Mr. Carter: How many times did you clean the ash pan?

Mr. Jenkins: Four times.

Mr. Carter: He gives 11 seconds to you for cleaning the ash pan four times. I guess it is 11 seconds, it looks like it. Eleven seconds, I think, cleaning the ash pan four times. Tell us how you clean the ash pan?

Mr. Jenkins: Well, you get down on the ground.

Mr. Carter: Oh, that is 11 minutes. I will take it back.

Mr. Jenkins: You get down on the ground, and there are two lugs there that have to be taken out, and then you have got to pull the two levers down, and then you have got to walk to the front end and get a front end poker and punch it out. There are cinders that fall down in there and clinkers.

Mr. Carter: You think it took you longer than that to do this four times?

Mr. Jenkins: Yes, sir.

Mr. Carter: Now about shaking grates. You were, I believe, shaking grates 6 minutes here, something like that, and 54 seconds. How many times did you shake the grates?

Mr. Jenkins: I shook them six times.

Mr. Carter: Now how do you shake grates?

Mr. Jenkins: Well, you have a bar that is about 3½ feet long, and it has got to be placed on every one of these shakers and shake every one of them. I think there are 6.

Mr. Carter: How many sections are there of grates on these engines that you fire?

Mr. Jenkins: Six. Three on each side.

Mr. Carter: You have to shake them how?

Mr. Jenkins: Every one separate.

Mr. Carter: Quite a job?

Mr. Jenkins: Yes.

Mr. Carter: If your fire is hot and there are clinkers there it is very difficult to break them loose?

Mr. Jenkins: Very hard sometimes.

Mr. Carter: Sometimes the engineer helps you?

Mr. Jenkins: Yes, sir.

Mr. Carter: Well, did you have to put in much time breaking the honeycomb from the flue during this trip?

Mr. Jenkins: I knocked it off twice.

Mr. Carter: Is that an easy job or a hard job with a hot fire?

Mr. Jenkins: Why, it is a pretty hard job.

Mr. Carter: About how long do you think you spent doing that?

Mr. Jenkins: About 20 minutes.

Mr. Carter: About ten minutes each time you cleaned it off?

Mr. Jenkins: Yes, about ten minutes each time.

Mr. Carter: Why did you do that?

Mr. Jenkins: Why, to make the engine a free steamer and burn less coal.

Mr. Carter: And after doing all this work that you describe, you were at rest or at ease either on the seat box or in

the gangway ten hours and 46 minutes out of the 15 hours and 15 minutes according to this report?

Mr. Jenkins: That is not so.

Mr. Carter: It is not fair at all, is it?

Mr. Jenkins: No, sir.

Mr. Carter: That is all.

CROSS EXAMINATION.

Mr. Sheean: Mr. Jenkins, how much time did you figure that, this last work you have been describing, how much time was it, thirty minutes, did you say?

Mr. Stone: Twenty minutes.

Mr. Jenkins: Twenty minutes.

Mr. Sheean: Twenty minutes. Then the other work that you had been describing before that, some physical work, how much time was spent on that?

Mr. Jenkins: Oh, about thirty minutes.

Mr. Sheean: Thirty minutes. Now, what other work outside of the shoveling of the coal was there on the trip?

Mr. Jenkins: Well, I fixed the head-light once.

Mr. Sheean: How long did that take?

Mr. Jenkins: Oh, that took about ten minutes, I guess.

Mr. Sheean: About ten minutes. Now what else?

Mr. Jenkins: Well, our cab lights went out on us. They are electric cab lights. And we had to go back to the car that was attached to the train, and get lanterns. We had the dynamometer car with us, and we went back there and got lanterns for our gauge lights and water glass lights.

Mr. Sheean: You went back and got lights. What else?

Mr. Jenkins: Well, they were in this car. It is a Burlington car that they had with them, that the test men had with them.

Mr. Sheean: You went back and got electric bulbs, were they, or what?

Mr. Jenkins: No, they were lanterns. They brought those over, though.

Mr. Sheean: Well, the getting of those lamps did not tax your physical strength?

Mr. Jenkins: No.

Mr. Sheean: Now, what other work outside of the shoveling of the coal on the trip did you do?

Mr. Jenkins: I took water six times.

Mr. Sheean: And how long each time of taking water?

Mr. Jenkins: Well, it is about a 9,000 gallon tank, and it takes about 10 or 12 minutes.

Mr. Sheean: Ten or 12 minutes each time?

Mr. Jenkins: Yes, sir.

Mr. Sheean: And you took water six times?

Mr. Jenkins: Yes, sir.

Mr. Sheean: So that of this time on the road here, you were at the water tanks for an hour, that is 6 ten-minute stops; six times 10 would be 60?

Mr. Jenkins: Yes, sir.

Mr. Sheean: There would be one hour of this time that you were taking water?

Mr. Jenkins: Yes, sir.

Mr. Sheean: Now does that cover all of the time outside of the shoveling of the coal?

Mr. Jenkins: Well, there was cleaning up the deck, the coal was spilled around by the shovel in putting it into the fire-box, and the deck had to be cleaned.

Mr. Sheean: That, I suppose, like the shoveling of coal you kept no special track of, the time of that?

Mr. Jenkins: No, sir, I could not do that.

Mr. Sheean: You could not do that. Now this record shows as I have read it here, that there is credit given you for an hour and 19 minutes of work besides the shoveling of the coal. You think that is about right, do you?

Mr. Jenkins: Well, I don't know.

Mr. Sheean: I mean outside of the time you were shoveling coal, other work, when you were in physical work; about an hour and 20 minutes or an hour and a half?

Mr. Jenkins: Oh, about an hour and a half or two hours, something like that.

Mr. Sheean: Now you, Mr. Jenkins, I take it, kept no count as to the number of shovels of coal that you put in anywhere?

Mr. Jenkins: I had something else to do besides count the number of shovels of coal.

Mr. Sheean: You did know, however, that the number that

were being put in were being counted by the observers on the train?

Mr. Jenkins: No, sir.

Mr. Sheean: You did not know that?

Mr. Jenkins: I did not know it.

Mr. Sheean: Did you have any talk with Mr. Willsie or the other gentleman that was with him as to what they were doing?

Mr. Jenkins: No, sir. They had their car with them, the dynamometer car, and I supposed they were testing the draw bars or something like that.

Mr. Sheean: But they rode up in the engine.

Mr. Jenkins: Mr. Woody, I believe it was, rode right up on tank and Mr. Willsie was on the engine most of the time.

Mr. Sheean: And you had a full tonnage train there?

Mr. Jenkins: Yes, sir.

Mr. Sheean: And made a distance of how much?

Mr. Jenkins: 136 miles.

Mr. Sheean: 136 miles. About how many tons?

Mr. Jenkins: 4,540. Isn't that what they show there?

Mr. Sheean: 4,540 tons; 75 cars.

Mr. Jenkins: 75 cars.

Mr. Sheean: I think that is all.

The Chairman: In firing an engine, what space of time intervenes from the time you make one fire until you are required to make another fire?

Mr. Jenkins: Well, that depends upon the grade. If it is a good bit upgrade, why the fires come pretty often.

The Chairman: "Pretty often" does not convey any idea to me. About what length of time? About how long between the time you make one fire and the time you are required to make another one, in going up a grade?

Mr. Jenkins: Well, the right way to fire an engine is to put in a fire in the engine and fire the engine slow. That is the best way, and about the easiest way.

Mr. Carter: Explain to the Chairman how long you would wait until you put in another one?

Mr. Jenkins: Oh, we wait 30 seconds or 15.

The Chairman: Well, when you are firing an engine slow, what is it then. What do you mean by that, when you are firing it slow?

Mr. Jenkins: Well, when you do what you call putting in a fire, you put in 12 or 14 shovelsful of coal without shutting the door.

The Chairman: Then how long do you wait until you put in more coal; for another fire?

Mr. Jenkins: Oh, wait about a minute or two minutes, as the case may be.

The Chairman: Now is that in a case where you are going up a grade, or is it that in ordinary practice?

Mr. Jenkins: Well, on this trip, that is all up grade for the first 57 miles. It is a pretty stiff grade. And from there on it is uphill and downhill.

The Chairman: Well, then, am I to understand, that in going up a grade, not more than a minute intervenes between the making of the fires?

Mr. Jenkins: That is about all. That is, the first 57 miles.

The Chairman: Well, now, how is it when you are on something like a level grade, approximately something like a level grade?

Mr. Jenkins: Well, the time is longer. It would be probably two to three minutes.

RE-CROSS EXAMINATION.

Mr. Sheean: Then the rolling one is even better for the fireman; he likes it better if there are slight ups and slight downs? I do not mean heavy grades.

Mr. Jenkins: No, you take a level track and that is the best.

Mr. Sheean: Just the dead level?

Mr. Jenkins: The dead level track.

Mr. Sheean: That is all.

RE-DIRECT EXAMINATION.

Mr. Carter: Now will you explain about how long it is between fires, or rather scoops of coal when you fire engines, you might say, scientifically, according to the rules of firing.

Mr. Jenkins: Oh, according to the rules, the way we are supposed to fire an engine, well it is the one shovel system, that is the name of it, and you put in one shovel of coal at a time, and shut the door, and then wait, oh, 30 seconds probably, or

40 seconds, and then you put in another. You are on the deck all the time practically, and you can't stand that with those engines on account of the heat from the door.

The Chairman: Is that kept up continuously?

Mr. Jenkins: That is what you are supposed to do. But a man cannot do that on account of the heat from the door, which is so great.

Mr. Carter: In practice you put in more than one shovel at a time, in going up grade?

Mr. Jenkins: Oh, yes, you put in more than one shovel, but you wait a short time, you know. So you are shoveling 14 shovels at a time, 14 shovels in at a time. You would be a longer time putting it in than you would if you would open the door and put it in all at once, you know.

The Chairman: That is all.

Mr. Burgess: But the actual duty of a fireman is, he puts the fire in, and then he many times has to pull his coal down and get ready for the next fire, and probably there are some coals shaken out in the gangway, and he scrapes that back, and probably sweeps his deck, and then steps to the gangway and gets a breath of air, and then steps back, and goes right back and starts over again, isn't that right?

Mr. Jenkins: Yes, sir.

Mr. Burgess: So that the fireman, while the engine is running, is practically in perpetual motion all the time.

Mr. Jenkins: He is busy all of his time.

Mr. Sheean: Except upon these engines there is the mechanical coal passer, isn't there?

Mr. Jenkins: Yes, the mechanical coal pusher.

Mr. Sheean: That is on the heavier type of power on that division of the Burlington?

Mr. Jenkins: Yes, sir.

Mr. Sheean: That is all.

Mr. Carter: That is all.

Mr. C. W. GRIER was called as a witness in rebuttal and having been first duly sworn testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and place of residence.

Mr. Grier: C. W. Grier; Pratt, Kansas.

Mr. Carter: What is your occupation?

Mr. Grier: Locomotive fireman.

Mr. Carter: On what railroad?

Mr. Grier: C., R. I. & P.

Mr. Carter: Now tell us what you do firing a locomotive on the Rock Island Railroad. You first start out, and about how soon are you called before you actually are in the terminal?

Mr. Grier: An hour and a half to two hours.

Mr. Carter: Are you paid for that hour and a half to two hours?

Mr. Grier: No, sir.

Mr. Carter: How much of that time are you paid for?

Mr. Grier: You are paid for the time you are called to leave.

Mr. Carter: And if you leave on time you would not be paid for anything?

Mr. Grier: No, sir.

Mr. Carter: On all these trips do the brakemen and engineers sometimes help you do your work?

Mr. Grier: Yes, sir.

Mr. Carter: Well, you look like a pretty robust fellow. Aren't you able to do it without the assistance of the engineer or the brakeman?

Mr. Grier: No, sir.

Mr. Carter: They volunteer their assistance to you, do they?

Mr. Grier: Yes, sir.

Mr. Carter: Now about how much do the tanks hold on your road, these sloping tanks?

Mr. Grier: 17 tons.

Mr. Carter: About how much will roll down without being shoveled down?

Mr. Grier: About 6 tons.

Mr. Carter: About 6 tons?

Mr. Grier: On some tanks 4 or 5, I would say.

Mr. Carter: But on the best tanks that you have on the Rock Island about 6 tons out of the 16 or 17 tons will come forward?

Mr. Grier: Yes, sir.

Mr. Carter: What brings the other part of it forward?

Mr. Grier: Shoveling it or pulling it down.

Mr. Carter: You don't have a coal pusher at all on the locomotives there?

Mr. Grier: On none of them.

Mr. Carter: Or on your division?

Mr. Grier: No, sir.

Mr. Carter: About how far do you get out on a division before you generally commence pulling down coal?

Mr. Grier: On westbound trains, 10 or 15 miles.

Mr. Carter: And then how many miles do you pull down coal twice until you take coal again?

Mr. Grier: Well, we quite frequently handle all the rest of it twice, and coal up again, and then go to the coal dock and take coal again, and handle that twice.

Mr. Carter: Do you ever clean fires on your division on the Rock Island Railroad?

Mr. Grier: Very near every trip between Harrington and Pratt, on westbound trains.

Mr. Carter: Do you have tools on your engines to clean fires with?

Mr. Grier: Yes, sir.

Mr. Carter: You could not clean them without fire-cleaning tools, could you?

Mr. Grier: No, sir. We have a clinker hook for that purpose.

Mr. Carter: And it is a fact that on the Rock Island road they do clean fires and have tools for cleaning fires, is that right?

Mr. Grier: Yes, sir.

Mr. Carter: Now, do you ever have honeycomb form on the flue sheets and crown sheets?

Mr. Grier: Yes, sir, when we have eastern coal, the flues nearly always honeycomb, and they provide bars at the different water tanks for knocking it off with.

Mr. Carter: And you have tools for doing all this work, have you?

Mr. Grier: Yes, sir.

Mr. Carter: About these new passenger engines and the Mikado freight engines, do they have brick arches?

Mr. Grier: Very near all of our heavy passenger engines

have brick arches, and our Mikado freight engines have brick arches.

Mr. Carter: Have you ever seen any of these brick arches fall down on the Rock Island road?

Mr. Grier: Several times.

Mr. Carter: What did you do when they fell down?

Mr. Grier: Pulled the arch out of the fire box.

Mr. Carter: And took the bricks out?

Mr. Grier: Yes.

Mr. Carter: Went right on?

Mr. Grier: Yes, sir.

Mr. Carter: Set out no cars?

Mr. Grier: No, sir.

Mr. Carter: Do you sometimes get these same engines without any bricks in them at all?

Mr. Grier: I have seen them go into terminals when the arch would fall down, and go out, and I wouldn't say what specified time, but several bricks were replacing the arch.

Mr. Carter: Without any arch in there at all?

Mr. Grier: Yes.

Mr. Carter: A brick arch does save coal, doesn't it?

Mr. Grier: I believe it does.

Mr. Carter: Is it very much hotter, to fire with a brick arch than without one?

Mr. Grier: Much more so.

Mr. Carter: Do you think the intense heat almost overcomes the saving of coal, so far as the fireman's labor is concerned?

Mr. Grier: I would rather they would not have an arch in them. I would rather shovel the coal than to put up with the heat.

Mr. Carter: When they have these brick arches, do the fire box frames get red hot sometimes?

Mr. Grier: The frame and the door—there is an extension, I should say about that long (illustrating)—and before you get eight miles out, on some of them, they are red hot and very near white hot.

Mr. Carter: And the reflection of that white heat and the fire in the fire box burns you?

Mr. Grier: Yes.

Mr. Carter: Burns your overalls?

Mr. Grier: Yes.

Mr. Carter: Have you been on several trips on the Rock Island Road, where the lubricators failed to work?

Mr. Grier: Yes.

Mr. Carter: Did they ever set out a train?

Mr. Grier: No, sir.

Mr. Carter: Went right on?

Mr. Grier: Yes, sir.

Mr. Carter: What did you do?

Mr. Grier: On most of these trips, the engineer would have me go out on the pilot and put oil through the relief valve while the train was in motion, and the engine shut off.

Mr. Carter: That is all.

CROSS EXAMINATION.

Mr. Sheean: What division is it you are running on?

Mr. Grier: The El Paso division.

Mr. Sheean: Between what terminals?

Mr. Grier: I work both ways out of Pratt, Kansas, between Pratt and Harrington and Pratt and Liberal.

Mr. Sheean: How long have you been with the Rock Island?

Mr. Grier: Since March 9, 1910.

Mr. Sheean: As fireman?

Mr. Grier: All of that time.

Mr. Sheean: And on the same division all of that time?

Mr. Grier: I will correct that a little. I worked out of Dalhart, about four months one time.

Mr. Sheean: You are firing out of Pratt now?

Mr. Grier: Yes.

Mr. Sheean: And have been, practically all of this time?

Mr. Grier: Yes.

Mr. Sheean: What is the type of engine used there—the heaviest on drivers that you have had occasion to use?

Mr. Grier: We do not go by weight on drivers, and I could not say.

Mr. Sheean: Do you know whether any of them weigh as high as 185,000 pounds on drivers?

Mr. Grier: I do not know what they weigh on drivers. I could not say.

Mr. Sheean: Just when was it that a train had the arch come down completely, on which you were firing, that went in with its tonnage?

Mr. Grier: What date?

Mr. Sheean: Yes.

Mr. Grier: I could not say.

Mr. Sheean: Where did the arch come down completely, and what was the terminal of the run, when that run was made?

Mr. Grier: I have had arches come down on the east end terminal, both at Pratt and Harrington.

Mr. Sheean: In what month did that occur?

Mr. Grier: I could not say.

Mr. Sheean: In what year did it occur?

Mr. Grier: I would say it was about two years ago.

Mr. Sheean: It would be the duty of the engineer to report a condition of that sort to the roundhouse, would it?

Mr. Grier: Well, I don't know whether it would or not. It happened so frequently, and they run them without arches, that I don't know whether they would report it or not. I am not an engineer, and I could not say.

Mr. Sheean: Can you give the name of the engineer and the run, on which a brick arch came down completely, and the run was completed with full tonnage?

Mr. Grier: I fired for Engineer Gifford most of the time.

Mr. Sheean: Engineer Gifford?

Mr. Grier: And I believe that happened on some trips with him, possibly. I could not say positively, but I was firing for him most of the time.

Mr. Sheean: And what is his full name?

Mr. Grier: Fred Gifford.

Mr. Sheean: He lives at Pratt, Kansas, does he?

Mr. Grier: Not now.

Mr. Sheean: Where does he live now?

Mr. Grier: It is my understanding that he is at Osawatomie, Kansas.

Mr. Sheean: Can you give the number of the engine on which the brick arch fell down completely, and which completed its trip with full tonnage?

Mr. Grier: No, sir.

Mr. Sheean: Or a general description of that engine, what its type was?

Mr. Grier: A 2500 Mikado type.

Mr. Sheean: A freight engine?

Mr. Grier: Yes.

Mr. Stone: The 2500 Mikado type weighs 243,000 pounds on drivers, either that or 238,000.

Mr. Sheean: What is the rate now paid on the Rock Island, on the engine you have been describing? Do you remember?

Mr. Grier: On through freight?

Mr. Sheean: Yes.

Mr. Grier: Firing?

Mr. Sheean: Yes.

Mr. Grier: \$3.75.

Mr. Sheean: And the terminals of the run you have been on are what distance apart?

Mr. Grier: On the east end, 127 miles, from Pratt to Harrington, and 136 miles from Pratt to Liberal.

Mr. Sheean: I think that is all.

Mr. Carter: That is all. Shall we call another witness?

The Chairman: It is so near 5 o'clock that we will suspend.

(Whereupon, at 4:55 o'clock P. M., March 11, 1915, an adjournment was taken to March 12, 1915, at 10 o'clock A. M.)



IN THE MATTER OF THE
 ARBITRATION
between the
 WESTERN RAILWAYS
and
 BROTHERHOOD OF LOCOMOTIVE
 ENGINEERS
and
 BROTHERHOOD OF LOCOMOTIVE FIRE-
 MEN AND ENGINEMEN
*under the Act approved July 15, 1913, by agree-
 ment dated August 3, 1914.*

Chicago, Illinois, March 12, 1915.

Met pursuant to adjournment at 10:05 A. M.

Present: Arbitrators and parties as before.

J. C. WHITE was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: Mr. White, state your name and place of residence.

Mr. White: J. C. White, Galesburg, Illinois.

Mr. Carter: What is your occupation?

Mr. White: Locomotive fireman.

Mr. Carter: In the employment of what railroad?

Mr. White: The C. B. & Q.

Mr. Carter: Have you been employed in freight service between Galesburg and Chicago?

Mr. White: Yes, sir.

Mr. Carter: What is the distance between Galesburg and Chicago.

Mr. White: 161 miles.

Mr. Carter: Have you found the work of firing a locomotive very difficult?

Mr. White: Yes.

Mr. Carter: About how much coal do you usually burn between Chicago and Galesburg?

Mr. White: Twenty-eight to thirty tons.

Mr. Carter: Are these superheated engines that you have been firing?

Mr. White: Some of them are.

Mr. Carter: Don't you find that superheated engines burn very little coal?

Mr. White: Well, there is not much difference.

Mr. Carter: Do you think one burns about as much as the other?

Mr. White: Yes.

Mr. Carter: Then do you say that the superheated engines are hard to fire?

Mr. White: Yes.

Mr. Carter: Have you ever played out on the road, that is, become exhausted so that you could go no further as a fireman?

Mr. White: Yes.

Mr. Carter: When did a case of this first happen to you?

Mr. White: It was in August, 1913.

Mr. Carter: Have you had a recent case?

Mr. White: Yes.

Mr. Carter: Will you describe that trip, and what happened to you?

Mr. White: It was in July, 1914, the other case when I played out.

Mr. Carter: Did you leave the engine?

Mr. White: Yes.

Mr. Carter: Who fired the engine in?

Mr. White: At this time we got a fireman at Buda, Illinois, to relieve me.

Mr. Carter: What did you do—go back in the caboose?

Mr. White: Yes, rode the way car in.

Mr. Carter: You were quite sick, were you?

Mr. White: Yes.

Mr. Carter: From overheating?

Mr. White: Yes.

Mr. Carter: Describe the most recent case you had of being overcome by the heat.

Mr. White: This was the 6th of February, I was ordered out of here.

Mr. Carter: You mean last month?

Mr. White: Yes. I was ordered out at 10:15. When I got down to Buda, Illinois, about two-thirds of the way over the road, my left side became numb, and the engineer and brakeman fired the engine on in for me. On the 7th, the doctor was called, and I have been under the doctor's care ever since.

Mr. Carter: Have you a statement from your physician?

Mr. White: Yes.

Mr. Carter: Is this paper which I hold in my hand, that statement from your physician?

Mr. White: Yes.

Mr. Carter: Just read that into the record.

Mr. White: It says:

"This is to certify that I saw Mr. J. C. White on the night of Feb. 7, 1915, and he was suffering a partial paralysis of his left side of face, left hand and arm, left foot and leg, and at that time partial aphasia. From the history of his condition and present illness, this man's condition has been brought on by over-exertion and extreme heat in his engine. This man having shoveled about thirty-two tons of coal coming from Chicago on his last trip.

(Signed) F. G. HALL, M. D."

"Acknowledged before me this 8th day of March, 1915.

(Signed) W. H. COFFEY, Police Magistrate."

Mr. Carter: That is an affidavit with a regular jurat?

Mr. White: Yes.

Mr. Carter: And you have been disabled from doing this work on account of this trip, you think?

Mr. White: Yes.

Mr. Carter: Do you think you will ever be able to return to the work?

Mr. White: I don't know whether I ever will or not.

Mr. Carter: Are you improving?

Mr. White: Very little.

Mr. Carter: Do you know of other firemen on this same division who have been overheated or exhausted so they had to give up their engines?

Mr. White: Yes, sir.

Mr. Carter: What became of them afterwards—some of them at least?

Mr. White: Well, one of the fellows is at Sheridan, Wyo., or he was, the last I heard of him.

Mr. Carter: Did he become exhausted, overheated, or, as we say, played out, on the road?

Mr. White: Yes, sir.

Mr. Carter: Was he relieved like you were?

Mr. White: Yes, sir.

Mr. Carter: Did he ever go back to firing again?

Mr. White: No, sir.

Mr. Carter: Do you know of any other similar cases?

Mr. White: Yes, sir.

Mr. Carter: It is not unusual for firemen to become exhausted in attempting to fire these big engines?

Mr. White: Yes, they do very frequently.

Mr. Carter: Is this the character of the sheet that you use?

Mr. White: Yes, sir.

Mr. Carter: Is that asbestos?

Mr. White: Yes, sir.

Mr. Carter: Do you have to use that sheet?

Mr. White: Yes.

Mr. Carter: Why do you have to use that sheet?

Mr. White: To keep the heat from burning your overalls and your legs.

Mr. Carter: That is on these superheated engines?

Mr. White: Yes, sir.

Mr. Carter: And you burn this much coal on these superheater engines?

Mr. White: Yes, sir.

Mr. Carter: That is all.

Mr. Burgess: May I look at that sheet, Mr. Carter; I want to see that myself.

CROSS EXAMINATION.

Mr. Sheehan: Mr. White, how long have you fired on this division?

Mr. White: About 22 months.

Mr. Sheean: And had you fired on some other division before that? Or has all your work been there?

Mr. White: Well, I worked on the St. Joe division of the Burlington in 1912.

Mr. Sheean: And you went into some other line of work then?

Mr. White: Well, I worked at the Galesburg Water Co., fired there, before I got on the "Q" this last time.

Mr. Sheean: And then entered the Burlington's employ, about 22 months ago.

Mr. White: Yes.

Mr. Sheean: Here on the run between Chicago and Galesburg?

Mr. White: Yes.

Mr. Sheean: And on that division how many superheated engines are there, do you know?

Mr. White: Well, I could not say as to that.

Mr. Sheean: You say that you have fired both the saturated and the superheated?

Mr. White: Yes, sir.

Mr. Sheean: With the same weight on drivers?

Mr. White: No.

Mr. Sheean: That is, the superheated engine is a larger engine than the other.

Mr. White: Yes, sir.

Mr. Sheean: And on the larger superheated engine you fired about the same amount of coal that you did on the small saturated?

Mr. White: The larger engines take more coal.

Mr. Sheean: I thought you said on the direct that there is not much difference in the coal between the saturated and the superheated.

Mr. White: They have got smaller engines superheated too, smaller class.

Mr. Sheean: About what weight on drivers?

Mr. White: Well, I don't know exactly what they do weigh.

Mr. Sheean: And how many classes of engines are there on that division that are superheated?

Mr. White: There are four.

Mr. Sheean: Four classes that are superheated?

Mr. White: Yes, sir.

Mr. Sheean: And different sizes and different weights?

Mr. White: Yes, sir.

Mr. Sheean: You were in through freight service all the time?

Mr. White: Yes, sir.

Mr. Sheean: Between Chicago and Galesburg?

Mr. White: Yes, sir.

Mr. Sheean: Which way is the heavy tonnage on that division?

Mr. White: East.

Mr. Sheean: East. And largely what?

Mr. White: Coal.

Mr. Sheean: Coal?

Mr. White: And wheat.

Mr. Sheean: Going back the other direction, about how much coal is used?

Mr. White: Well, there is not a great deal of difference.

Mr. Sheean: And about what length of time is the run ordinarily made in, going back?

Mr. White: Well, you hardly ever get over the road in twelve hours. About sixteen.

Mr. Sheean: How far is Buda from Chicago?

Mr. White: About 130 miles, somewhere along in there, from Chicago.

Mr. Sheean: And the division itself is what?

Mr. White: 161 miles.

Mr. Sheean: 161 miles. I think that is all.

RE-DIRECT EXAMINATION.

Mr. Stone: Mr. White, have you ever had any assistance from engineers, or brakemen, helping you fire the engine?

Mr. White: Yes, sir.

Mr. Stone: Quite often?

Mr. White: Yes, sir.

Mr. Stone: Is it a common practice on the Galesburg division for engineers and brakemen to help the fireman out on these heavy tonnage trains?

Mr. White: It is, yes, sir.

Mr. Stone: Well, neither the brakeman nor the engineer have to do this, do they?

Mr. White: No, sir.

Mr. Stone: They just simply do it because they realize you are overworked?

Mr. White: Yes, sir.

Mr. Stone: About how old are you, Mr. White?

Mr. White: Thirty-one.

Mr. Stone: How long have you been firing?

Mr. White: About six years.

Mr. Stone: And now, on account of the heavy work and the overheating, or something of that kind, you are through?

Mr. White: Yes, sir.

Mr. Stone: At an age when you ought to be at your best?

Mr. White: Yes, sir.

Mr. Stone: I think that is all.

Mr. Carter: Mr. White, have you been examined; have you been to a hospital and been examined, to see what was the matter with you?

Mr. White: I was sent up here to be examined at a hospital.

Mr. Carter: What did the hospital authorities say when they examined you?

Mr. White: Well, the Relief wanted me to go to the hospital, and come to find out, they wanted me to pay my expenses while I was at the hospital.

Mr. Carter: Who did that, you say?

Mr. White: The doctors, the Relief doctors.

Mr. Carter: Who are the Relief doctors?

Mr. White: Why, Morrissey, I believe, is his name, and Denney.

Mr. Carter: I know, but what do you mean by the Relief doctors?

Mr. White: Well, that is the Company doctors they have.

Mr. Carter: You say they wanted you to go to the hospital?

Mr. White: Yes, sir.

Mr. Carter: And be examined?

Mr. White: Yes, sir.

Mr. Carter: Well, why didn't you go?

Mr. White: Well, I didn't think that I should have to pay

for the expense of being out there three or four days, to be examined.

Mr. Carter: Well, do you mean to say that you do not think you can afford to pay for the expense?

Mr. White: No, sir.

Mr. Carter: You are a member of the Relief; you are drawing benefits, are you not?

Mr. White: Yes, sir.

Mr. Carter: Have you a family?

Mr. White: No, sir.

Mr. Carter: And don't you expect to be examined?

Mr. White: I expect to some time.

Mr. Carter: That is all.

(Witness excused.)

CHARLES HINTZ was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and place of residence, Mr. Hintz?

Mr. Hintz: Charles Hintz, Green Bay, Wisconsin.

Mr. Carter: What is your occupation?

Mr. Hintz: Locomotive engineer.

Mr. Carter: In the service of what railroad?

Mr. Hintz: The Chicago & North Western.

Mr. Carter: How long have you been employed as an engineer on the Chicago & North Western Railroad?

Mr. Hintz: A little more than thirteen years.

Mr. Carter: Thirteen years. Did you fire before that, on the road?

Mr. Hintz: Yes, sir.

Mr. Carter: How long since you first entered the service of that company?

Mr. Hintz: As a fireman?

Mr. Carter: Yes, sir.

Mr. Hintz: I entered the service as a fireman in 1897, September 24, 1897.

Mr. Carter: Have you examined page 110 of Exhibit No. 26, which purports to show that you earned \$201.12 in the month of October, 1913, and how you earned it?

Mr. Hintz: I have.

Mr. Carter: You have a transcript from that exhibit?

Mr. Hintz: I have.

Mr. Carter: Mr. Hintz, it shows that you made \$201.12 in October, 1913. Is that true?

Mr. Hintz: Yes, sir.

Mr. Carter: How often have you made \$201.12 since you have been an engineer on the Chicago & North Western Railroad?

Mr. Hintz: Never before nor since.

Mr. Carter: In these thirteen years, you never reached \$200 on any other occasion; is that right?

Mr. Hintz: Yes, sir.

Mr. Carter: What were your average earnings during the fiscal year ending June 30, 1914?

Or rather, you haven't got that. What were your average earnings for the calendar year, 1913?

Mr. Hintz: About \$120 a month.

Mr. Carter: That is during all the months of the calendar year 1913, you averaged about \$120 a month?

Mr. Hintz: Yes, sir.

Mr. Carter: And notwithstanding the fact that you earned \$201.12 in October, 1913?

Mr. Hintz: Yes, sir.

Mr. Carter: Would that indicate that you earned less than \$120 some months?

Mr. Hintz: Yes, sir.

Mr. Carter: And after thirteen years' service and seniority as an engineer for the North Western Railroad?

Mr. Hintz: Yes, sir.

Mr. Carter: This exhibit, Mr. Hintz, showed that you made 33 complete trips in the month of October, 1913; the average hours per trip were 10. Does that agree with your records?

Mr. Hintz: No, it does not.

Mr. Carter: Will you explain how they succeeded in showing that you made 33 trips in the month of October, which averaged only ten hours per trip?

Mr. Hintz: I have examined my time book and find that the only way they could have figured it is when I have been tied up under the law, and started out again the next day, completing

my trip. They have considered the next day another trip. I was only receiving pay for the miles or hours during this time.

Mr. Carter: Now, explain some typical trip where you left and how far you got, and where you were tied up, when you started on with your trip, and how long it took you to complete it.

Mr. Hintz: On October 1, 1913, I was ordered from Butler to Green Bay, with a train on an extra, and I got as far as Calumet Yard. Calumet Yard is about, I think, 80 some miles from Butler, and my time was getting too short to reach Green Bay under the Service Law, so I was tied up at Calumet Yard and was taking the required amount of rest, and ordered out again to complete the trip the following day. For this I only received the hours from the time I left Calumet Yard until I arrived at Green Bay.

Mr. Carter: As though you had used the same number of hours continuously; that is, if you used 15 hours to Calumet yard, and how many hours after you left Calumet yard—about two hours, did you say?

Mr. Hintz: Calumet Yard to Green Bay?

Mr. Carter: Yes.

Mr. Hintz: I was 6 hours and 30 minutes all told.

Mr. Carter: Then you were paid for the hours before being tied up, plus the hours after being tied up, and not paid for the time while you were tied up. Is that right?

Mr. Hintz: Yes.

Mr. Carter: If this had been two trips really, would you not have received a full day's pay for each of both trips?

Mr. Hintz: Yes.

Mr. Carter: The Chicago & North Western Railroad considered it one trip when they paid you in this manner, did they not?

Mr. Hintz: I believe they should have.

Mr. Carter: That is, they did not pay you a minimum day for each of two separate trips?

Mr. Hintz: No, sir.

Mr. Carter: About how many times were you tied up during the month of October?

Mr. Hintz: I was tied up and towed into a terminal seven different times during that month.

Mr. Carter: Besides being tied up and continuing your own trip without being towed in?

Mr. Hintz: Yes.

Mr. Carter: Did you ever make short turn around trips in the month of October that are shown as two trips there?

Mr. Hintz: Yes.

Mr. Carter: Will you describe a typical turn around trip that is included in this exhibit as being two trips?

Mr. Hintz: I made a certain trip from Green Bay to a place called Wabeno and return.

Mr. Carter: Tell how far that is, and how you left and returned, and how long you stopped at Wabeno.

Mr. Hintz: I believe Wabeno is something in the neighborhood of 75 or 80 miles, just at a guess; and when we arrived at Wabeno we lost no time in turning there, but started back immediately.

Mr. Carter: How many miles did you make in the round trip?

Mr. Hintz: I would have to look in the record.

Mr. Carter: Oh, estimate it.

Mr. Hintz: I think something in the neighborhood of 150 run there.

Mr. Carter: Were you paid for two days, or were you paid for 150 miles turn around?

Mr. Hintz: I was paid for the total number of miles.

Mr. Carter: You were not paid for two trips then?

Mr. Hintz: No, sir.

Mr. Burgess: Pardon me, Mr. Carter, but if he has the exact mileage there, why cannot we have it?

Mr. Carter: Well, give the exact mileage. I wanted to save time, Mr. Burgess.

Mr. Hintz: The mileage I have for that trip is 155 miles.

Mr. Carter: Now according to the report of your work for October 1913, you made 33 trips, an average of 10 hours per trip. Mr. Hintz, do you think it is fair to the engineers in this movement to thus bring down the average hours per trip, when you are only paid as you have indicated here, and yet it is reported here as two trips instead of one?

Mr. Hintz: I do not.

Mr. Carter: For instance, if you were to go 15 hours and

be tied up for 8, and then ran 5 hours getting in, you would be 20 hours on the trip, in which you worked, in addition to the tie-up period, would you not?

Mr. Hintz: I don't believe I quite get that.

Mr. Carter: If you were 15 hours on the trip, and then were tied up for the usual rest period, and then proceeded to the end of your trip, taking 5 hours additional, that trip would be a 20 hour trip, would it not, from terminal to terminal?

Mr. Hintz: Yes, sir.

Mr. Carter: That is, it would be one trip of an average of 20 hours duration?

Mr. Hintz: Yes, sir.

Mr. Carter: And you are paid that way, are you not?

Mr. Hintz: Yes, sir.

Mr. Carter: But by reporting it in the exhibits here that you made two trips, one of 15 hours and one of 5, they are able to show that you made two trips of ten hours each. Is that right?

Mr. Hintz: I believe it is.

Mr. Carter: One of 15 and one of 5 is 20. Half of 20 is 10 hours for each trip, as would be shown here. Now the fact of the matter is you were on the road actually working 20 hours, and tied up we will say 8 hours. Is that true?

Mr. Hintz: Yes, sir.

Mr. Carter: Now, Mr. Hintz, why are you tied up on the road so often, or why are all the men tied up so often? Is it because of the heavier trains?

Mr. Hintz: Sometimes it is due to heavy trains, sometimes to heavy traffic, sometimes to other conditions.

Mr. Carter: Do you believe the burden of this tie-up should fall upon the engineers and firemen, or do you believe the railroads should be willing to pay continuous time from the time you leave the terminal until the time you reach the next terminal?

Mr. Hintz: I do.

Mr. Carter: Now this statement shows the total number of hours was 330.90. What does your time book show?

Mr. Hintz: My time book shows that I received pay for 347 hours and 58 minutes.

Mr. Carter: Then about 18 hours of the time for which you were actually paid by the North Western R. R. in October,

1913, they have not reported here when they tried to show how little you worked for the \$201, have they?

Mr. Hintz: I believe not.

Mr. Carter: Mr. Hintz, if this were a general rule in the preparation of all of the railroad's exhibits, it would not represent the facts, would it, so far as hours per trip or hours for the money received?

Mr. Hintz: No, sir.

Mr. Carter: That is all.

CROSS EXAMINATION.

Mr. Sheean: Mr. Hintz, you worked on 28 different calendar days of that month, did you not?

Mr. Hintz: Yes, sir.

Mr. Sheean: As shown here. And your total miles made were 2,715?

Mr. Hintz: About that. I have figured it 2,750.

Mr. Sheean: Well, is that counting the actual miles, or do you consider as the equivalent of miles certain allowances that are reduced to miles? That is, you convert hours and miles so frequently—I mean all railroad men, that I was wondering whether the 2,750 were actual miles, or—

Mr. Hintz: They are actual time card miles, as I figured them.

Mr. Sheean: This shows 2,715 miles. Now the actual hours reported here were 330.9. You make it 347.

Mr. Hintz: 347 hours and 58 minutes.

Mr. Sheean: Is that also the actual hours, or have you converted their value as being equivalent to a certain number?

Mr. Hintz: It does not include any preparatory time. It is the actual time between terminals, from the time I was ordered to leave until arriving at destination.

Mr. Sheean: Have you the details of that, Mr. Hintz, of just how you get the total of 347, instead of 330.90 on the different days?

Mr. Hintz: Yes, sir.

Mr. Sheean: You have your time slips for that month?

Mr. Hintz: Yes, sir.

Mr. Sheean: I wish you would just leave those, so that we

can check and find where the error is made, if you will, please. We have that here.

Mr. Carter: Mr. Chairman, I suggest Mr. Hintz will be glad to join with any representative of the railroads in checking his time. Will you not, Mr. Hintz?

Mr. Hintz: Yes, sir.

Mr. Carter: Be glad to meet any representative of the railroads?

Mr. Sheean: We want to straighten it out. We don't want to take the time here. No need of reading it into the record, then. Just straighten it out and see if we can find out where the difference is on that.

In the hours here, Mr. Hintz, the schedule of the North Western covers the tie-ups under the law, counting the hours for the time tied up, hours or miles whichever are greater, also after the rest period, then adding the miles to the terminal, or the hours. That is the North Western schedule, is it not, for paying in that way, I mean the present North Western schedule.

Mr. Hintz: Why, we are paid from the time of the tie-up until we arrive, or are towed into the destination, the miles or hours, whichever may be the greater.

Mr. Sheean: There was one trip you described here, in which you completed the trip in fifteen hours approximately to the tie-up point, and some six hours in completing the trip the next day after your rest period.

Mr. Hintz: After the rest period.

Mr. Sheean: And for that you were paid the fifteen hours plus the six hours?

Mr. Hintz: I was paid the 15 hours and 30 minutes on the previous day, and 6 hours and 30 minutes on the following day, for completing the trip.

Mr. Sheean: That is, you were paid for twenty-two hours, the equivalent of twenty-two hours?

Mr. Hintz: If that is what it figures up.

Mr. Sheean: Or, when they talk of days and hours being equal, you were paid for a little over two days, ten hours being the equivalent of a day?

Mr. Stone: Did you get a day and a half's pay the first day?

Mr. Hintz: I did not.

Mr. Shea: But during that time you were tied up eight hours?

Mr. Hintz: I don't just remember whether we were tied up eight hours or ten hours. We were tied up the length of time required by law.

Mr. Shea: Assuming that you were tied up eight hours, you were fifteen hours on the first leg of the trip, were you?

Mr. Hintz: Fifteen hours and 30 minutes.

Mr. Shea: Then you were tied up eight hours. That would be 23 hours. Then you consumed 6 hours in making the second leg of your trip?

Mr. Hintz: Six hours and 30 minutes.

Mr. Shea: That would be, all told, 29 hours and 30 minutes from the time you left your initial point until you completed your trip?

Mr. Hintz: Yes, sir.

Mr. Shea: Is that right?

Mr. Hintz: Yes, sir.

Mr. Sheehan: And you were under pay all of that time except during the time which, under the law, you were required to take rest?

Mr. Hintz: Yes, sir.

Mr. Sheehan: That is all.

Mr. Shea: Where do you live?

Mr. Hintz: Green Bay, Wisconsin.

Mr. Shea: Do you run out of that terminal?

Mr. Hintz: Most of the time.

Mr. Shea: When are you required to report for duty in beginning a trip?

Mr. Hintz: At Green Bay, it requires us to report almost an hour—between 45 minutes and an hour before leaving time.

Mr. Shea: When does your time begin?

Mr. Hintz: The time when the train is ordered to leave the terminal.

Mr. Shea: Under the rule, how much time are you required to have your engine out before the beginning of your trip?

Mr. Hintz: In Green Bay, we are required to have our engine out over the turntable 30 minutes before the leaving time of the train. At Butler, we are supposed to be up in the yard and on our train 30 minutes before the train is due to leave.

Mr. Shea: How much time are you required to be around in order to have your engine ready, in order to have her over, 30 minutes before the train is due to leave?

Mr. Hintz: It requires practically an hour.

Mr. Shea: Are you paid anything for that time?

Mr. Hintz: No, sir.

Mr. Shea: Then you give the company approximately one hour before the beginning of a trip for which you receive no compensation?

Mr. Hintz: Yes, sir.

Mr. Shea: How many trips did you make in the month of October?

Mr. Hintz: I worked 28 calendar days.

Mr. Shea: Then you gave to the company, free gratis, twenty-eight hours for that month, did you not? Did you have twenty-eight calls?

Mr. Hintz: Well, I would not say twenty-eight, because some of those trips were turn-around trips, and I had no preparatory time. My engine was ready.

Mr. Shea: Assuming that you did have twenty-eight calls, you would give the company twenty-eight hours gratis?

Mr. Hintz: Yes.

Mr. Shea: After you complete your trip, Mr. Hintz, how much time are you required to give, in order to make your reports, and so forth, without any compensation?

Mr. Hintz: We have to look our engine over and make out our coal ticket, and work report, and coal report, and other things. It requires practically half an hour.

Mr. Shea: Then, in making a trip, calculating the time consumed before you go out and the time consumed after you repeat the trip, approximately one hour and 30 minutes that you give to the company, without receiving any compensation?

Mr. Hintz: Yes.

Mr. Shea: That is all.

Mr. Burgess: Are you paid on the minute basis for final terminal delay? What I mean is, if you are over 30 minutes, do you get an hour, or are you paid on the minute basis?

Mr. Hintz: On arrival at destination?

Mr. Burgess: On arrival at destination.

Mr. Hintz: We do not receive anything unless we are delayed one full hour after we have our engine cut off from the train, with the train in on the designated track. Unless the time is one full hour, we do not receive anything.

Mr. Burgess: So that after you arrive at your destination, it is possible to work 58 or 59 minutes without compensation, is it?

Mr. Hintz: It would be possible.

Mr. Burgess: And 30 minutes in advance of leaving; that would be one hour and 30 minutes for which you would not receive any pay, unless the final terminal delay was over one hour. Is that right?

Mr. Hintz: I believe it is.

Mr. Burgess: You stated that you had run an engine thirteen years?

Mr. Hintz: A little over thirteen years.

Mr. Burgess: Are there brick arches in your engines?

Mr. Hintz: Not in all of them, but in most of them.

Mr. Burgess: Did you ever have a brick fall down?

Mr. Hintz: Yes, quite frequently.

Mr. Burgess: Did you give up your train when that happened?

Mr. Hintz: No, sir.

Mr. Burgess: Did you ever break a lubricator glass?

Mr. Hintz: Yes, many times.

Mr. Burgess: Did you set your train out when you did that?

Mr. Hintz: No, sir.

Mr. Burgess: That is all.

Mr. Sheean: That is all.

(Witness excused.)

CARL RUDOLPH was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and address.

Mr. Rudolph: Carl Rudolph, Peru, Indiana.

Mr. Carter: What is your occupation?

Mr. Rudolph: Locomotive fireman.

Mr. Carter: By what road are you employed?

Mr. Rudolph: The Wabash Railroad.

Mr. Carter: How long have you fired on the Wabash Railroad?

Mr. Rudolph: About eleven and a half years.

Mr. Carter: Have you ever been promoted?

Mr. Rudolph: No, sir.

Mr. Carter: Does it take a fireman eleven and one-half years on the Wabash before he is promoted?

Mr. Rudolph: Yes, and longer.

Mr. Carter: How long do you think it will be before you are promoted, at the present rate?

Mr. Rudolph: Probably fourteen or fifteen years.

Mr. Carter: It has been stated here that some of the engineers draw more wages than governors of states. Taking your past experience, when do you think you will be eligible for a governor's wages, as an engineer?

Mr. Rudolph: I don't think I will live that long.

Mr. Carter: You have fired freight most of the time, have you?

Mr. Rudolph: Yes.

Mr. Carter: Earlier in these proceedings, another fireman from the Wabash, a Mr. Jacoby, from Moberly, Missouri, testified that on the Wabash Railroad they were tied up under the law, had hard, long trips, sometimes were relieved, sometimes when they were not relieved. Subsequently a witness for the railroads indicated that Mr. Jacoby was mistaken. Now, you come from east of the River, do you not, on the Wabash?

Mr. Rudolph: Yes.

Mr. Carter: Take an extreme trip where you get over your division, as I understand, from Decatur, Ill., to Peru, Ind., without being tied up under the law, and yet are on duty a great many hours. Describe a trip now that you have in mind.

Mr. Rudolph: Well, on December 17, 1914, we were called to leave Decatur at 7:30 P. M.

Mr. Carter: 7:30 P. M.?

Mr. Rudolph: Yes, sir.

Mr. Carter: What date is that?

Mr. Rudolph: December 17, 1914. We arrived at Tilton at 2:50 A. M., a distance of 71 miles. The coal dock being out

of commission at this point, and they were coaling a high class freight engine ahead of ours, we went and got a lunch, and then went directly back to the engine. At 5:05 A. M., the roundhouse foreman informed us that we would be relieved until the engine was coaled up.

Mr. Carter: That is 2 hours and 15 minutes later?

Mr. Rudolph: Yes, sir.

Mr. Carter: You were not notified until 2 hours and 15 minutes later that you would be relieved until the engine was coaled up?

Mr. Rudolph: No, sir.

Mr. Carter: Then what happened?

Mr. Rudolph: He said we would be relieved until the engine was coaled. I asked him how long that would be, and he said about 6:30 or 7 o'clock. Well, being such a short period until the engine would go I did not think it advisable to go to bed, so I went to the roundhouse office and took a small iron grate for a pillow and laid down behind the stove and the engineer sat up in the chair. At 9 A. M., the roundhouse foreman told us that we would take our full eight hours' rest, but we would figure the time from 5:05 A. M. Well, I did not think that we had had any rest during this period of being around Tilton, so I sent a message to the dispatcher telling him I wanted 8 hours' rest from 9 A. M., as I could only get 4 hours' rest from 5:05 to 1 o'clock P. M. The dispatcher, as usual, did not answer the message. I went to bed at 9:10, and at 9:45 was called out of bed, after being in bed 35 minutes, to again resume duty, and we would tie up at 4 P. M., which would be at the expiration of 16 hours, deducting the time we stayed at Tilton and left the engine in charge of the man at Tilton. At 4 P. M., we arrived at Lafayette, Ind., which was a distance of 50 miles further, and we got a message there to take our train to East Yard and put it in what was known as a sawdust track at that point, and got back at the roundhouse at 4:30, when we were relieved, which was 30 minutes in excess.

Mr. Carter: How long had you been since you left Decatur until you were actually relieved at Lafayette?

Mr. Rudolph: About 21 hours.

Mr. Carter: Then you were actually relieved, you went to bed and got your rest, did you not?

Mr. Rudolph: Yes, sir.

Mr. Carter: Then what happened?

Mr. Rudolph: Well, I went to bed, was in bed for 6 hours, after we had changed clothes and washed up, and gone through the necessary process before retiring, and we were called at 1:30 for 2 A. M., which would give us 8 hours' rest, and I figured we were entitled to 10 hours, but we went on. We got the crew the next morning at 7:30, which would make the trip from Decatur to Peru, a distance of 172 miles, in 26 hours, and deducting the rest period from that.

Mr. Carter: The 8 hours that you actually had for rest?

Mr. Rudolph: Yes.

Mr. Carter: Were you at rest all those 8 hours?

Mr. Rudolph: Yes.

Mr. Carter: If you were tied up under the law, and were given 8 hours off duty as the law says, on a trip, a typical trip, about how much time could you actually be in bed resting?

Mr. Rudolph: From 5 hours and 30 minutes to 6 hours.

Mr. Carter: The law does not say anything about rest, does it? You are not acquainted with the law?

Mr. Rudolph: I don't exactly understand it.

Mr. Carter: The law only requires you to be off duty?

Mr. Rudolph: Yes, only requires you to be off duty.

Mr. Carter: And if they give you an iron pillow, an old broken grate off the stove, you are still off duty, but you are not getting much rest?

Mr. Rudolph: That is right.

Mr. Carter: Are there many tie-ups on this division?

Mr. Rudolph: Yes, sir.

Mr. Carter: About how many tie-ups do you yourself estimate there would be a month for all the engineers and firemen on the division?

Mr. Rudolph: Well, we have 17 crews working on this particular division, and I believe a fair estimate would be that there are 2 tied up a day.

Mr. Carter: You think that would be a fair estimate?

Mr. Rudolph: Yes, sir.

Mr. Carter: You don't know exactly what it would be?

Mr. Rudolph: No, sir, not exactly.

Mr. Carter: Now how long is this division, from Decatur to Peru?

Mr. Rudolph: 172 miles.

Mr. Carter: Was it always 172 miles?

Mr. Rudolph: No, sir.

Mr. Carter: Will you explain that?

Mr. Rudolph: At one time it was 101 miles from Peru to Tilton and 71 miles from Tilton to Decatur.

Mr. Carter: Well, why did they eliminate the terminal at Tilton?

Mr. Rudolph: To avoid paying 29 miles constructive mileage.

Mr. Carter: Between Tilton and Decatur?

Mr. Rudolph: Between Tilton and Decatur, yes, sir.

Mr. Carter: Formerly they paid 100 miles both ways for that 71 miles.

Mr. Rudolph: Yes, sir.

Mr. Carter: Did the engineers and firemen have a clause in their schedule that 100 miles or less, 10 hours or less would constitute a day's work in freight service?

Mr. Rudolph: Yes, sir.

Mr. Carter: And in order to avoid paying as per contract they eliminated the terminal at Tilton, did they?

Mr. Rudolph: Yes, sir.

Mr. Carter: And now you have to run 172 miles?

Mr. Rudolph: Yes, sir.

Mr. Carter: They have, however, avoided payment of the constructive mileage, have they not?

Mr. Rudolph: Yes, sir.

Mr. Carter: Would this indicate that in any agreement made, or in any arbitration award that might be reached, the railroads usually find a way of avoiding the expense?

Mr. Rudolph: I think it does.

Mr. Carter: Even though they make men work a day and a half sometimes to do it?

Mr. Rudolph: Yes, sir.

Mr. Carter: Do you think conditions are rapidly improving so far as the hours of service are concerned?

Mr. Rudolph: From my observation I do not think that they are.

Mr. Carter: Bad as ever?

Mr. Rudolph: Just about.

Mr. Carter: That is all.

CROSS EXAMINATION.

Mr. Sheean: When was the Tilton terminal abandoned or changed?

Mr. Rudolph: Well, I have not the exact figures; I think it was along in 1906.

Mr. Sheean: So that since 1906, at least, they have been running that as one division. Are you prepared to say now that all of the engineers and firemen operating on that division between Decatur and Peru will be satisfied to have re-established as two divisions that 172 mile division so that they could run 100 miles to Tilton, and the other 72 miles as another and separate division?

Mr. Rudolph: Well, I am not prepared to say as to how all the men feel with regard to that matter, no.

Mr. Sheean: And whether or not the change was made so as to give the men the opportunity of being paid for 172 miles, back in 1906, you don't know?

Mr. Rudolph: No, sir.

Mr. Sheean: The earnings of the men, of course, running it in two divisions, would be limited to 100 miles practically out of each terminal, if Tilton was a terminal?

Mr. Rudolph: The men would be assigned to those.

Mr. Sheean: Yes, and they would have just 100 miles for their day's work in either direction?

Mr. Rudolph: Well, I could not say as to that, because they would run turn around trips.

Mr. Sheean: Well, outside of running turn-around trips, on any straight away run wherever they paid this constructive mileage, that it has been intimated they were seeking to avoid, wherever that constructive mileage was paid on a straight away run, the earnings of the men would be limited to the 100 miles a day on that run?

Mr. Rudolph: Yes, sir.

Mr. Sheean: Now, whether or not that would be satisfactory to the men you don't know?

Mr. Rudolph: I do not.

Mr. Sheean: You had no personal participation in anything that led to the making of this long division of 172 miles?

Mr. Rudolph: No, sir.

Mr. Sheean: Whether it was at the request of the men or not, you don't know?

Mr. Rudolph: It was not at the request of the men.

Mr. Sheean: You had nothing to do with anything that led up to it yourself?

Mr. Rudolph: No, sir.

Mr. Sheean: Whether or not it was desirable that Tilton be established as a terminal you don't know?

Mr. Rudolph: It has been since.

Mr. Sheean: What is it?

Mr. Rudolph: It has been since.

Mr. Sheean: Established as a terminal?

Mr. Rudolph: No, it has been desirable to the freight men on our division.

Mr. Sheean: By all of them?

Mr. Rudolph: I can't say as to all of them, because I am not familiar with the men on the other division.

Mr. Sheean: How old are you, Mr. Rudolph?

Mr. Rudolph: Thirty years old.

Mr. Sheean: And you have been firing on that division 11½ years?

Mr. Rudolph: Yes, sir.

Mr. Sheean: In through freight all the time?

Mr. Rudolph: Yard engine for a few months at the beginning.

Mr. Sheean: And what is the type of power you are firing there now?

Mr. Rudolph: At the present time, since the first of January, I have been in passenger service, but I expect to be in freight service upon my return.

Mr. Sheean: Well, just before you went into the passenger service what kind of engine were you firing?

Mr. Rudolph: Mikado, 282.

Mr. Sheean: What is the weight on drivers of that engine?

Mr. Rudolph: 205,000 pounds.

Mr. Sheean: And how many years did you fire a Mikado, 208,000 pounds on drivers, over this 172 mile division?

Mr. Rudolph: Well, I am not prepared to state, because I have been intermittently in the passenger service for the last few years.

Mr. Sheean: Well, about how many years?

Mr. Rudolph: As an aggregate?

Mr. Sheean: Yes. About how many years were you firing on the Mikado engines there on this long freight division?

Mr. Rudolph: Well, I don't believe it has been a year altogether.

Mr. Sheean: Well, I mean in total spread of time. When did they put on the heavy Mikados down there?

Mr. Rudolph: Oh, I thought you meant in the shops. Well, those came in the fall of 1912.

Mr. Sheean: And during the greater part of that time you have been on the Mikado engine as a fireman, catching an occasional passenger run?

Mr. Rudolph: No, being promoted to passenger service for a period of a few months at a time.

Mr. Sheean: But a greater part of the time since 1912, your work has been on a Mikado weighing 208,000 pounds on drivers?

Mr. Rudolph: 205,000 pounds.

Mr. Sheean: Superheated?

Mr. Rudolph: No, sir.

Mr. Sheean: Most of these difficulties that you speak of with reference to the Hours of Service Law, could be eliminated by the creation of another division?

Mr. Rudolph: I believe they could.

Mr. Sheean: That is, cutting up this long run of 172 miles into two divisions?

Mr. Rudolph: Yes, sir.

Mr. Sheean: That is all.

RE-DIRECT EXAMINATION.

Mr. Carter: Mr. Rudolph, how long did you say these Mikados have been there?

Mr. Rudolph: Since the fall of 1912, on this division.

Mr. Carter: About two years last fall?

Mr. Rudolph: Yes, sir.

Mr. Carter: How much coal do they burn?

Mr. Rudolph: One way over the road?

Mr. Carter: Well, ordinarily.

Mr. Rudolph: Well, a very fair average would be 25 tons of coal one way.

Mr. Carter: How much have you burned?

Mr. Rudolph: I have burned 20 tons of coal.

Mr. Carter: Have other firemen had similar experiences?

Mr. Rudolph: Yes, sir.

Mr. Carter: You have statements to that effect, if you care to introduce them?

Mr. Rudolph: Yes, sir.

Mr. Carter: Regarding the elimination of this terminal at Tilton, would you like to see the terminal restored, so that you would not have to work so long and hard?

Mr. Rudolph: Yes, sir.

Mr. Carter: Is it not a fact that the engineers and firemen have now, and have had for some time, a formal request upon the officials of the Wabash Railroad, to restore the terminal at Tilton?

Mr. Rudolph: Yes, sir.

Mr. Carter: Would that formal request of the engineers and firemen indicate that they would like to have the old conditions there established?

Mr. Rudolph: It does.

Mr. Carter: And would it indicate that they never wanted them changed?

Mr. Rudolph: It does.

Mr. Stone: I understood you to say, when the old division was to Tilton, it was 101 miles.

Mr. Rudolph: Yes.

Mr. Stone: And then 71 miles from there on?

Mr. Rudolph: Yes, sir.

Mr. Stone: Under the old established plan, they paid 201 miles then for getting a freight train over that division, did they not—over the two divisions; paid 101 miles to Tilton, and paid 100 miles between Tilton and Decatur?

Mr. Rudolph: Yes, sir.

Mr. Stone: Different crews, of course?

Mr. Rudolph: Yes.

Mr. Stone: Now, they get the one crew to go through for
 172 miles?

Mr. Rudolph: Yes, sir.

Mr. Stone: So it was a convenience to the company, and not a convenience to the men, that they wiped out Tilton as a terminal?

Mr. Rudolph: Yes, sir.

Mr. Stone: That is all.

Mr. Park: About how much coal do you burn on an average each trip?

Mr. Rudolph: Each trip, or one way?

Mr. Park: Averaging one trip with another, your fast trains, and stock trains, and dead freight.

Mr. Rudolph: I said before, that 24—a fair average would be 25 tons of coal.

Mr. Park: Every trip?

Mr. Rudolph: Every trip, one way.

Mr. Park: So that if your division were cut your average would be 12 tons for each division?

Mr. Rudolph: Yes, sir. I could not say as to that, because the one division is hilly, and it consumes more coal on that division, than it does on the other.

Mr. Stone: There are records on that division, are there not, as high as 40 tons?

Mr. Rudolph: I believe there are, but I have not the figures.

Mr. Stone: I have been told so by a number of the engineers, that they have been known to burn as high as 40 tons. These Mikado engines are not superheated, are they?

Mr. Rudolph: No, sir.

Mr. Stone: Have they brick arches?

Mr. Rudolph: Yes, sir.

Mr. Stone: But they do have a good appetite?

Mr. Rudolph: They do.

Mr. Stone: That is all.

Mr. Carter: That is all.

(Witness excused.)

C. W. ELLIS was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and place of residence.

Mr. Ellis: Tipton, Missouri.

Mr. Carter: What is your occupation?

Mr. Ellis: Locomotive fireman.

Mr. Carter: On what railroad?

Mr. Ellis: The C. R. I. & P.

Mr. Carter: Rock Island Road?

Mr. Ellis: Yes.

Mr. Carter: In Railroad Exhibit 27, page 1426, the following details are given:

"C. W. Ellis, Centerville; worked 30 days; 405 hours; 13½ hours per day; wages, \$133.55."

This exhibit reports you to be a switch engine fireman, and as a switch engine fireman, you are presumed to have earned \$133.55. Were you a switch engine fireman in October, 1913?

Mr. Ellis: Yes, sir.

Mr. Carter: What class of work were you employed in?

Mr. Ellis: We switch coal mines from Sharon to Numa, and do station switching.

Mr. Carter: About how much traveling did you do with this switch engine handling cars at the coal mines?

Mr. Ellis: A distance of about twelve miles.

Mr. Carter: Were you traveling on the main line a great deal of this time doing this work?

Mr. Ellis: Yes.

Mr. Carter: They call that switching service on the Rock Island, do they?

Mr. Ellis: Yes.

Mr. Carter: Suppose I should tell you that on other roads they call it mine run service, it would not change the character of the work, would it?

Mr. Ellis: No, sir.

Mr. Carter: Now, are you paid a switching rate, or are you paid through freight rates?

Mr. Ellis: Paid through freight rates.

Mr. Carter: Then, regardless of the fact that they call it switching service, you are really in road service, and paid as such?

Mr. Ellis: Yes.

Mr. Carter: Then it was not the switching rates that you got that gave you \$133.55?

Mr. Ellis: No, sir.

Mr. Carter: But at any event, Mr. Ellis, you worked 13½ hours every day, according to their statement, for thirty days in order to earn this \$133.55?

Mr. Ellis: Yes, sir.

Mr. Carter: And that was not at a switching rate, but at a through freight rate?

Mr. Ellis: Yes, sir.

Mr. Carter: Do you believe that through freight rates should be paid on all railroads like on the Rock Island, for this mine run service, even though they call it switching service?

Mr. Ellis: Yes.

Mr. Carter: Was the preparatory time on this job counted in this statement?

Mr. Ellis: No, sir.

Mr. Carter: There was not very much preparatory time on this job, was there?

Mr. Ellis: No, sir.

Mr. Carter: But how much time were you required to put in in advance of leaving there, in getting the engine ready, etc?

Mr. Ellis: Well, we just got on the engine long enough to fill the lubricator, and that was really about all.

Mr. Carter: Well, how long are you called before your time begins?

Mr. Ellis: Well, they never called me on this job; I showed up.

Mr. Carter: Is it a regular assignment?

Mr. Ellis: Yes, sir.

Mr. Carter: Well, then, about how much time does it require you to be there before you leave? A very short time?

Mr. Ellis: Well, if we were called for 6 o'clock A. M., I would usually try to get there about 5:30 or 5:35, in order to give me time enough to fill the lubricator, and other work.

Mr. Carter: Inspect the tools on your engine?

Mr. Ellis: Inspect the engine to see if it was all right.

Mr. Carter: In October, 1913, you earned \$133.55, by

working thirty days at 13½ hours per day, not including this preparatory time? Did you ever earn that much before or since?

Mr. Ellis: Yes, sir.

Mr. Carter: When did you earn it before?

Mr. Ellis: I don't think I earned it before, but I have earned it since, on the same job.

Mr. Carter: Did you put in just about as many hours?

Mr. Ellis: Practically more.

Mr. Carter: If you earned more, you would have to work more hours, would you not?

Mr. Ellis: Yes, sir.

Mr. Carter: You are paid by the hour on the job?

Mr. Ellis: Yes, sir.

Mr. Carter: Therefore, in order to make two men's pay, you would have to do two men's work, would you not?

Mr. Ellis: Yes, sir.

Mr. Carter: What are your average earnings since you have been employed by the railroad, counting necessary lay-offs, etc?

Mr. Ellis: I should judge they would be between \$80 and \$85.

Mr. Carter: Are you sometimes sick, like other people?

Mr. Ellis: Yes, sir.

Mr. Carter: And sometimes want to stay at home for a day with your family, like other people?

Mr. Ellis: Well, lots of time I would like to.

Mr. Carter: Well, can't you afford to? Do you think you have to make all this money to live?

Mr. Ellis: I can't afford to. I have got to work every trip.

Mr. Carter: You think, in order to support your family, as you would like to support them, you have to work this 13 hours and a half a day?

Mr. Ellis: Yes, I have got to do it.

Mr. Carter: Don't you think, perhaps, you would enjoy life better, if the railroad required you to quit work at the end of ten hours, in order to avoid the payment of overtime at time and a half?

Mr. Ellis: Yes, sir.

Mr. Carter: If the railroads paid time and a half for over-

time after ten hours' work, do you think they would average those runs so you would have relief?

Mr. Ellis: I think they would.

Mr. Carter: Because it is more profitable to do it the other way; that is all.

CROSS EXAMINATION.

Mr. Sheean: Mr. Ellis, I would just like to get the idea of that work that you do there. Just take any day, starting out, what your work is, just describe one of the day's trips.

Mr. Ellis: Well, we usually were called at 6 A. M., and about every other day we would go from Centerville to Numa.

Mr. Sheean: That is how far?

Mr. Ellis: That is practically eight miles.

Mr. Sheean: Centerville to Numa?

Mr. Ellis: Yes.

Mr. Sheean: And would you go out light, or take cars with you?

Mr. Ellis: Well, we would usually have empties.

Mr. Sheean: Now, you would start out from Centerville about what time?

Mr. Ellis: Well, if all overdue trains had arrived, we would start immediately after 6 o'clock.

Mr. Sheean: And you would take empties out from Numa first?

Mr. Ellis: And mines en route.

Mr. Sheean: And you would get out to Numa about what time, ordinarily?

Mr. Ellis: Well, ordinarily we would get out there at 7:30 or 8 o'clock.

Mr. Sheean: And then when you got to Numa, what ordinarily would be done, or would that depend entirely on what you found there?

Mr. Ellis: Well, if the mines had worked the day before, we usually would pull the loads out of the mines.

Mr. Carter: Practically doing the mine switching there?

Mr. Ellis: Yes, sir; set empties in the mines.

Mr. Sheean: Practically doing the mine switching there?

Mr. Ellis: Yes, and setting empties in the mine.

Mr. Sheean: Conditions varying, I suppose, as to the **length of time, from day to day, at Numa?**

Mr. Ellis: Yes, sir.

Mr. Sheean: Sometimes running from 8 until about how late?

Mr. Ellis: In the morning, you mean?

Mr. Sheean: Yes.

Mr. Ellis: Well, from 8 to 10 o'clock, somewhere along there.

Mr. Sheean: And then at 10 o'clock what did you do?

Mr. Ellis: We usually went back to Centerville.

Mr. Sheean: Taking back some loads with you?

Mr. Ellis: Once in a while we would have a few loads.

Mr. Sheean: But the majority of the time going back light?

Mr. Ellis: Yes.

Mr. Sheean: And then when you got back to Centerville—

Mr. Ellis: Usually when we got back to Centerville we would have to do the station switching.

Mr. Sheean: At Centerville?

Mr. Ellis: Yes.

Mr. Sheean: And do that until the lunch hour?

Mr. Ellis: Until noon, yes.

Mr. Sheean: Until noon. Then, at noon you would go home for your meal there?

Mr. Ellis: Yes.

Mr. Sheean: Would you take an hour off for your meal?

Mr. Ellis: We did not have any specified length of time for dinner.

Mr. Sheean: You were on continuous time there on that?

Mr. Ellis: Yes.

Mr. Sheean: But you took your own time, in those 13 hours and a half, and that included whatever time you took for your meals?

Mr. Ellis: Yes.

Mr. Sheean: And that was left entirely to you, whatever was the most convenient time you found?

Mr. Ellis: We usually went home and back as soon as possible.

Mr. Sheean: After making this one round trip, you fitted

it in the best way you could, and if the work required it, in the station switching, you would clean that up and be later than usual?

Mr. Ellis: Yes.

Mr. Sheehan: Just accommodated your desires to the needs of the company in the best way that you could?

Mr. Ellis: Yes.

Mr. Sheehan: In other words, you railroaded, didn't you?

Mr. Ellis: Yes.

Mr. Sheehan: Do you think there is any really good reason now why that should end a day's work, and that you should be automatically released when you get back there at the noon hour on a run of that sort? You are a practical railroad man. Is there any real sense in a proposition of that sort?

Mr. Ellis: We usually went home to dinner.

Mr. Sheehan: Yes, I know; but do you think there is any sense in the proposition that when you come back after dinner a new day should begin, just because you happen to go out and get back to your terminal?

Mr. Ellis: A new day begin?

Mr. Sheehan: I know it didn't begin, but some gentlemen here are asking that it should begin under circumstances of that sort.

Mr. Ellis: Well, as I say—

Mr. Sheehan: It does not appeal to you on that particular run, does it?

Mr. Ellis: On all switching jobs such as that there is usually time for meals. We were not released.

Mr. Sheehan: No, but you get to the terminal. You have been out on the main line and go back to the terminal again, and you would be automatically released if some people's ideas were adopted?

Mr. Ellis: Not on this job.

Mr. Sheehan: Not on that job?

Mr. Ellis: No, sir.

Mr. Sheehan: That is really a switching job, isn't it?

Mr. Ellis: Yes.

Mr. Sheehan: You do the switching job at the station, and you do the switching job at the mine?

Mr. Ellis: Yes.

Mr. Sheean: And there is the one engine crew there that does it?

Mr. Ellis: Yes.

Mr. Sheean: And you are on continuous time, from the time you go to work until you are relieved?

Mr. Ellis: Yes.

Mr. Sheean: And in making up this average of 13 and one-half hours, I suppose on some day it ran a good deal more than 13 and one-half hours, didn't it?

Mr. Ellis: Yes.

Mr. Sheean: And less on other days?

Mr. Ellis: Yes.

Mr. Sheean: And whatever work there was to be done, this one crew did it?

Mr. Ellis: Yes.

Mr. Sheean: Was that a switching crew that you had there? I mean, how many men did you have there besides yourself and the engineer?

Mr. Ellis: Two brakemen and the conductor.

Mr. Sheean: Two brakemen and a conductor?

Mr. Ellis: Yes.

Mr. Sheean: Do you know whether the brakeman and conductor were paid road rates or switching rates?

Mr. Ellis: They were paid road rates.

Mr. Sheean: All of them?

Mr. Ellis: Yes.

Mr. Sheean: The three members of the crew?

Mr. Ellis: Yes.

Mr. Sheean: But the work there varies from day to day, doesn't it?

Mr. Ellis: Yes.

Mr. Sheean: And neither you nor the company nor anyone else can tell just how much work there is going to be a week from today?

Mr. Ellis: No, sir.

Mr. Sheean: Or just how long it is going to take to do it?

Mr. Ellis: No, sir.

Mr. Sheean: The one crew does it now, and does it according to the needs of the shippers and the needs of the community?

Mr. Ellis: Yes.

Mr. Sheean: That is all.

RE-DIRECT EXAMINATION.

Mr. Carter: Mr. Ellis, the point you have brought out here was that you were reported as being a switch engine man, presumably drawing switch engine wages, but you were drawing road wages, were you not?

Mr. Ellis: Yes.

Mr. Carter: You do not deny that you are in the switching service, do you?

Mr. Ellis: No, sir.

Mr. Carter: It is only the rate that would be liable to cause others to make mistakes?

Mr. Ellis: Yes.

Mr. Carter: This was really a switch engine, a mine run engine, and you did the switching at Centerville in addition to the mine switching?

Mr. Ellis: Yes.

Mr. Carter: And you got road pay for it, did you not?

Mr. Ellis: Yes.

Mr. Carter: Did the conductor and brakemen have a caboose?

Mr. Ellis: No, sir.

Mr. Carter: How much money did they get? Did they get more money for doing this switching than if they had been actual roadmen and had had a caboose? Did these brakemen get higher rates for yard service than they would get for road service?

Mr. Ellis: I am not thoroughly acquainted with the yard rates.

Mr. Carter: Is it not a fact that conductors and brakemen insist on being called switching crews in order to get more money than they would if they were on the road?

Mr. Ellis: I could not say.

Mr. Carter: You are not acquainted with their rates of pay?

Mr. Ellis: No, sir.

Mr. Carter: Well, I cannot state that fact. That is all.

Mr. Stone: Let me ask you a question. In addition to that you also work east of Sharon, do you not?

Mr. Ellis: Yes.

Mr. Stone: You have to, in order to get water down at the foot of the hill, don't you?

Mr. Ellis: Water, and the mines between Centerville and Sharon.

Mr. Stone: Down on the side hill?

Mr. Ellis: Yes.

Mr. Stone: I worked all over that territory myself a number of years, so I am fairly familiar with it. The clearance at those coal chutes is just as close as it used to be, I suppose?

Mr. Ellis: They have them out now. They are torn out.

Mr. Stone: Do they still have the loading chute as close as ever?

Mr. Ellis: Yes.

Mr. Stone: The clearance is very close, getting through there with your engine?

Mr. Ellis: Yes.

Mr. Stone: As I remember it was only about 4 or 5 inches from the side of the cab, or from the side of the aprons that were framed there. Do you still have the coal mines between Numa and Centerville?

Mr. Ellis: Yes.

Mr. Stone: So you not only work at these stations, but work at the coal mines between?

Mr. Ellis: Yes.

Mr. Stone: In regard to this automatic release, it would be a very easy matter for them to change the layover of the engine, and have that layover at one end or the other of that route, would it not?

Mr. Ellis: I presume so.

Mr. Stone: That is all.

Mr. Burgess: Mr. Ellis, regardless of the fact that you went from one point to the other and did switching, the fact does remain that you did receive road rates for the service rendered. Is that right?

Mr. Ellis: Yes.

Mr. Burgess: And that not only applied to you, but applied to all members of the crew?

Mr. Ellis: Yes.

Mr. Burgess: And if the Board saw fit to ascertain

whether the rates for the conductors and trainmen were higher than the usual and ordinary road rates, that would develop the fact that, even so, you were getting road rates, and that there would be an incentive to get the switching rate applied? That is, they would receive more money for being termed yardmen, if that fact could be developed, that they did enjoy higher rates?

Mr. Ellis: I think since I was there, the conductor and brakemen have received switching or local rates for doing that switching, but not the engine crew.

Mr. Burgess: But the engine crew did not receive such rates?

Mr. Ellis: No, sir.

Mr. Burgess: That is all.

RE-CROSS EXAMINATION.

Mr. Sheean: Mr. Ellis, about your earnings there, has there been any month at all in the last year when you got down as low as \$85 or \$90?

Mr. Ellis: Yes.

Mr. Sheean: And how much did you lay off to bring them down to that?

Mr. Ellis: Do you mean during the time that I was on that switching?

Mr. Sheean: Yes?

Mr. Ellis: All I laid off was on account of sickness. I can't recall just the length of time.

Mr. Sheean: You are only giving your best recollection, I think, about the average earnings?

Mr. Ellis: Yes.

Mr. Sheean: The slip handed me as to your earnings during the year ending June 30, 1914, shows \$1,322.91. That is what you earned for the year?

Mr. Carter: Pardon me. Has counsel for the railroads the earnings of this witness for the year?

Mr. Sheean: Yes, I was just going to hand it to the witness. Just compare the slip, to see whether that agrees with your recollection? You apparently for a time had through freight, part of the month, or the latter part of the year?

Mr. Ellis: Yes.

Mr. Sheean: But in the yard service the lowest month's pay seems to be \$94, when you laid off for seven or eight days.

Mr. Ellis: Yes. In bringing it down to \$80 or \$85 I averaged from January 1 last year up to and including August. I did not average the switch engine rates, but that was part in switching and part in through freight rates. That is when I went back to Trenton from Centerville.

Mr. Sheean: When did you say—last August?

Mr. Ellis: In making this average that I quote, from \$80 to \$85, I averaged my wages from January 1, 1914, up to and including August, 1914. That was three or four months on switch engine, paying the road rates, at Centerville, and the balance of the time in through freight service out of Trenton.

Mr. Sheean: On the bottom of that, January, 1914, to June, 1914, seems to be included there. Have you a memorandum of those earnings? I just wanted to see wherein the difference would be, because there is nothing as low as \$85 in any of those months.

Mr. Ellis: You do not seem to show from June on down?

Mr. Sheean: No, that ends with June, 1914.

Mr. Ellis: I was compelled to lay off in July and August, almost an entire month, on account of sickness.

Mr. Sheean: Well, then, in reaching the average of \$80 or \$85 you include two months in which you were off because of sickness?

Mr. Ellis: Yes. From January 1, 1914, I put in four months of good wages, and two or three months I was required to lay off on account of sickness, and earned practically nothing at all.

Mr. Sheean: This particular job you have described here at Centerville, that seems to pay from \$95 up to \$137. I see you made \$137 in December, 1913.

Mr. Ellis: Yes.

Mr. Sheean: You said you had a couple of months since October, 1913, in which you made a little more than you did in that particular month?

Mr. Ellis: Yes.

Mr. Sheean: But in the switching job itself that you have described here, the pay of the fireman runs from \$95 up to \$137?

Mr. Ellis: Yes.

Mr. Sheean: And the average you spoke of was for a period later than that, when you were partially in the yard, or in this yard work, and partially in through freight, and a part of the time sick?

Mr. Ellis: Yes.

Mr. Sheean: That is all.

(Witness excused.)

WILLIAM HALEY was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and residence.

Mr. Haley: William Haley, Sioux City, Iowa.

Mr. Carter: What is your present employment?

Mr. Haley: General Chairman for the Brotherhood of Locomotive Firemen and Enginememen.

Mr. Carter: On what railroad?

Mr. Haley: The Chicago, St. Paul, Minneapolis & Omaha Railroad.

Mr. Carter: How long have you been an employe of the Omaha Railroad?

Mr. Haley: In engine service, since May, 1900.

Mr. Carter: You know Mr. Trenholm well?

Mr. Haley: Yes.

Mr. Carter: During his testimony, I think, it was understood that he believed that the employes of the Omaha road were perfectly satisfied with their conditions there; and I will quote from page 5108 of the proceedings:

“Mr. Trenholm: I will admit that the Omaha Road has not very many trimmings in its schedule. It has been by mutual agreement between the officers and the men; the men were willing to give an honest day’s work for an honest day’s pay, and had never asked for anything else, and do not want anything else as nearly as I know. We pay just as high a rate as anybody.”

It is true that they pay as high a rate as the North Western? That is true, is it not?

Mr. Haley: Yes.

Mr. Carter: But there are trimmings missing on the Omaha, are there not?

Mr. Haley: Yes.

Mr. Carter: Do they pay for terminal delay on the Omaha?

Mr. Haley: They do not.

Mr. Carter: Do they pay for terminal delay on the North Western?

Mr. Haley: They do.

Mr. Carter: Does the North Western own the Omaha.

Mr. Haley: That is my understanding—they have got a controlling interest.

Mr. Carter: Have the firemen been satisfied during these years to do terminal work without special pay for same?

Mr. Haley: They have not.

Mr. Carter: Have they made strenuous efforts to secure pay for terminal delay?

Mr. Haley: They have made efforts to secure pay for terminal delay.

Mr. Carter: In a brief manner, just describe what efforts have been made, what rules you have asked for, when they were asked for, and what the replies of the officials have been.

Mr. Haley: In August, 1907, the Firemen's organization negotiated the first schedule that was negotiated on the Omaha road by the Firemen's organization, and during those negotiations they made a request for the following rule:

"Firemen will receive delayed time at the rate of ten miles per hour for all time delayed at terminals before departure and after arrival; this time to be allowed in addition to miles of trip."

We failed to get that.

Mr. Carter: Why didn't you get it?

Mr. Haley: The committee decided that the concessions that we did get at that time were all that we could get peacefully.

Mr. Carter: It was on the principle that small favors are thankfully received, and large favors in proportion?

Mr. Haley: Yes.

Mr. Carter: And in view of the fact that you did get some favors, you were willing to make settlement without pressing it further?

Mr. Haley: At that time, yes.

Mr. Carter: Did you try it again later?

Mr. Haley: Not as a general rule, but we did try in 1912 to remedy a condition that existed at the Minneapolis terminal.

Mr. Carter: Will you explain the condition that exists at the Minneapolis terminal?

Mr. Haley: Since the schedule was negotiated there have been some changes in the conditions of the work at the Minneapolis terminal, and at the present time there are being crews run to the Minneapolis terminal that did not run there prior to that time.

Mr. Carter: What has this resulted in?

Mr. Haley: It has resulted in a more congested condition at the Twin City terminals, and consuming more time of the road crews in the terminal.

Mr. Carter: Is there time put in by road crews after they reach the terminal for which they receive no compensation?

Mr. Haley: There is time consumed there, yes.

Mr. Carter: What did you ask in 1912?

Mr. Haley: In 1912, the Firemen's Committee made the following request, in September:

"That firemen be allowed terminal delay between M. & St. L. depot, Minneapolis, and the East Yard, and between East Yard and engine house. When business is good considerable delay is encountered between those points, sometimes reaches 3 hours, and firemen feel that additional compensation should be granted them for this delay."

The request was declined.

Mr. Carter: Did you then agree with the officials of the Omaha road that you would not get it?

Mr. Haley: Well, we agreed with them in this way, that we felt we were not prepared to carry the matter any further.

Mr. Carter: Does an agreement of this character indicate satisfaction of the employees with the agreement?

Mr. Haley: No, sir, it does not.

Mr. Carter: It indicates that they are willing to be conservative and take what they can get, and give up what they cannot get.

Mr. Haley: Yes.

Mr. Carter: These negotiations were conducted with what officer?

Mr. Haley: The negotiations in 1907 were conducted with the General Superintendent, Mr. Strickland, and in 1912 with the General Superintendent, Mr. Peechin.

Mr. Carter: And it does indicate that the men on the Omaha, so far as the firemen are concerned, are not satisfied with not having terminal delay?

Mr. Haley: Yes.

Mr. Carter: The "trimmings," as they are called?

Mr. Haley: Yes.

Mr. Carter: Is it a fact that these negotiations were conducted by the subordinate officers, and in all possibility Mr. Trenholm did not know that they took place?

Mr. Haley: That is possible.

Mr. Carter: And it is no reflection on Mr. Trenholm to say that he did not know anything about it?

Mr. Haley: No, sir.

Mr. Carter: Is it not a fact that on the Omaha road they do recognize that a higher rate should be paid for the larger engines when used as switch engines?

Mr. Haley: Yes.

Mr. Carter: They have been liberal in that, have they not?

Mr. Haley: Yes.

Mr. Carter: They have already issued a differential in their rates for switch engines, paying the men in the Minneapolis yard different rates, dependent on whether they used a big engine or a small engine.

Mr. Haley: They have issued a differential on the big engine, not on the smaller.

Mr. Carter: That is what I mean. They pay a higher rate when the big engine is used.

Mr. Haley: Yes.

Mr. Carter. That is all.

Mr. Park: You were not very serious, were you? You did not think of appealing to Mr. Trenholm? You seem to have been satisfied with the General Superintendent's decision. You did not even take an appeal to Mr. Trenholm?

Mr. Haley: I believe Mr. Trenholm's position on that particular point has been pretty thoroughly understood, and the committee considered it in that light.

Mr. Park: Mr. Carter said Mr. Trenholm did not know anything about it.

Mr. Haley: He did not know anything about these negotiations.

Mr. Carter: That is, so far as you know?

Mr. Haley: So far as I know; but on the question of terminal delay, I think Mr. Trenholm has made himself very clear on that, even in this meeting.

Mr. Park: And in these particular negotiations you were not interested enough in your request to take an appeal to Mr. Trenholm from the position of the General Superintendent?

Mr. Haley: As I said before, Mr. Trenholm's position was clearly defined at other times prior to that, and the Committee felt at these particular times that we were not prepared to carry the matter any further, or consume any more time. In 1907 our Committee were in session about a month.

Mr. Park: The ordinary procedure, though, when you have anything very serious, or want it very bad, is to go to the head of the operating department, is it not?

Mr. Haley: Speaking for the Firemen's Committee on the Omaha road, our practice has been generally to do all our negotiating with the General Superintendent.

Mr. Park: If you are not satisfied with his decision, the instructions of your organization are that you shall go to the head, or the highest operating official, are they not?

Mr. Haley: No, there are no such instructions.

Mr. Park: That is the general practice, is it not?

Mr. Haley: I could not speak for that as a general practice, no.

Mr. Park: You are always satisfied then with the decisions of the General Superintendent in all matters that you negotiate with him?

Mr. Haley: No, I would not say that we are always satisfied.

Mr. Park: But do you ever go over his head?

Mr. Haley: Yes, we have gone over his head, without results.

Mr. Park: That is all.

Mr. Burgess: Mr. Haley, is it not a general practice for a committee negotiating a wage scale, when deciding whether

they will appeal to a higher officer, to decide in their own minds as to whether it would be of any real value.

Mr. Haley: Yes. That is always taken into consideration.

Mr. Burgess: So, if the higher officer's attitude in regard to any particular question is well known, the committee then decide whether it would be proper to chase a shadow or not, do they not?

Mr. Haley: Yes.

Mr. Burgess: And they do not wilfully and knowingly waste the funds of the men in trying to obtain a decision which in their minds they are satisfied will be against them?

Mr. Haley: No, sir.

Mr. Burgess: Is that correct?

Mr. Haley: That is correct.

Mr. Burgess: To be perfectly frank, and bring the true situation before the Board, was it not a fact that the Committee on that road decided that it would be necessary either to take a strike vote, or precipitate a strike, before they could obtain this concession, no matter who they appealed to?

Mr. Haley: Yes.

Mr. Burgess: That is all.

Mr. Nagel: Mr. Haley, you say you knew Mr. Trenholm's attitude?

Mr. Haley: Yes.

Mr. Nagel: The General Superintendent of the road knew his attitude, did he not?

Mr. Haley: He certainly must have.

Mr. Nagel: Did you expect the General Superintendent to overrule Mr. Trenholm when you made your application?

Mr. Haley: I do not understand your question.

Mr. Nagel: Did you expect the General Superintendent to overrule Mr. Trenholm when you made your application for a change in the rules?

Mr. Haley: The General Superintendent could not overrule Mr. Trenholm. Mr. Trenholm was General Manager.

Mr. Nagel: That is what I thought. Then you did not expect any result when you presented the demand, did you?

Mr. Haley: No, sir, we did not expect any result from Mr. Trenholm; that is, unless we were capable of getting it from Mr.

Strickland or Mr. Pechin, the General Superintendent, whichever one it might be.

Mr. Nagel: Did you think he would give you a decision which was contrary to Mr. Trenholm's position?

Mr. Haley: Well, the question was, we believed that we were entitled to that consideration, but having discussed it thoroughly with the General Superintendent, we believed we had got a decision which would be supported by the General Manager.

Mr. Nagel: I simply wanted to get the practical significance of your move, whether you expected a real result, or simply wanted to lodge your demand.

Mr. Haley: Well, Mr. Nagel, in taking up such negotiations, it is like taking up this case. We start out to negotiate, to make our requests. We have no way of knowing what we are going to be conceded, when we start out, and during the negotiations it is decided by the committee just how far they will go, and that was the case in these negotiations.

Mr. Park: You always ask for enough so that you average up?

Mr. Haley: We always ask what we believe we should have.

The Chairman: Has the superintendent the discretion to determine as to whether or not, from time to time, under existing conditions, he may or may not grant a certain concession or increase of wage?

Mr. Haley: Well, Mr. Chairman, I don't know as to what authority he has, or as to what extent he can go. I presume that he has got to have the approval of his superior officers in any instance where compensation is considered.

The Chairman: Then, as I understand, you secure an adjustment of these matters by conferring from time to time with the superintendent, who is the man immediately in charge of such matters?

Mr. Haley: The General Superintendent.

The Chairman: And is that the way in the past that you have secured the concessions that you have?

Mr. Haley: Yes, sir.

The Chairman: Well, is it a fact that sometimes you are able to present the matter so as to have the Superintendent make

a change, or suggest a change to the General Superintendent that he would not have made prior to that time?

Mr. Haley: Our experience has been, and we have done all our negotiating for our schedules with the General Superintendent, and whatever took place between him and the General Manager, I don't know.

The Chairman: What I want to know, is this: you say you have a condition which has existed for some time. Now, have you in the past been able, by bringing certain facts before the Superintendent, to induce him to make certain recommendations as to changes?

Mr. Haley: We have. We have gotten certain changes, yes, sir.

The Chairman: And is that the only method you have of presenting your claims to the road, or ultimately getting them to the General Manager?

Mr. Haley: We have access to the General Manager if we decide to appeal from a decision of the General Superintendent.

The Chairman: But in the first instance, you do not go to the General Manager or the President of the road, but the only avenue of approach that you have is through the Superintendent, as I understand it.

Mr. Haley: That is correct. We begin our negotiations with the General Superintendent.

The Chairman: And so, from time to time, when you feel that you have grievances, you take those matters up with the Superintendent?

Mr. Haley: Yes, sir.

The Chairman: And he passes upon them?

Mr. Haley: Yes.

The Chairman: And then if, in your judgment, you think it is worth while to appeal, you appeal the case, if the judgment is against you?

Mr. Haley: Yes, sir.

The Chairman: That is all.

CROSS EXAMINATION.

Mr. Sheean: Mr. Haley, I take it you got something both in 1907 and 1912, when you withdrew this request? That is, you

have read us this one request. I assume there were a good many requests taken up at that time.

Mr. Haley: You understand, in 1907, we negotiated an entire schedule.

Mr. Sheean: Well, prior to that time, the engineers had negotiated the Firemen's Schedule?

Mr. Haley: Prior to that time, the schedule of the Engineers and Firemen, were together. And, as far as I know, the firemen never were represented at a meeting.

Mr. Sheean: And in 1907, they made a separate schedule, and you had the general ground work of what was already in the Engineer's Schedule, which pertained to firemen?

Mr. Haley: Yes, sir.

Mr. Sheean: Well, at that time, in connection with the negotiation of an entire schedule, there were some new things that were not in the schedule of the Engineers, that you also wanted to put in here?

Mr. Haley: Yes, sir.

Mr. Sheean: A terminal delay was one of the things that was asked, and did not go in?

Mr. Haley: Yes, sir.

Mr. Sheean: And there were other things asked that had not been in the previous schedule, and that did go in, other concessions made?

Mr. Haley: Yes, sir.

Mr. Sheean: And then again, in 1912, I take it, when you asked terminal delay, you asked other things also?

Mr. Haley: Yes, sir.

Mr. Sheean: Increases?

Mr. Haley: No, sir; not in 1912.

Mr. Sheean: That is, in 1912, it was just working conditions?

Mr. Haley: Working conditions.

Mr. Sheean: And there were some things granted there?

Mr. Haley: Yes, sir, there were some things.

Mr. Sheean: Mr. Haley, I don't suppose that you could, as a matter of fact, identify that you traded this particular request for this particular concession, but you came in with a number of requests, and this for terminal delay was declined, and other things were granted, in whole or in part?

Mr. Haley: In 1912, there was not any revision of schedule at all. It was simply requests with regard to some conditions that existed on the road, as well as this particular condition at Minneapolis, you see, and this request pertaining to the terminal time at Minneapolis simply applied to Minneapolis, in our request of 1912.

Mr. Sheean: That was because of peculiar conditions at that one point, congested conditions at that one point.

Mr. Haley: Yes, that was because of the delay on account of the work the crews were doing in that particular terminal.

Mr. Sheean: Now, when you spoke in answer to one of Mr. Carter's questions, of their being no pay for terminal delay, you mean by that no separate pay? If it runs into overtime, it is overtime, and it is paid for time.

Mr. Haley: If it runs into overtime, yes.

Mr. Sheean: But the Omaha schedule does not recognize, as a separate and distinct item, the part inside of the terminals, from other parts?

Mr. Haley: No, sir.

Mr. Sheean: And the attitude of Mr. Trenholm, that there was no justification for dividing up the day's work into separate arbitrary periods, was just as well known to you then as it is after hearing him testify here now?

Mr. Haley: His attitude on that particular point, yes.

Mr. Sheean: His attitude on that particular point?

Mr. Haley: Yes. But we do not agree with him.

Mr. Sheean: That is what I mean, on that particular point?

Mr. Haley: Yes, but we do not agree with him.

Mr. Sheean: No. But you did not take up with him, either in 1907 or in 1912, and make any effort to persuade him that his belief on this principle that a day's work was a day's work, ought to be changed?

Mr. Haley: After the time we consumed discussing those particular articles, with the General Superintendent, why the committee decided that it would be of no value to go any further with them.

Mr. Sheean: That is all.

Mr. Shea: In other words, Mr. Haley, in negotiating matters of that kind with a subordinate officer, and you receive an

adverse decision, you think that it is a useless waste of time and money to appeal to a superior officer, in order to have him affirm an adverse decision of a subordinate officer?

Mr. Haley: That is correct.

Mr. Sheean: Well, that is only true, isn't it, Mr. Haley, where it involves some general, well known principle of schedule making. But you would not hesitate, in a difference of opinion about a matter of rates, or anything of that sort, to take it up with the General Manager?

Mr. Haley: It depends entirely on what you are confronted with?

Mr. Sheean: Yes, and where it involves a fundamental principle, and you know that the man is committed to the principle that a day's work is a day's work, and should not be subject to arbitrary subdivisions, you do not attempt to change an established schedule where you know a man is committed to that principle, that is, you do not pursue the useless task where you know a man is committed to that, as a principle. But I take it you appeal to Mr. Trenholm on other matters?

Mr. Haley: Yes, we appeal to Mr. Trenholm on other matters.

Mr. Sheean: And there isn't any hesitancy about doing that, or taking up an appeal to him on any matter unless it be simply on the ground of some well established belief on his part that you know would make it hopeless?

Mr. Haley: No. There is no hesitancy.

Mr. Sheean: You have there the time beginning thirty minutes earlier than it does on the North Western?

Mr. Haley: Providing the time is computed in hours, but that is of no additional value if the time is computed in miles.

Mr. Sheean: That is, the impression was left here that you have simply the North Western schedule minus certain things. You also have this particular thing, that does not appear in the North Western schedule, whereby, in case a man is paid in hours, he is paid thirty minutes more on the trip than he would be if he made the same trip under the North Western schedule?

Mr. Haley: Yes, sir.

Mr. Sheean: And was not this in reality a compromise or exchange, on a request for initial terminal delay?

Mr. Haley: No, sir, not with the Firemen's Committee, as told to me. The question was discussed prior to my time, as a committeeman, back in 1902.

Mr. Sheean: Well, that was before there was a separate Firemen's Committee?

Mr. Haley: This question of terminal time was taken up entirely as a separate proposition in 1907, by the Firemen's Committee.

Mr. Sheean: Well, you don't know, then, Mr. Haley, whether, at the time, the schedule negotiated by the Engineers applied also to the Firemen—you don't know whether, in negotiating that schedule, they compromised on this 30 minute proposition which now obtains, as a compromise on their request for initial delay?

Mr. Haley: I was not a member of that committee, and all I know of that is hearsay, and I would not want to say.

Mr. Sheean: That is all.

RE-DIRECT EXAMINATION.

Mr. Stone: Mr. Haley, you do know as a matter of general knowledge, that the general committee of the B. of L. E. did trade that to Mr. Trenholm for one of the other 57 varieties that was "just as good," do you not?

Mr. Haley: It is true the trade was made.

Mr. Stone: Is it not true that all settlements or agreements that are reached are, in fact, a compromise?

Mr. Haley: That is my understanding.

Mr. Stone: Is it not a fact that your not appealing over the head of your General Superintendent shows that your firemen are inclined to be conservative on the Omaha Road?

Mr. Haley: That is correct, in my opinion.

Mr. Stone: I believe you are a salaried Chairman, are you not?

Mr. Haley: At the present time, yes, sir.

Mr. Stone: Just what are your particular duties? What do you put in most of your time doing?

Mr. Haley: I put in most of my time handling complaints from the men.

Mr. Stone: You don't go up and down the line of road

trying to make your men believe that they are entitled to something they are not entitled to, do you?

Mr. Haley: No, sir, I should say not.

Mr. Stone: Your principal job is keeping the brake on, is it not?

Mr. Haley: That is my biggest trouble, to keep the men satisfied. My time is taken up entirely by matters complained of and sent to me.

Mr. Stone: So, in reality, the biggest part of your time is put in sitting on the lid, instead of trying to get the lid off?

Mr. Haley: It has been, in my experience.

Mr. Stone: And as a result of all these years of negotiations you are still continuing to do that honest day's work for an honest day's pay, and the measure is represented by the company's standard?

Mr. Haley: Yes, sir.

Mr. Stone: Is it not a fact that after these decisions have been handed down by an operating officer, the only appeal that you have is the strong arm method of going to a strike? That is the last court of appeal, is it not, or arbitration?

Mr. Haley: That is the last court of appeal.

Mr. Stone: It is a fact, that it is the rank and file of the men, and not the few salaried men, who put up those cases and want them brought up?

Mr. Haley: It certainly is.

Mr. Stone: I understand that this so-called preparatory time, which is a misnomer, on the Omaha, only begins thirty minutes prior to the time of leaving the yard; is that correct?

Mr. Haley: That is correct.

Mr. Stone: It is not thirty minutes prior to the time you are leaving the roundhouse, while you are getting the engines ready, or anything of that kind?

Mr. Haley: No.

Mr. Stone: Just leaving the yard?

Mr. Haley: Just leaving the yard.

Mr. Stone: And you are expected to be on your train thirty minutes before leaving time?

Mr. Haley: We are expected to be on the train a sufficient time to leave on time.

Mr. Stone: That is, to have everything ready, air tested and pumped up, and everything ready to leave on time?

Mr. Haley: Yes.

Mr. Stone: If it takes ten minutes, or thirty minutes, you are supposed to be there?

Mr. Haley: Yes, sir.

Mr. Stone: And if it takes longer, you are supposed to be there?

Mr. Haley: Yes, sir.

Mr. Stone: And all the time you are at the roundhouse getting your engine ready, prior to that time, is not counted at all?

Mr. Haley: No, sir.

Mr. Stone: The time begins thirty minutes before the leaving time of the train at the yard?

Mr. Haley: Yes, sir.

Mr. Stone: Is that the actual time, or the time called for?

Mr. Haley: The time called for.

Mr. Stone: For example, if you were called to leave at 7 o'clock, and did not get out of the yard at 8 o'clock, when would your time begin?

Mr. Haley: The time would begin at 6:30.

Mr. Stone: And it is also shown by their exhibit here that 79 per cent of the freight trains get over the road in mileage, and not hours?

Mr. Haley: Yes, sir.

Mr. Stone: And if that is true, then 79 per cent of your men do not get preparatory time in freight service?

Mr. Haley: That is correct.

Mr. Stone: That is all.

RE-CROSS EXAMINATION.

Mr. Sheean: Mr. Haley, about finally accepting this court of last resort—last appeal; I have heard a good deal about these open meetings on the Omaha Road. Don't you call meetings there and have the officers there, and discuss any grievances, issuing invitations to come in and tell what their attitude is?

Mr. Haley: Well, Mr. Sheean, my understanding is the open meetings on the Omaha Road never have been for the purpose of schedule making.

Mr. Sheean: Oh, no, no. But any grievance which arises here, about having to resort only to the strong arm—I think that is the way Mr. Stone put it.

Mr. Stone: That was the way I said it. I didn't have in mind the mutual admiration society that they have in these open meetings.

Mr. Sheean: I thought perhaps, then, that Mr. Haley had given public assent to your declaration. I just wanted to get the facts as to whether or not, in case anything is turned down by any officers, or you don't agree with the officers, or any of your chairmen, has not there been in vogue on that road for some time the plan of letting the whole matter be aired in open meeting?

Mr. Haley: The question of open meetings has always been handled in this way. They have called those meetings, and it has been understood by the officers of the company, as well as the men, that those meetings would be open to all employes, from every craft; from the office to the section men; and it has been stated on the platform by the Managers and by the General Superintendent, that any man who was not satisfied, or who had any complaint to make, could get on that floor and make it, and the officers would be called on to get up and answer why that condition existed, in the presence of the entire audience, and, as it was termed, it was letting the sunlight in on it—on the condition; and it was believed to be the best way to eliminate objectionable conditions. But, as far as handling any matter of schedule, or pertaining to wages, or anything of that kind, to my knowledge there never has been anything of that kind settled officially in those meetings.

Mr. Sheean: Well, but if there is any complaint of any sort, Mr. Haley, about any violation of a schedule, or improper conduct on the part of anybody, this open meeting plan has been in vogue for some years there. It is not a case of jumping in with "the strong arm" with anyone, at least until after there has been the opportunity of the open meeting, so that everybody knows what the attitude of everybody else is. Isn't that true?

Mr. Haley: I would like to answer with reference to that "strong arm." That is entirely a separate proposition from the open meetings. The question of "the strong arm" is handled strictly along the lines—or, in other words, the question

of handling a matter when we get up to the point of issue, is handled entirely separate from those open meetings, and has nothing to do with it at all.

Mr. Sheean: But the open meeting gives opportunity for a full and complete uncovering of any grievance that anybody has. It is discussed fully and freely, is it not, at those meetings?

Mr. Haley: The open meeting affords an opportunity where any individual may get up and tell that he is dissatisfied, and why he is dissatisfied.

Mr. Sheean: Well, as a matter of fact, Mr. Haley, is it not a fact that this Engineer's Schedule, which covered the work of the firemen and their pay, and everything else, was made in open meeting.

Mr. Haley: As a matter of fact, that is hearsay with me, what I know about that. I was not present at the meeting at which they claimed to have discussed the Engineer's Schedule, in 1902.

Mr. Sheean: But, whatever grievances there are, as a matter of fact, since you have been actively there, since you have negotiated the separate schedule for the firemen there, any grievance of any sort is open for full discussion, is it not?

Mr. Haley: As I said before, any individual is permitted to get up himself and tell why he is dissatisfied, and what the conditions are surrounding it, just the individual, as a matter of organization, yet it is not an organization affair.

Mr. Sheean: Not at all.

Mr. Haley: No.

Mr. Sheean: Just open to everybody?

Mr. Haley: Open to everybody.

RE-DIRECT EXAMINATION.

Mr. Stone: Mr. Haley, it is really true that those open meetings are in direct opposition to organization, is it not? They want the individual to handle his grievance, instead of handling it through the organization?

Mr. Haley: Well, they lay the foundation for the individual to present his grievance. As to what the intention is, why I would not care to say.

Mr. Stone: Coming back to that history of 1902, when they gave up their terminal delay, if my recollection is correct—and

I am simply speaking from memory now, I have not the files here, I can get them very easily—the general committee, when the proposition was made to them, declined to accept.

Mr. Haley: That is what I have been told, yes, sir.

Mr. Stone: And then they went back to the men, went behind the committee, and held open meetings with the men. Is that correct?

Mr. Haley: That is all hearsay with me.

Mr. Stone: Well, I don't want you to testify to anything that is hearsay.

Mr. Haley: They went back to the men, or to their lodge rooms, and discussed it with them in the lodge rooms.

Mr. Stone: I guess that is possibly true, and also, if my memory serves me right, one member, one of the prominent engineers, who handled the Northern Division at that time, held meetings and discussed them with the men, I believe he is an official of the company today, is he not?

Mr. Haley: That is my understanding. That is what I am told.

The Chairman: Don't you think, Mr. Haley, in these open meetings, it is to the interest of a man who is charged with some infraction of the rule, to be permitted to speak out in the meeting there, and have his accuser confronted with him, in order that the matter may be fought out in the open?

Mr. Haley: I don't object to it, if the men desire to do it that way.

The Chairman: In other words, it would prevent any subordinate official sending a report in, and falling back on that, not giving the man an opportunity to confront his accuser. You think that is a good feature, don't you?

Mr. Haley: That feature I don't object to at all.

Mr. Nagel: Sometimes a man does not feel his grievance quite as keenly after he has had a chance to express it. Isn't that so?

Mr. Haley: That is true.

Mr. Nagel: Not speaking of your meetings especially, but it is a general observation, is it not, that we sometimes adopt resolutions because we do not expect to do anything? It that not so?

Mr. Haley: That is possibly so.

Mr. Nagel: That is human nature.

Mr. Trenholm: If I may be pardoned, Mr. Chairman, may I just say a word as Chairman of the Committee, and as the Manager of this railroad under discussion, to clear up this thing, so there may be no misunderstandings about it.

It is the outgrowth, you might say, of accident. I take no credit for it. But I do believe that it is an excellent way of keeping in touch with your employes, and giving your employes an opportunity to make known any troubles they may have.

It originated, as Mr. Stone has said, away back in 1901 or 1902. The Engineers' Committee came in to make a schedule with me, and they had at that time a number of things, such as arbitrary time for turn-arounds, and initial terminal delay, and possibly final terminal delay—I don't remember. But I was very anxious to clean up the schedule, and have a clear simple schedule that everybody could understand, so that the perquisites would not go to individual men, the man who catches a trip, or is delayed, and catches something; that is a perquisite. It does not go to the man who does the work. And my thought was to pay the thirty minutes preparatory time in exchange for these things commonly called perquisites, and apply them, work them out, so that the man who really worked the hours, would be getting paid for it. Way freights, transfer engines, and men who clean up no long hours on the road, would be paid this thirty minutes preparatory time.

Now, the Committee did not feel like accepting it. They said they had no authority; they came there representing their constituents, with a certain schedule; and finally we agreed to submit it to the men on the road, and the Committee went out to take a vote of the men on the proposition submitted by the company through me; and after they had been out a few days, I heard of a certain engineer circulating a petition to vote down this schedule because there was a nigger in it.

A little while after I heard of another division engineer passing a circular around for everybody to sign. So I wrote the Chairman, telling him what I had heard, and told him I was anxious to find anything wrong with that schedule, as anxious as he or any of the men could possibly be; that I was sincere in what I was trying to do, and that I was prepared to

go before the Lodge and advocate it before the men; that I was not afraid of it.

That opened up a new thought. The men took a vote at these different lodges, as to whether they wanted a general officer in the lodge or not, and I think every lodge voted it down, one after the other, of the Omaha lodges, that they did not want any general officer in the lodge; until it came to the last lodge. That was West Seventh Street, and they voted, "Let us bring him out here, and see what he has to say." So they sent two men down for me Sunday afternoon, and escorted me out there at 2 o'clock, and took me up to the altar, like a lamb to the slaughter, and they kept me there until midnight. Of course, it was all pleasant and nice, and we fought out this schedule, and I told them I thought they were pretty stingy with their invitations, that they didn't invite some other officers.

But, to make the story short, that resulted in each of the other lodges rescinding their vote by inviting not only me but all of the officers I wished to bring, to come to their lodges, and after they got through with their secret work we held what we called an open meeting, to discuss these schedules, and we discussed them and the men discussed them from all possible standpoints. And the result of it was that the schedule was adopted by the Committee, and was endorsed by the men, giving up the initial terminal delay and these other little things that were there; not figuring that they were giving up anything, but that they were getting—and I still think they got really more in the thirty minutes preparatory time than they gave up in those other things. Now, so far as I know, there has never been a request come to me to change that, not one.

Now, that resulted in what is known as the open meetings on the Omaha Road. The engineers said, "Now that we have got this thing started, and got the officers up on the platform to shoot at them, and express our opinion of them, why not keep it up?" I said, I should be very glad, and all the officers would be very glad to attend any meeting they arranged for.

The men arranged for these meetings. It spread; it took in the firemen after that, and took in the trainmen and conductors, and brakemen and firemen; everybody on the Omaha Road has an invitation to any of those meetings, and they go from one end of the road to the other. They have had at these

meetings—I think Mr. Haley will bear me out—as high as five and six hundred men.

Mr. Haley: That is true.

Mr. Trenholm: And they go in there, and the officers are there on the platform, and it brings the sunlight in on all the things that are done on the railroad.

Now, I am a strong advocate of them. I am there, and I have got to answer for my conduct before five or six hundred men, and every other officer, whether he be a roundhouse foreman, or who he may be, if he gets cranky in the morning, and gets up wrong end to, and does some man a little wrong, he is brought up and is called on to come out on the platform and tell these men why he did it. He never wants to get out the second time; it cures him. It will cure you, or cure me of doing a wrong, if you have got to get out and, before your men, explain why you did it, if you have no reason to give. And I claim it was the best cure that ever was brought out for the dirty little things that are done on a railroad—and there are dirty things done, I will admit it. And I believe Mr. Haley will concur in what I say, that any roundhouse foreman, or train despatcher, or anybody else, who is called on to explain in one of these meetings why he did this thing that the man charges him with will probably not do it again. It is a very embarrassing position to put him in, to have to get up and explain before the General Manager, and General Superintendent, and all his fellow employes, why he did a nasty thing.

Now, there is a history of what you are talking about here, and I wanted to get it straight.

Mr. Burgess: Can I ask you one question?

Mr. Trenholm: Yes.

Mr. Burgess: You would not recommend meetings of that kind, however, to negotiate one of these schedules?

Mr. Trenholm: Oh, I don't think it could be done, Mr. Burgess, all schedule matters. Anything that comes up regarding schedules is brought up in these meetings. Men are reinstated after being taken out of service; cases of discipline are discussed in these meetings; all the evidence is brought out, and we have a regular trial, and have the matter put to a vote. I have gone so far as to submit to the vote of 600 men whether the action of the officer in taking a man out of service, was

justifiable, and I want to say for the men, that I never submitted a thing to a vote of five or six hundred labor men that I did not get absolute justice out of them.

Mr. Burgess: But I was just referring—

Mr. Trenholm: Oh, as to negotiating a whole schedule, I would say no. As far as discussing it goes, I think it is very fine.

Mr. Stone: Now, Mr. Chairman, in view of the fact Mr. Trenholm has made this statement, I would like to say a few lines myself.

I don't think there is any question about my scrapping qualities, owing to the peculiar combination of my nationality; but I will say to you frankly, if I were working on the Omaha Railroad, as one of the men in the ranks, and wanted to keep my job and get along in peace, I would not attend one of those open meetings and air any dirty linen. I think the individual man is at a disadvantage every time he goes there and undertakes to argue out a case with all the officers of a company.

It is a beautiful theory, I will admit, but in every day practice I have my doubts about it, because there is a quiet pressure that stands back of all men on a railroad, that "You had better get along with the rank and file of your officers in peace, if you want to work here in peace."

Now, this case that Mr. Trenholm recites, is the only case I know of in the history of the organization, where an officer has gone behind the General Committee representing the men, and had the rank and file of the men turn the Committee down and accept something the Committee refused to accept when first offered to them. And it is true he did that. And it is true you got the preparatory time and the initial terminal delay away from the men, under that plan.

Mr. Trenholm: We gave them preparatory time.

Mr. Stone: Gave them nothing! You gave them something that was "just as good."

Mr. Trenholm: I gave them thirty minutes.

Mr. Stone: That is a good deal like these Indian givers, you know. When you go out and visit one of these Indian tepees in the West, he will give you everything he has, his horses, his squaw, everything, but when you leave, you had better not try to take any of them away with you. If you do there will be trouble. And that is the way they did in this case. The men

have only been sorry for that once, and that is, ever since they gave it away. And this request today is just as strong upon the Omaha Road as from any other road, and their strike vote was just as strong, and I am sure if we went down on the mat to see who was the best man, we would tie the Omaha Road up along with the rest.

The Chairman: Mr. Stone, don't you think in adjusting differences growing out of the construction of schedules, or involving reports that are made against men, that it is a good idea to get them face to face?

Mr. Stone: I believe in personal conference always. But, Mr. Chairman, if I may be permitted to say one more word, I cannot believe for a minute that a general superintendent will decide on any question of difference as important as a wage schedule, without consulting with the higher officers.

Oftentimes, in our schedule making, we meet some officer who says he speaks for that railroad. He may only be the general superintendent; he may be the general manager; he may be a vice-president; but when he says, "I speak for this railroad," I take it for granted he knows what he is talking about, and that he is the spokesman. However, I will say this; before I would allow the men to go on strike I would appeal to the highest ranking officer of that road. That is our law. It requires us to do that.

If you will pardon me just a minute. For example, on the New Haven Road, the two organizations were ready to strike and the time was fixed, because the Vice-President said: "I am speaking for the President." I got there before the strike was on, to take charge of it, and as soon as he said that, I said, "Well, I want to hear from the President." "But," he said, "here is, over this man's signature, that he does speak for the President." I immediately sent a telegram to Mr. Elliott, the President, asking him if that was the decision of the New Haven Road, and he wired back inside of two hours, and asked me and the committee to meet him. So we found out that the Vice-President did not speak for the road in that particular case, or else they had had a change of heart. We met Mr. Elliott, and we did settle without a strike. But, for another example, now, we had a strike on the Southern Pacific. The four organizations on the Southern Pacific struck. They never got to see Mr. Scott,

the operating officer in charge, at all. Mr. Wade said he spoke for Mr. Scott. And they went on strike because they could not get to see Mr. Scott. They never did see Mr. Scott at all, and have a conference with him.

Mr. Trenholm: I want to say just a word. I don't agree with Mr. Stone, of course—

Mr. Stone: Well, we haven't agreed all summer, Mr. Chairman.

Mr. Trenholm: On the effect on the men who had a grievance, on the railroad and submitted it in open meeting. Those meetings have been conducted on the Omaha Road for twelve years or more, and I know of no case—I never heard of a case, I never heard it intimated, that any man who got up and told of what happened to him, ever heard of it after. It was threshed out in the meeting. There was no criticism of any one for doing it, except "Come out and tell us why you did it. Tell this body of men why you did it." That is all there has ever been to it. And I don't think there can be a case shown where there was any feeling against a man for telling the facts. We invite it. I, myself, invite it. If I have done anything on this railroad as its General Manager, that is wrong, I want you to tell me wherein you think I am wrong, and I will either defend myself and show that I am right, or I will concede that you are right; one or the other. And I make the statement that I have been handling men for twenty-five years, and I made that five or six years ago, if any man can show me where I have done an injustice, done him a wrong—I have had to discharge men; I believe in good discipline, and I am going to maintain it as long as I am on the road; but if any man can show me where I have done him an injustice, I propose to right it so far as in my power to do.

Now, that is the position I stand in before these men, and have stood for twelve years, and I believe Mr. Haley will bear me out in it.

I did not make this talk on this for the purpose of exploiting anything that we have on the Omaha Road, but I simply did not want any misunderstanding of how it happened and why we did it. It was at the invitation of the men to come to an open meeting.

I did not arrange these meetings. The men got them up and invited me to come over and get on the carpet and be shot at.

Mr. Stone: May I ask you one question, Mr. Trenholm?

Mr. Trenholm: Yes, sir.

Mr. Stone: In case a man could not convince you that he had been done an injustice, and still felt that he had been unjustly dealt with, what happened?

Mr. Trenholm: I will put it to the vote of 500 men in that room, and if the men say I have done him wrong I will right it. I can't be any fairer than that.

Mr. Carter: Mr. Haley is it the purpose of your testimony here to show that the men on the Omaha road and Mr. Trenholm do not agree over matters here submitted for arbitration?

Mr. Haley: Yes, sir.

Mr. Carter: That is all.

Mr. Sheean: That is all.

MR. J. A. COCHRAN, was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and place of residence.

Mr. Cochran: J. A. Cochran, St. Paul, Minn.

Mr. Carter: What is your present occupation, Mr. Cochran?

Mr. Cochran: Chairman of the Firemen's Committee on the Great Northern Railroad.

Mr. Carter: Firemen and Hostlers' Committee?

Mr. Cochran: Yes, sir.

Mr. Carter: How long have you served in that capacity?

Mr. Cochran: About 14 years.

Mr. Carter: You have been one of these agitators that have been described here by some of the witnesses of the railroads?

Mr. Cochran: Well, the men do not think so all the time.

Mr. Carter: Are they constantly after your scalp because they say you are not settling their grievances?

Mr. Cochran: A great many times.

Mr. Carter: Isn't your greatest burden as a General Chairman the effort to keep pace with your men because you are not more radical?

Mr. Cochran: Yes, I think that is true.

Mr. Carter: You would perhaps not have as many enemies as you do have if you were more radical?

Mr. Cochran: Yes, I think there is a certain element, or sometimes a majority that believe that the action of the committee is not drastic enough.

Mr. Carter: And if you are defeated at any time, will it not be the platform of your opponent that he will be more drastic than you have been?

Mr. Cochran: Yes, that is the usual policy.

Mr. Carter: Well, in your own observations in your own work, and from that of all other General Chairmen, is it not a fact that, instead of agitating trouble, their greatest burden and effort is to prevent trouble?

Mr. Cochran: Well, a General Chairman of a railroad such as the Great Northern would be in a bad position if he went out and agitated trouble all the time, that is, if he went around to the meetings and made these so-called anarchistic talks he would be in this position, that he would be unable to get any consideration from the officers of the company, and if he went around and agitated trouble he would get possibly more than he could adjust and the result would be that the company would not do anything for him, and he would get into a lot of trouble and then they would say the committee met, "Why, if your chairman had conducted himself properly we would not have this difficulty." So the chairman would be the goat. In other words a man has got to be well balanced.

Mr. Carter: He has got to be conservative, has he not?

Mr. Cochran: To a great extent.

Mr. Nagel: Conservative and progressive both, a good deal like a United States Senator?

Mr. Cochran: Well, that is he has got to have what you might term progressiveness.

Mr. Nagel: Well, it is a combination of the two, each used at the proper time?

Mr. Shea: That is quite a good principle, is it not?

Mr. Cochran: Yes.

Mr. Carter: It is quite a hard job to hold, is it not?

Mr. Cochran: Well, I have put in 14 years at it, and I have had a good many experiences.

Mr. Carter: Now what do you know about the hostlers on

the Great Northern road, and the history of the hostler business on that road? I wish you would explain in a brief manner how hostlers are procured on the Great Northern Railroad, how they are paid, and give the Board a general line of information upon the subject.

Mr. Cochran: Well, to begin with, my knowledge of the hostlers, personally, dates back to previous to 1899, but previous to 1893, in fact, I believe from the beginning of the negotiation of the contract, or previous to any contract for the firemen, the oldest fireman was required to act as hostler.

Mr. Carter: Will you explain why the company thought that was best?

Mr. Cochran: Well, I was led to believe at that time that the reason for it was that the oldest fireman would be more competent to be in charge of an engine than some man who had never handled an engine.

Mr. Carter: Was that the attitude of the officials of the company?

Mr. Cochran: Yes, indicated by the rule that was made at that time.

Mr. Carter: That was even before you had a contract?

Mr. Cochran: Yes, before there was ever a contract in existence.

Mr. Carter: Well, now, beginning with your first acquaintance with the matter, when you became identified with the contractual relations between the firemen and hostlers and officials of the Great Northern Railroad, what do you know about it personally?

Mr. Cochran: Well, in 1894, under date of July 1, 1894—

Mr. Carter: You will always remember that date?

Mr. Cochran: Yes: The following rule appears in the engineers' contract, rule 10:

“All engines shall be handled at terminal points by hostlers and engineers shall not be required to take engines to and from trains, except at such points as may be determined upon by the Division Master Mechanic and the engineers affected at that point. It is understood that this rule is not to be so construed as to unnecessarily increase the expense of the company. In case of disagreement, they may appeal to the Superintendent of Motive Power, who will decide.”

Mr. Carter: What was the purpose of the engineers in getting this agreement in their schedule? To relieve themselves of this hostler's work at terminals?

Mr. Cochran: Yes, the object of that rule was to have the engines taken from the passenger stations to the roundhouse on the incoming trip.

Mr. Carter: And brought back to the passenger station before the trip began?

Mr. Cochran: Well, I will illustrate it. At St. Paul, the roundhouse is 2 miles, or thereabouts, from the passenger station, and the engineer on the incoming train, in those days, got off the engine and went home, and the hostler took the engine back to the roundhouse.

Mr. Carter: And the engineers wanted to be relieved of that work?

Mr. Cochran: The engineers wanted to be relieved of taking the engines back to the roundhouse, and they did get relief.

Mr. Carter: But if they did it they were paid anyhow?

Mr. Cochran: At that time I don't think so. Later on that was arranged for.

Now, another rule in their schedule at that time, rule 19, section 6:

"When it becomes necessary to reduce the number of engineers, the youngest engineer in the road service shall be reduced to yard service, the youngest yard engineer to be hostler; the youngest hostler to firing, and his rights as fireman to be governed by his position on the firemen's list; it being understood that no yard engineer shall be reduced to hostler or firing to make room for an engineer from the road service who is a younger engineer in the service of the company."

Now that appeared in the engineer's contract, and the firemen had no schedule at that time.

And they had no committee negotiating with the company. The Engineers provided for that with the company.

Mr. Carter: Then it was not an effort on the part of the firemen at that time, to get somebody's job?

Mr. Cochran: No, they had nothing to do with it.

Mr. Carter: Well, now, continue the history of the hostler business on the Great Northern Road. When did the engineers

insist that they should be paid for doing the hostling if the railroad company did not furnish a hostler to do the work?

Mr. Cochran: Well, now, on January the 1st, 1900, that is when I became identified with the Firemen, they went in and got a contract.

Mr. Carter: Before you get to the Firemen, Mr. Cochran, do you understand that the Engineers in this movement are asking that where six or more engines are handled at a terminal, they will be relieved of doing the work and a hostler provided for them?

Mr. Cochran: Yes.

Mr. Carter: The Engineers do not want to do this hostling if they can avoid it, do they?

Mr. Cochran: Well, I can best illustrate that by showing in the next contract after this one, as to how our company insisted on that proposition.

Mr. Carter: All right; go ahead.

Mr. Cochran: On January 1st, 1900, the Firemen got a schedule. It consisted of different rules. In Rule 2, "Basis of Compensation," it says "Hostlers will be paid at the rate of \$70.00 per month, twelve-hour day." Of course, at that time switch engineers and firemen, and work train men, were working a twelve-hour day. And that schedule provided that the oldest fireman would do the hostling, in line with the Engineers' contract of 1894.

Mr. Carter: Well, Mr. Cochran, have the men in the other classes of service on the Great Northern Road had their day reduced from twelve hours to ten hours?

Mr. Cochran: Well, the switch engineers and switch firemen and the work train men and snow plow men, and all the train and engine service, all service rendered in the train and engine department that I know anything about, or any other service, is either a ten-hour or eight-hour day, except the hostlers, and perhaps their helpers.

Mr. Carter: They have kept them on a twelve-hour day, have they?

Mr. Cochran: Yes, sir.

Mr. Carter: Evidently there is a disagreement of opinion between these hostlers and the officials of the company on that matter, is there not?

Mr. Cochran: Yes, there is.

Mr. Carter: Well, go on.

Mr. Cochran: On January 1, 1902, there was a joint schedule which took effect between the engineers and firemen with the company, and that schedule said "Hostlers will be paid at the rate of \$70.00 per month, per day of twelve hours or less."

Mr. Carter: Did it still provide that the oldest fireman or the youngest demoted engineer should do the job of hostling?

Mr. Cochran: Oh, yes.

Mr. Carter: And that has been insisted upon by the company at all times?

Mr. Cochran: Yes, always.

Mr. Carter: Has it not been a fact that when the wages of the firemen were increased and their daily work decreased, that many a fireman would like to have avoided the necessity of hostling?

Mr. Cochran: Yes, sir.

Mr. Carter: On account of low wages and long hours?

Mr. Cochran: Well, on account of the twelve hour day.

Mr. Carter: But the company insisted they should do it, did it not?

Mr. Cochran: Well, they never made the concession to the Committee.

Mr. Carter: Go on.

Mr. Cochran: Well, then, in 1894, the engineers had the rule that permitted or required the hostlers at certain points to take the engines from the passenger station on incoming trains back to the roundhouse, and on January 1, 1902, when the joint committee met the officers of the Company, the Company insisted on doing away with hostlers going down to the depot to get the engines, for the reason that they did not want to trust anybody on the main line, at least, that is what they said, who was not a regular qualified engineer, and that they wanted the engineers and firemen to handle their engines back and forth. And, also, at points where they had the coal sheds on the main line, they did not want the hostler with his incompetent helpers, out on the main line, and made provision in a rule of January 1, 1902, Rule 3, as follows:

"The Company reserves the right, at points where hostlers are employed, to require enginemmen to receive their engines

from hostlers on the roundhouse lead or other places designated by the Master Mechanic, or Superintendent, and, at the expiration of runs, to coal and water their engines, when coal chutes and water tanks are on main line, and deliver them on such roundhouse lead or other designated track."

Now, that was the contention of the company in getting that into the schedule, that they did not want the hostlers out on the main line.

Mr. Carter: Why didn't they want hostlers out on the main line?

Mr. Cochran: Well, they contended, as I recall, and I was chairman of the Fireman's Committee at that conference, that the hostler was out there with probably helpers who had very little experience, and passenger trains on the main line coming in at terminals, would not be given the protection that would be given by a regular engineer and fireman.

Mr. Carter: Did you hear the statement of "using any kind of an old thing," any kind of a man, handy man, or anything else, to go out on the road?

Mr. Cochran: Yes, I did.

Mr. Carter: Well, do you think that the officials of the Great Northern would agree with the officials of these other roads that that was really a "safety first" measure?

Mr. Cochran: Well, they do not permit anybody to handle engines on the main line of the Great Northern, except a regularly qualified engineer or fireman, or a hostler, perhaps, who has been an engineer and demoted back to hostler.

Mr. Carter: They believe that those are necessary precautions for the safety of the traveling public, and other employes?

Mr. Cochran: Well, they did at the time we made this rule.

Mr. Carter: All right, go ahead.

Mr. Cochran: Further, in Rule 3, of January 1, 1902:

"It is agreed that if conditions at any point make it necessary to consume more than thirty minutes in coaling and watering engines, overtime will be paid as per schedule.

"It is also agreed that where enginemen are required to hostle their own engines an arbitrary allowance of thirty minutes or five miles at schedule rates will be allowed."

The concession was granted, an allowance of thirty minutes or five miles at schedule rates where enginemen were required

to take their engines from the depot. That also applied on the branch lines, at outlying points, where there is only a watchman. In those days they required the engineer and fireman to put away their engine without compensation.

We made a request, as I recall it, that that be done away with. We did not want to do that work for nothing. That is, if we were out on the road ten hours and got in at the branch, particularly where the work was heavy, that we be relieved from putting away that engine, and the company insisted that the engineer and fireman should handle the engine. That a watchman was not competent. So they granted us the 30 minutes' arbitrary allowance, or all the time over 30 minutes.

And that continued from January 1, 1902, up to and including the present time.

Mr. Carter: Well, you understand that the proposition here is that the engineers want a general rule established, that wherever six or more engines are handled in the twelve hour period at a given point, that they will be relieved of doing this work, and a hostler shall be supplied.

Mr. Cochran: Yes, sir.

Mr. Carter: That would be on the same character of relief as the rules you have been reading, but reached in a different manner?

Mr. Cochran: Yes, sir.

The Chairman: We will now take a recess, gentlemen.

(Whereupon, at 12:30 o'clock P. M. a recess was taken until 2:30 o'clock P. M.)

AFTER RECESS.

J. A. COCHRAN was recalled for further examination, and having been previously sworn, testified as follows:

Mr. Carter: Mr. Cochran, in reading the rules, up to what year had you brought them?

Mr. Cochran: I think Rule 3 in the schedule of 1902.

Mr. Carter: Now, proceed to read the rules as they develop.

Mr. Cochran: In the contract of 1902, Rule 58.

"Wherever practicable, firemen will be required to serve not less than thirty days as hostlers before being promoted to engineers."

Mr. Carter: Did the railroad insist on a fireman having experience as a hostler before being promoted?

Mr. Cochran: Yes, that was a rule the company wanted.

Mr. Carter: What do you understand their idea was?

Mr. Cochran: The contention of the manager at that time was that firemen, while firing an engine, never had very much opportunity of handling an engine out on the road. In fact, instructions were generally issued and understood that an engineer was not to permit a fireman to handle an engine; and that by acting as hostler he handled the engines and acquired a certain judgment that was necessary in moving and stopping the engines, and became familiar with the various working parts of an engine by seeing them taken down and work done on them in the roundhouse.

Mr. Carter: I understood you to say that the rules of the company forbid a fireman handling an engine except by instructions of the engineer?

Mr. Cochran: Yes.

Mr. Carter: They did not, on that road, have men of two or three months' experience in shoveling cinders out of an ash pit handle their engines, did they?

Mr. Cochran: I never knew of any doing that work.

Mr. Carter: The general attitude of the company was that men should have experience and be qualified to a certain extent before they would be placed in charge of locomotives.

Mr. Cochran: Yes.

Mr. Carter: And this rule that you have just read, I understand, was upon the theory that even after a man had fired a locomotive a considerable number of years, before he ran the locomotive he ought to serve as hostler, in order that he might become familiar with the responsibility or care and handling of an engine?

Mr. Cochran: Yes.

Mr. Byram: Mr. Carter, may I ask the witness a question?

Mr. Carter: Yes, certainly.

Mr. Byram: Where are the hostlers employed? At what points? At terminal points generally?

Mr. Cochran: Well, they are employed at terminal points, yes.

Mr. Byram: And where are your coal chutes located on the Great Northern, at what points?

Mr. Cochran: Do you want the whole system?

Mr. Byram: No, generally speaking, are they on the main line or off?

Mr. Cochran: I could not give you a general idea. I could enumerate the whole system, if you want.

Mr. Byram: I do not think that is necessary. Are they generally located on the main line, or off the main line?

Mr. Cochran: They are located at main line, at a great many points. In fact, at a great many points, they have a lead from the roundhouse to the back side of the coal shed, so it is not necessary for the hostler to take the engine out on the main line to secure coal.

Mr. Byram: Does the Great Northern follow a practice that is different from railroads generally, in the location of their coal chutes at terminal points?

Mr. Cochran: I couldn't say as to that.

Mr. Byram: Generally they are located on the main line.

Mr. Cochran: Coal sheds are located on the main line for this reason. At Barnesville, Minn., which I assume you are familiar with, the coal shed there is on the main line, so as to permit passenger engines that are running there to take coal from the main line; but they have a lead from the roundhouse to the back side of the shed, where the hostler coals the engine and does work.

Mr. Byram: Do they have a lead to all coal sheds where they are located on a main line?

Mr. Cochran: I think possibly with the exception of two sheds on the whole system.

Mr. Byram: That is all.

Mr. Carter: Now, after this rule requiring all firemen to serve as hostlers one month before being promoted to the position of engineer, what is the next rule that is found in the schedule?

Mr. Cochran: Well, the next rule, of course, is that requiring—that meant that the oldest fireman would do the hostling. For instance, when they cut the extra engineers board, the youngest road engineer would be reduced to yard engineer, and

the youngest yard engineer to hostler, and the youngest hostler to fireman.

Mr. Carter: The Great Northern Road has always considered the position of hostler as quite a responsible position, has it?

Mr. Cochran: Yes, sir, they have.

Mr. Carter: Now, are there any other new rules that you have not read. That is, rules that were incorporated in these schedules subsequent to the time that you have already mentioned?

Mr. Cochran: Yes. In the contract of January 1, 1902—there was a new contract written on September 1, 1903, a joint contract with the engineers and firemen, and there was some change in the rules concerning hostlers. But at all times they were along the same lines, that the youngest fireman would do the hostling, and be held responsible for a considerable amount of the work in and around the roundhouse.

Mr. Cochran: In that schedule of 1903, September the 1st, Rule 4 was a ruling prescribing the duties of a hostler.

“At main line terminals where hostlers are employed, their duty will be to see that fires are cleaned, and coal and water and sand put on the engines. At ends of runs where this work is done by enginemen they will be paid for actual time consumed in doing the work, at schedule rates.”

Mr. Carter: Now, whom do you mean by “they?” The engineers?

Mr. Cochran: The engineers and firemen.

Mr. Carter: Go ahead.

Mr. Cochran: (Reading): “Provided that in no case will less than five miles be allowed for this service.”

Now, the meaning of that “five miles” was that that was an arbitrary allowance, and if the engineer and fireman were able to hostle the engine in fifteen minutes, they got a thirty minutes arbitrary allowance, and that applied in every instance, whether the trip was computed in hours or in miles.

Mr. Carter: Well, let us presume it was at one of these outlying points at the end of a branch run, where they only had a watchman to watch the engine over night, what would the engineer and fireman do there under that rule, and who would move the engine?

Mr. Cochran: Well, at the completion of the trip, or when the engine would be cut loose from the train, the engineer and fireman would run it to the coal dock, and the general conditions on those branches in those days on a coal dock was that they had hand power machines, where you hoisted up the bucket. The brakeman went along, and the watchman and the brakeman hoisted the bucket up and slung it over the tank, and the fireman would dump it, and when they had the engine coaled up they would move the engine up to the cinder pit, and the watchman would knock the fire out, and the engineer and fireman put the engine in the roundhouse.

Mr. Carter: Well, if there was no roundhouse?

Mr. Cochran: Well, they would move it over where it would stand for the night.

Mr. Carter: Would the engine then be blocked and properly secured?

Mr. Cochran: Yes.

Mr. Carter: Would the watchman run around that locomotive at night, or handle it?

Mr. Cochran: No, sir.

Mr. Carter: If he had done so, would he have been disciplined?

Mr. Cochran: Yes, the engineer would have been disciplined for permitting him to handle the engine.

Mr. Carter: Well, suppose he did it without the knowledge or consent of the engineer?

Mr. Cochran: Then he would be apt to be dismissed.

Mr. Carter: And the engineer and fireman received an arbitrary of thirty minutes, and if it took over thirty minutes, they received whatever the actual time was?

Mr. Cochran: Yes, if it took an hour or an hour and a half, or two hours, why they got it.

Mr. Carter: Now, suppose there were six engines to be handled that way by the engineer and fireman in the evening, and in the morning, or whatever the time was, would it be about as cheap for the railroad to have a hostler there, as to pay six engine crews for this period?

Mr. Cochran: Well, in a case of that kind, if the six engines came in at night, why, if they had no hostler, they would pay the engineer and fireman at least thirty minutes, or if it was

over thirty minutes, they would get whatever it was and in the morning when the engineer and fireman would take the engine out of the roundhouse they would again receive the arbitrary of thirty minutes, or whatever amount of time it was over. Now, our company has usually followed this practice that at a point wherever the amount of time paid to the engineers and firemen for hostling the engines, was more expensive than putting on a hostler, they employed a hostler.

Mr. Carter: And in this proposition, it was considered reasonable that where as many as six engines were handled, in a period of twelve hours, day or night, that they should have a hostler and not require the engineers and firemen to do this work?

Mr. Cochran: Well, the company would pay at least twelve hours for that service, to the engineers and firemen, besides maintaining watchmen there for the purpose of cleaning the fires and putting the coal off the platforms.

Mr. Carter: Now, the next rule.

Mr. Cochran: The continuation of Rule 4 of the 1903 contract, is as follows:

"Enginemen will receive their engines from hostlers on the round house lead or other place designated by the division Master Mechanic or Superintendent, and, at the expiration of runs, will deliver them on round house lead or other designated track."

Now, the purpose of that was on account of hostlers going on the main lines. At that time, previous to this, we had no rule designating how or where the engine crew would leave their engine. The company insisted on that rule because they wanted to have the right to say to the engineer and fireman, "You must leave the engine somewhere off of the main line," if they so desired it. Then, they added this to it:

"When it is necessary at points at which hostlers are employed for enginemen to take coal and water at ends of runs on account of coal chutes and water tanks being located on the main line, they will do so, and will be paid for this service as above."

Now, the purpose of that rule was, at the points, as mentioned by Mr. Byram, where it was impossible to get the coal on the engine without going on the main line, the company would require the engineer and fireman to take coal and water at the

shed, and then take the engine over on the roundhouse lead and leave it there for the hostler.

Mr. Byram: That only applied to places where hostlers were employed, didn't it?

Mr. Cochran: Yes, but the rule up here above says:

"At ends of runs, where this work is done by enginemen, they will be paid for actual time consumed in doing the work at schedule rates, providing that in no case will less than five miles be allowed for this service."

Now, that applied at every place. This other rule was for this express purpose: the company were requiring the engineer and fireman to take coal, and keep the hostlers off the main line, and the committee had that rule inserted, to do the work, and when they did the work they would get paid for it.

Mr. Carter: Why did not the company want the hostlers to come out on the main line?

Mr. Cochran: Well, the manager at that time insisted or contended that it was not safe to have hostlers with the helpers out on the main line.

Mr. Carter: You said that this morning, did you not?

Mr. Park: Do you have automatic signals?

Mr. Cochran: Why, I do not know of many automatic signals, Mr. Park. Possibly there are on the ore line.

Mr. Park: Not as a general thing?

Mr. Cochran: On some divisions, they use the staff system—not very generally.

Now in that same year rule 58:

"Hostlers will be paid at the rate of \$2.70 per day of 12 hours or less. If other work is required of hostlers, additional compensation at rates to be agreed upon will be paid. When hostlers are taken off and inspectors substituted for them, enginemen will be given preference for such positions.

Mr. Carter: Will you explain the effect and intent of that rule?

Mr. Cochran: In 1899, was the first time the engines were pooled on the Great Northern Railroad. That is, previous to that time every engineer and fireman had a regular engine, but that year they pooled the engines. That is, you might come in on one engine and get another engine out. No engineer had a regular engine.

They insisted, I assume, from their viewpoint, on putting on inspectors whose duty it was to go all over the engine after the engineer made out his work report, and see whether he had omitted any work on the engine that should have been reported.

Well, then, when business would fall off at some point, like Melrose, Minn., after the grain rush was over, there would be one-third of the crews working there, and there would not be work enough for a hostler and inspector, and they would pull off the inspector or the hostler.

The general practice was to combine the work and turn it over to the hostler if he had time enough to do the work.

Mr. Carter: That is, he became inspector and hostler too?

Mr. Cochran: Yes.

Mr. Carter: Were his wages cut because he had other work besides that of hostler, like on other roads?

Mr. Cochran: Well, this is what was done at some points. If the inspector was getting less money than the hostler, they tried to take the hostler off, and leave the inspector on, and if it was the other way, of course the change was made that way.

Mr. Carter: That is, if the inspector was getting the most money he walked the plank?

Mr. Cochran: Yes.

Mr. Carter: And, if the hostler was getting the most money, he did the same thing?

Mr. Cochran: Yes.

Mr. Carter: The cheapest man was retained?

Mr. Cochran: Yes. Now, that was provided for in the—the general plan was, the first year they did that they added \$5 to the hostler's wages, which made \$75 a month. That is, when he was getting \$70 a month. But when his pay was increased to \$2.70, making about \$83 a month, and the inspector \$2.70, then they made the change.

Mr. Carter: Well, what was the outcome of that disagreement?

Mr. Cochran: Well, we had a rule made in the following schedule, the one that followed that, that provided for it—the supplement to the schedule of 1905, rule 2:

“Hostlers will be paid at the rate of \$3.10 per day of 12

hours or less. If other work is required of hostlers, additional compensation at rates to be agreed upon will be paid.

“When hostlers are taken off and inspectors substituted for them, firemen will be given preference for such positions.

“When hostlers are required, in addition to their regular duties, to act as inspectors, their rate of pay will not be less than that of hostlers.”

Mr. Carter: Then the hostlers' rate of pay was fixed as the minimum?

Mr. Cochran: Yes.

Mr. Carter: There was no objection, however, to that hostler serving as inspector, was there?

Mr. Cochran: No.

Mr. Carter: Whenever the necessities of the company required that man to do this work, the men did not object thereto, but they believed that he should receive at least hostler's wages. Is that right?

Mr. Cochran: Yes.

Mr. Carter: And the agreement was made to that effect?

Mr. Cochran: Yes, and when that arrangement was made, why then, the hostler was not moved; the inspector was changed. Now in that same agreement we provided for the work of a hostler. That is—

Mr. Carter: Before you get away from that, didn't you also have hostlers who were foremen?

Mr. Cochran: Well, at many points the inspectors must act as foremen, or the hostler would act as foreman and inspector and hostler.

Mr. Carter: He might be foreman, inspector and hostler combined?

Mr. Cochran: Yes.

Mr. Carter: There was no objection to that, was there, when the business was not enough to justify more than one man?

Mr. Cochran: No.

Mr. Carter: All you asked was that he get the hostler's minimum rate?

Mr. Cochran: All we contended was that in no instance should he be paid less than the hostler.

Mr. Carter: But, in practice, did not they pay a hostler-inspector-foreman more money than hostlers wages?

Mr. Cochran: Yes, considerably more.

Mr. Carter: Do you recall any of the wages paid to these men who served as foremen, inspectors and hostlers?

Mr. Cochran: Yes, I know one instance at the present time, I believe, or just recently. In the ore service, of course, you understand that operates from early in the spring until late in the fall, and up in the mines there is what is known as Kelly Lake terminal. In summer, it is a big terminal, and they employ three or four hostlers, days and that many nights. In the winter time, there is no ore moving and there is not much doing around the mines, and they only maintain two or three engines and one freight crew there at one time. Now that foreman up there was acting in the combination job now, and he is paid \$175 a month.

Mr. Carter: They pay him \$175 a month for doing two men's work, instead of paying him 17½ cents an hour, like they do down here. Is that it?

Mr. Cochran: Yes, sir.

Mr. Carter: Now what other rule did you get?

Mr. Cochran: Rule 7 of that same contract:

"At main line terminals where hostlers are employed, their duty will be to see that fires are cleaned, and coal, water and sand put on all engines. At ends of runs, where this work is done by firemen, they shall be paid actual time consumed in doing the work at schedule rates; provided that in no case will less than five miles be allowed for this service."

And then, of course, the other combination of the rule as to where they will receive and leave their engines still applies.

And rule 7 of that same agreement said:

"At main line terminals, where men are employed, firemen will not be required to clean fires."

That is, at any point where there was a watchman or round-house force, the fireman would not have to clean the fires.

Now, in the Engineer's contract as applied in all their contracts, about the same thing as in the fireman's rule 5:

"All time allowance to engineers must include the firemen who are with them. Engineers are required to account for fireman's time with their own. Engineers will be notified when time is not allowed as claimed on time slip."

It provides that when 30 minutes is paid to the engineer, or whatever it is, it will be paid to the fireman.

Mr. Carter: That they both do the work?

Mr. Cochran: Yes, paid to both.

Mr. Carter: Go ahead.

Mr. Cochran: Now, the agreement of May 16, 1910; there are some changes in that.

Mr. Carter: That is about the latest, is it not?

Mr. Cochran: No, we have one later than that. "Hostlers will be paid at the rate of \$3.35 per day of 12 hours or less."

Mr. Carter: How much did you say?

Mr. Cochran: \$3.35.

Mr. Carter: Per day of how much?

Mr. Cochran: Twelve hours or less.

Mr. Carter: They still insist on the hostler working 12 hours?

Mr. Cochran: The only man around there, he and his helper. But I just had a grievance from a hostler, that he is required to work 12 hours, and the helper only works 8 hours.

Mr. Carter: And he is his own helper for four hours?

Mr. Cochran: Yes. Of course, the helper didn't have the word "less" in his agreement.

Mr. Carter: And while they work the helper only 8 hours a day they only pay him two-thirds of the day's pay?

Mr. Cochran: I assume that they pay him the hourly rate, for 8 hours.

"When hostlers are required, in addition to their regular duties, to act as inspectors, their regular pay will not be less than that of hostlers."

You notice that theory is carried out all through the schedule. And then, the same provision as to the duties of hostlers at the main line terminals, and where they will receive their engines.

Mr. Carter: Is that the last rule you have?

Mr. Cochran: In that agreement.

Mr. Carter: Now, are there any subsequent agreements?

Mr. Cochran: I have got one here of March 1, 1913.

Mr. Carter: What does it say about hostlers?

Mr. Cochran: Rule 3, A. "Hostlers will be paid at the rate of \$3.35 per day for 12 hours or less. When hostlers are taken off and inspectors substituted for them, firemen to be given preference for such positions.

"B. When hostlers are required, in addition to their regular duties, to act as inspectors, their rate of pay will not be less than hostlers.

"C. Firemen who are called to handle or watch engines at roundhouses will receive \$3.35 per day of 12 hours or less; overtime pro rata."

Mr. Carter: That is hostlers' rates?

Mr. Cochran: Hostler's rates, yes, sir. Now, you will notice in all these rules, of course, the 12 hours applies to them up to the present time, but in this contract we get a noon hour.

Mr. Carter: This last one?

Mr. Cochran: Yes, we thought we got a noon hour.

Rule 20, paragraph B. "Hostlers will be given one hour for meals. They will be allowed as near as possible the sixth hour."

Now there is not anything positive about it you know. It says, "as near as possible." It is a vastly different noon hour than that applied to the switch engineer and fireman.

Mr. Carter: Well, how did it work out in practice? Do the hostlers usually get the noon hour after that agreement?

Mr. Cochran: Well, in some instances, I assume they do, and in other instances they may not get a chance to go and get anything to eat until two or three o'clock in the afternoon, and if they are required to work, there is no penalty attached thereto.

Mr. Carter: Do you think it is necessary to have a penalty in order to get the noon hour?

Mr. Cochran: Well, it was necessary for switch engineers and firemen.

Mr. Carter: Is it not a fact that when they have a penalty, sometimes the railroads pay the penalty and work the men?

Mr. Cochran: Yes.

Mr. Carter: I mean to say willingly?

Mr. Cochran: Yes.

Mr. Carter: Have you read all your rules?

Mr. Cochran: No, we have some more. Rule 36—

Mr. Carter: This is the last schedule?

Mr. Cochran: This is March 1, 1913.

"The oldest fireman will be required to hostile, and shall have seniority on preference jobs."

That theory has been carried out all the way through.

Mr. Carter: You require the oldest fireman to do the hostling work?

Mr. Cochran: Yes.

Mr. Shea: Right there, is that compulsory for the oldest firemen to take hostlers positions?

Mr. Cochran: Yes, he has no choice about it.

Mr. Carter: On account of the long hours of service for hostlers, which make a comparatively low rate of pay per hour, firemen have to make sacrifices, do they not, in their monthly earnings, when they take jobs of hostling?

Mr. Cochran: The hostlers' rate has not kept pace with the rate on engines in road service. That is, at the time when they paid \$70.00 a month for a hostler, the rate for firing an engine was about \$2.30.

Mr. Carter: Away back fourteen years ago?

Mr. Cochran: Yes, the highest paid were \$2.40. That, figured on a thirty-day month, without overtime, would about equal the rate for the hostlers.

Mr. Carter: Has not the introduction of larger engines been compensated for to some extent, by a higher rate for the firemen?

Mr. Cochran: Yes.

Mr. Carter: Has it been compensated to the hostlers?

Mr. Cochran: I do not think—not to the same extent, compared to what is required of them.

Mr. Carter: Is the hostler required to have more skill, and more responsibility to handle these huge locomotives on turn tables than on lighter locomotives?

Mr. Cochran: Take it, for instance, on our line, it has grown very rapidly in the last fifteen years, and the roundhouses that were built when the road was built, some of them have been enlarged and some of them have not. When they bought these large engines, the turn-tables in some instances were not built for as big engines. When the big Mikado engines came at many of these points, the hostler would have to balance the engine, and he would not have any extra space at either end of the table. If he got it too heavy on one end, the table sets on a post in the center, and if he got it too heavy on one end and cramped it a little bit, all the men they had about the place could not turn the engine; and he had to be very careful in

getting the engine on; and in running the engine into the roundhouse, the doors were small, and there was no clearance, and if he was not careful, he would hook onto something and tear it down. Then the jack that they had to get the smoke stack under was a small affair, and he had no space, perhaps, between the pilot and the wall, and if he came in a little bit too rapidly, and poked a hole in the roundhouse, that meant thirty days, or the loss of his job.

Mr. Carter: Were some of these locomotives too big to get across the table, and did he have to take care of them on the outside?

Mr. Cochran: When the Mallet engines came first, they had no equipment to handle them, and it was necessary to turn them on "Y's."

Another feature about it, the coal sheds were built when they had the smaller locomotives. Of course, some of them have been raised now, as the result of an application by the Firemen's Committee. These big engines come in with high tanks. They take them to a coal shed and pull the apron down, and as they go down into the tank about two feet, and on these long divisions it is necessary to pile on all the coal that they can on the engine, to go to the next coaling station, when the engine went out, perhaps it would require half an hour to shovel this coal off the apron, and that would delay the hostler in his work, getting the engine in.

Then, taking water, in place of filling a tank of 3,000 or 3,500 gallons capacity, he has got to fill a tank of 8,000 or 10,000 gallons capacity.

Mr. Carter: Everything increases in proportion to the engine?

Mr. Cochran: Very much so.

Mr. Carter: On roads where engineers and firemen are paid for doing this hostling, if this proposition is awarded, there would be but little expense to the railroads of putting a hostler where they are now paying engineers and firemen to do this work.

Mr. Cochran: I think it would be cheaper to our company under our rules.

Mr. Carter: Mr. Cochran, have you anything further that you desire to say about the hostler question?

Mr. Cochran: Yes. The book of rules provides for hostlers:

“Hostlers report to and receive instructions from roundhouse foremen, and obey the orders of traveling engineers. They will receive engines from engineers on completion of trips on the designated receiving tracks, and will see that the same are furnished with coal, water and sand, and fires cleaned before being placed in the roundhouses. They will also be responsible for placing engines on furnish tracks promptly when ordered for service.”

These are rules 460 and 461. The meaning of that is, if there is an order comes to the roundhouse that they want an engine for 3 o'clock in the afternoon, if a clerk is maintained there, or whoever takes the order, he turns it over to the hostler, and it is necessary for him to see that the engine is fired up and got out on the furnish track in proper time for the engineer and fireman to do their inspection, and prepare the engine to be over in the yard at the time designated to leave.

Rule 462.

“They will be held responsible for the proper care and safe keeping of engines placed on receiving or furnish tracks, and will see that same are properly secured as prescribed by Rule 485.”

Rule 485 states that—

“Engines when left without any one in charge must be carefully shut off, the reverse lever placed on center, cylinder cocks opened, independent driver brakes set, and wheels securely blocked.”

Mr. Carter: You mean that the Great Northern takes considerable precautions for the protection of its property and the lives of others?

Mr. Cochran: Well, they do, because we have had, in some instances, engines get away, and they went into the turntable pit and tied up the division until they got the engine out.

Mr. Carter: And that is why they want them blocked?

Mr. Cochran: Rule 463:

“It will be their duty to maintain water at proper height in boilers of engines fired up and standing in round houses, or upon receiving or furnish tracks.”

In that connection, the hostler really becomes in a manner the assistant of the roundhouse foreman. That is, he relieves

the roundhouse foreman of all the details of furnishing the engines and keeping them in proper condition.

Rule 464:

“They must know that engines going out of roundhouse, or being turned for service, are supplied with coal, water and sand, and must see that engineer’s tools and oil cans are placed on same.”

Mr. Carter: Under these rules they have charge of the helpers, the men who put on oil and supplies?

Mr. Cochran: They have an oil man in the roundhouse, and the hostler has charge of him, and the helpers, to see that they properly perform their services.

Mr. Carter: Have you the current engineer’s schedule there?

Mr. Cochran: Yes, sir.

Mr. Carter: Will you please turn to page 21, rule 40, paragraph B and read that?

Mr. Cochran: Rule 40, paragraph B:

“At points where hostlers are not employed the hostling will be performed by engineers.”

Mr. Carter: The company seems to insist upon the most skilled labor doing this hostling work?

Mr. Cochran: Well, there isn’t anybody, to my knowledge, that handles an engine on the Great Northern Railroad other than a hostler or an engineer and fireman. Now, there may be an instance where some fellow may come along and move an engine under the direction of the roundhouse foreman, to get it out of the way, or something like that.

Mr. Carter: That is really not in accordance with the rules of the company?

Mr. Cochran: No. But he would be really under the direction of the roundhouse foreman. He perhaps would be present when the operation is going on.

Mr. Carter: He would be like a fireman running an engine, with the engineer on the engine?

Mr. Cochran: Yes. We have a rule here that I would like to call your attention to: Rule 38, paragraph B:

“Coal and water terminals. When it is necessary for firemen to take coal and water at ends of runs where hostlers are employed or where crews are changed and engines run through,

they will be paid actual time consumed in doing the work, at schedule rates, with a minimum of five miles."

Now, I want to call your attention to a feature of this rule. You will note it says here, "Where crews are changed and engines run through." Now, recently, or a few years back, the engines were always cut out wherever the engineer and fireman cut out, but to get more mileage out of the engine they now run them sometimes over two or three divisions. I will refer to one particular instance. The incoming crew cut off at Barnesville, and the coal shed was located maybe a half a mile from the depot. They had to take coal and water there for the outgoing crew. They declined to pay the five miles for that. They said he had not reached his terminal. So that was in the schedule of 1910. When we made this schedule we provided for it:

"Where crews are changed and engines run through, they will be paid actual time consumed in doing the work at schedule rate with a minimum of 5 miles."

Now we thought we had something in that rule and were going to be paid for it. But there is a place, Evansville, 57 miles from Barnesville, where previous to this rule, if an engineer and fireman stopped and took coal they would be severely disciplined for it. And west of there, at Hillsboro, if they took coal they would be disciplined. So when we got this ruling the order was issued that the crew going east would take coal at Hillsboro, and the outgoing crew would take coal at Evansville, and no coal was taken at Barnesville.

Mr. Carter: Then, sometimes, when the expenses are estimated, of what a rule is going to cost, as a matter of fact it does not cost anything after it is allowed?

Mr. Cochran: Quite often.

Mr. Carter: Therefore instead of having the hostlers do this work they wanted the engineer and fireman to do it, and when it went into the contract that they should be paid for it, why, in order to avoid the expense they had them take the coal and water on the road before they would get to the terminal?

Mr. Cochran: Yes.

Mr. Carter: And if they had done that before it would have been in violation of the rule?

Mr. Cochran: I fired those runs myself on that division for two years, and whenever we took coal at Evansville it was neces-

sary for the engineer to make an explanation why he stopped there and took coal. Now they stop the Overland Limited at Evansville, since we got this rule.

Mr. Carter: Cheaper to stop a transcontinental train than it is to pay the engineer and fireman to take coal?

Mr. Cochran: It seems to me they think so.

Mr. Carter: The engineer and fireman take coal where?

Mr. Cochran: At Evansville.

Mr. Carter: But they do not get paid for it?

Mr. Cochran: No.

Mr. Sheean: They are under pay all the time?

Mr. Cochran: Yes, and laboring some.

Mr. Sheean: Yes, but during the time they are putting on the coal they are under pay?

Mr. Cochran: Earning their money.

Mr. Sheean: Well, that is what I mean; that is not taken out; it is not separated from their day's work?

Mr. Stone: They are working by the mile, are they not?

Mr. Cochran: The difference is this, Mr. Sheean: The matter is so small that it doesn't mean anything to the fireman, we don't care anything about it, but it shows the spirit, that when compensation is due they say, "We won't do the work there, but we will do it where there isn't any compensation due if we can get away from it."

Mr. Sheean: That is, if they can avoid paying an arbitrary, so long as the men are under pay at the time this work is done, they avoid paying it as an arbitrary?

Mr. Cochran: We do not consider it an arbitrary at the end of 125 miles, with 14 big coaches, in 5 hours and 25 minutes, you know.

Mr. Carter: How long would you have to be on that run before you get overtime, on a five-hour day?

Mr. Cochran: Well, on the basis of 100 miles, it would be 10 hours.

Mr. Carter: How long did it take to make the run?

Mr. Cochran: Well, the actual running time is 5 hours 25 minutes, or 5 hours and 27 minutes.

Mr. Carter: Is it a hard job for the fireman and engineer, too?

Mr. Cochran: Well, they are busy all the time.

Mr. Carter: The best men generally put on those jobs?

Mr. Cochran: Well, my experience has been, and I fired the run myself, of course, when the engines were not as heavy as they are now nor the trains as large, and I believe that I could stand about as much work as the average fellow 25 or 26 years old at that time, and I know that it was all I could do, and I got off of the run whenever I could, to get a run that was lighter. I think the same applies at the present time.

Mr. Carter: The company prefers, I imagine, beside the seniority rule, to put their oldest and most experienced engineers on this Overland Limited, do they not?

Mr. Cochran: Yes, sir. For instance, we have two lines out of St. Paul, one known as the Willmar line and other as the Fergus line, the old St. Paul, Minneapolis & Manitoba, and the other known as the Great Northern. The engineer that worked years ago in the freight service on both of those lines, if he is running a passenger engine on the Fergus Falls division and his seniority entitles him to or he has to go over on the Willmar line, they make him take an "experience" trip with another engineer before he goes on one of those passenger trains.

Mr. Carter: Even though he had experience on the other line?

Mr. Cochran: Yes, and some of them as much as 25 years.

Mr. Carter: Now, Mr. Cochran, do you know many of these conditions under which these test trips were made? You have looked over those test trips; you have been back to St. Paul since you have looked over them, have you not?

Mr. Cochran: Yes, sir.

Mr. Carter: Will you explain some of the conditions you do not think were fair to the firemen?

Mr. Cochran: Yes, sir. Well, in the first place, in the test sheets here as given me, I assume they are all that were made, that is, all that were introduced in evidence.

Mr. Carter: From your road?

Mr. Cochran: Yes. This comprises 12 tests, and I believe the Great Northern operates over 7,000 miles of railroad.

Mr. Carter: About how many firemen?

Mr. Cochran: Well, I assume that under normal conditions—and I wouldn't assume to say just now—but in the fall of the year, like a year ago, or last fall previous to the grain move-

ment, I assume they used 1,200 firemen. Now, this test was made on the Willmar division out of St. Paul, on what is supposed to be the fast freight, train 401. That train 401 is scheduled out of St. Paul, or Como Avenue yards. Now, the Como Avenue yards are located possibly three-quarters of a mile or a mile from the Jackson Street roundhouse. The engine crew shows up there at least 30 minutes before they are due to leave. In other words, they would have to be at the roundhouse at about not later than 12:30. They take their engine and go up to the Como Avenue yards and pick up their train, or part of their train. Sometimes it is more than at other times. And they are due to leave there at 1:30 o'clock A. M. Then they go to the Minnesota transfer, which is about midway between St. Paul and Minneapolis, and they pick up whatever merchandise is at the Transfer, or other freight to go. Then they go over to Minneapolis Junction, and they are due there at 2:30 in the morning, so they have an hour going over there, a distance of about 7 miles. And at Minneapolis Junction the switch engines are always there, and put on to them whatever merchandise they have there. Then they go over to Clearwater Junction which is—

Mr. Carter: Just estimate the distance.

Mr. Cochran: Well, the exact distance is here. Well, it is about 12 miles from St. Paul. And they are due there at 2:45, and due out of there at 4:25. And the difference in the time there is made, of course, to provide for the delays across the terminals. Now the first four miles, about four miles out of St. Paul, are shown in the exhibit here as a one per cent grade. Now the test here shows that it was made from the Clearwater yards at Minneapolis, that is where the tester started. But the fireman started to work over at St. Paul.

Mr. Carter: How long before?

Mr. Cochran: Well, he should have left there from Como yards at 1:30 in the morning.

Mr. Carter: And he would have been on duty thirty minutes before that, reported for duty thirty minutes before that?

Mr. Cochran: Thirty minutes before that.

Mr. Carter: One hour, or 30 minutes, which?

Mr. Cochran: Thirty minutes.

Mr. Carter: Thirty minutes?

Mr. Cochran: He had to be there and on his train at 1:30,

ready to leave at 1:30. Now it might take him 15 minutes to get up there, and the engine crew would have to allow for time enough so they would not be blocked. If they were blocked, held there, why they would be disciplined for it.

Mr. Carter: When did this test begin?

Mr. Cochran: In the morning at 7:40 A. M.

Mr. Carter: How long had the fireman been on duty?

Mr. Cochran: Well, it looks to me that the train was set back to accommodate the fellow who was making the test, so that he would not have to get out at 1:30 at night.

Mr. Carter: Ordinarily, the train would have left much earlier than that?

Mr. Cochran: Four twenty-five it was due to leave, but if they were over there until 7:40, if they got there on time, and it was 7:40 before they left, it was evident they were doing some work around there switching a train. So that he put in 12 miles; he had put in anyhow whatever time he left St. Paul, he did 12 miles work going across those terminals. There is an illustration of it here, in this time card, of the number of trains that are operated back and forth there over those terminals.

Mr. Carter: Under the time card, how much time would he have across there?

Mr. Cochran: How much time?

Mr. Carter: If he was on time all the time, left on time and left Clearwater on time, how much time to do this work from the terminal?

Mr. Cochran: Two hours and 55 minutes.

Mr. Carter: How much?

Mr. Cochran: Two hours and 55 minutes.

Mr. Carter: And you say this test appears to have begun at Clearwater?

Mr. Cochran: Yes.

Mr. Carter: You don't know that this train might have been started from Clearwater on this occasion?

Mr. Cochran: They couldn't start it from Clearwater.

Mr. Carter: Unless it is done especially for a test.

Mr. Cochran: Because there are no train crews that tie up there. No train crews tie up there. Road crews tie up at St. Paul.

Mr. Carter: Now, do you know of any other test that does

not seem to take the entire trip in, or something of that kind?

Mr. Cochran: Well, the same test was made on a train out, known as Second 401. That was made from Union yards, Minneapolis to Willmar, and Union yards is what is commonly known as "The Wheat Field," or about 7 miles from St. Paul.

Mr. Carter: Did this test commence at "The Wheat Field?"

Mr. Cochran: That is what is shown here on this sheet.

Mr. Carter: And that is just simply an observation of yours? You have not interviewed the fireman, or anything of that kind?

Mr. Cochran: Well, there is this about it. No freight crews tie up in Minneapolis except the way freight. They run to Como Avenue yards.

Mr. Carter: That is, in St. Paul?

Mr. Cochran: St. Paul. And they run out of St. Paul. Now, another test was made here eastbound on that same division, from Willmar to Cedar Lake yards. Now, Cedar Lake yards is west of Clearwater Junction. It does not show on the time card, but I should judge it is about two miles west of Clearwater Junction. And to explain the Cedar Lake yards, that is what they call "the hump yard." That is where they set out wheat trains. And they use a Mallet engine there, and they couple up about 100 cars and come up there on the Hump, and have about 30 "Rough riders" catching the cars down in the field. And this test shows that it started at Willmar and ended at Cedar Lake yards. Well, now, there is no place there to eat or sleep, no place there to tie up any crews. Now, there were one of two things this crew had to do: If they set out all their train at Cedar Lake yards they would double them back to Willmar possibly light, but I notice he was on the road too long to do that. So, assuming that he may have set out part of his train there, or all of it, he might have backed up some empty cars there and hauled them down to the junction.

Mr. Carter: About how long would it usually take before he was finally relieved, after he reached this place?

Mr. Cochran: Well, I was just going to explain that. If he set out all his train there he might be required to pick up some empty cars there and take them to the junction, or if he did not set out all of his train he would have to go to Clear

Water Junction, or to Minneapolis Junction, where he might be required to pick up cars to take over to Minnesota Junction, or Como. And to go over to Como, it requires sometimes an hour and a half, or two hours, to get across those terminals, and the fireman certainly has to work in through that section of the country. So, on the Willmar Division, whatever those tests are, they do not show any one beginning at St. Paul, or ending at St. Paul. They show two trips at the Cedar Lake yards, and two trips at the Union yards, in Minneapolis.

Mr. Carter: That is all.

Mr. Cochran: There is one test I want to call your attention to here.

Mr. Carter: Go ahead with the test.

Mr. Cochran: There is a test here on the Kalispell Division, on train 435, which is known as a fast freight, and it shows 1,700 tons. And the tonnage rating of that engine is 1,850 tons. And it shows that the fireman was 2 hours and 22 minutes supplying coal to the fire box. Now, so you will understand that, that is from Cut Bank to White Fish, up over the summit of the Rocky Mountains, and it is 61 miles to the summit. Now, that would indicate, of course, that that was a pretty easy job over there for a fireman, but here recently the Superintendent writes the Local Chairman out there, a letter dated White Fish, Montana, February 20, 1915, as follows:

"I have your favor of February the 19th, making application for 100 miles run-around in favor of Fireman E. L. Harris, who on January 14, 1915, stood first out on extra board at White Fish. This run-around being claimed on account of our using an engine herder from Summit to assist in bringing train from Blackfoot to Summit, on account of fireman on engine 2016 being overcome, due to heavy work."

Mr. Carter: Is that the Superintendent's letter?

Mr. Cochran: Yes, signed by the Superintendent.

Mr. Carter: And he says the fireman was overcome on account of overwork?

Mr. Cochran: Due to heavy work.

Mr. Carter: It was not the same man who was the observer on this trip, was it?

Mr. Cochran: There was no observer on this trip.

Mr. Carter: I mean this observer, that you are talking

about now. He did not think that anybody was ever over-worked, did he?

Mr. Cochran: Not in his report. Now, the feature of this is, that this fireman played out twenty-six miles from Cut Bank, and was not half way up the mountain. So that the tests made there were made on the fast freights and not on the drags, and some of those trains go over there with over 2,000 tons on, and the test was made on a 1,700 ton train. So that it is not a true indication of what the men have to contend with.

Mr. Shea: Mr. Cochran, were these tests made on divisions that are known as easy, or hard divisions?

Mr. Cochran: Well, the tests were made on the Willmar Division, ninety miles out of Minneapolis, where they burn, generally speaking, Eastern coal.

And then the next trip was made between Havre and Cut Bank, Montana, 129 miles of territory. And the next one was made from Cut Bank to White Fish. All westbound on those two trips.

Now, we have a division out of St. Paul, between St. Paul and Superior, or 161 miles. And going from Superior to St. Paul it is 59 miles uphill, and about .7 per cent grade, that is, rolling grade. And it is all that those engines can do to get their trains up there, and it requires four and five hours to do it, and in the winter time it is necessary for the company to put helpers on there to get the tonnage up. Now, there was no test made over this 161 miles.

Also from Superior to Cass Lake, a distance of 161 miles, where it is almost level, and where they haul the heaviest tonnage, as high as 3,500 to 4,000 tons, there was no test made there.

Mr. Carter: That is, no tests reported, you mean?

Mr. Cochran: No tests shown here, as made there.

Then, on the ore line, at the time these tests were made, we were hauling ore from Superior to Kelly Lake, which is about 114 miles, and they haul as high as 6,500 tons of ore on Mallet engines, but there is no test shown here, between those points.

And there is no test shown from Breckenridge to New Rockford, a distance of 162 miles. And, on what is known as the Butte Division, from Havre to Butte, Montana. And from Great Falls to Billings, Montana. And the new line, from Great Falls to Cut Bank, over what is known as the Cut-Off in the San Cou-

lee territory, where they burn San Coulee coal, they do not show any test in that territory.

Mr. Byram: Mr. Cochran, did you say they haul 6,000 tons of ore from Superior to Kelly Lake?

Mr. Cochran: Am I right, Johnson?

Mr. Johnson: From Kelly Lake to Superior?

Mr. Cochran: From Kelly Lake to Superior. They do not haul the ore up.

Mr. Byram: Down hill?

Mr. Cochran: No, not necessarily down hill. It is down hill from Brookston to Cloquet.

Mr. Byram: How much uphill is there on that trip?

Mr. Cochran: Well, at some points they maintain a helper

Mr. Stone: That is 7,500 tons, instead of 6,500 tons, isn't it, Mr. Cochran?

Mr. Cochran: Yes. 125 cars. You understand, Mr. Byram, it is just as hard to haul empties up, you know, up to the mines, as to haul the train down.

Mr. Byram: Do they haul 6,000 tons of empties up?

Mr. Cochran: Well, they haul all they can get together, all that will hold together and all they can handle.

Mr. Byram: Six thousand tons of empties?

Mr. Cochran: They couldn't haul six thousand tons of empties. I never heard of it. But if you get enough empty cars, they pull just as hard as the loads, for the fireman.

Mr. Shea: Just as hard for the fireman?

Mr. Cochran: Yes.

Mr. Byram: Just as hard to haul them down hill as up?

Mr. Cochran: Well, there would not be any one who would contend that. But when you go down one hill as fast as you can run the engine, in order to get the train over the next hill, there is not much relief for the fireman in that territory, because he has got to shovel enough coal in the fire box to get the train up the next hill.

Mr. Byram: Do you think it is just as hard to haul those oil trains from Kelly Lake to Superior as it is to haul empty cars back?

Mr. Cochran: Well, they burn a little more coal coming down than they will coming up.

Mr. Byram: Coming down.

Mr. Cochran: And then from Williston to Glasgow is 157 miles of freight territory; and Glasgow to Havre is 152. And, of course, I don't find any tests in there. Now, the tests shown here were mainly with Ferney coal. They used Ferney coal from Cutbank or from Havre and White Fish, because they cannot burn Coolety over the mountain. So to get the real dope of what a fireman performs on a system the size of the Great Northern, I think it would be necessary to get more than twelve tests.

Mr. Carter: Are accommodations for engineers and firemen any better at Cutbank than they used to be?

Mr. Cochran: I think they are about the same.

Mr. Carter: Do they have a waiting list at the hotel to go to bed, like they used to?

Mr. Cochran: Yes, when they have any business there.

Mr. Carter: First in first out? Men sit in the office until a fellow gets out of bed?

Mr. Cochran: The man who runs the hotel runs it for money, and with the rush of emigration in there in the last few years, when a train gets in there they fill up the space, and if an engine crew is there, when there is a vacancy, they get it.

Mr. Carter: That is all.

CROSS-EXAMINATION.

Mr. Sheean: Mr. Cochran, since these test sheets on which Mr. Tollerton testified were filed in the court, how many observations or tests, to your knowledge, on how many different roads, have been taken and reported to Mr. Carter, along the same lines?

Mr. Cochran: I don't know of any.

Mr. Carter: On any railroad?

Mr. Cochran: I don't know of any.

Mr. Carter: No observations at all?

Mr. Cochran: I don't know of any observation made by Mr. Carter, or any of his associates.

Mr. Sheean: No, not by Mr. Carter, but as to whether there have been reported to Mr. Carter.

Mr. Cochran: No, I know nothing about it.

Mr. Sheean: Nothing about any?

Mr. Cochran: No.

Mr. Carter: I can answer for that, that I have not, directly or indirectly, suggested or intimated that anybody should take a test, and nobody has ever reported, directly or in any manner any test to me. The only thing we did, we had photostat copies made of a certain number of those tests, and we sent them out to our General Chairmen, and they gave them to the men, and the men kicked on the tests, and we sent for quite a large number of the men, and when we heard that some members of the Board were getting very impatient, we sent ten men home, I think yesterday morning, and some of the best men we had, but we didn't want to worry the Board.

Mr. Sheean: My inquiry was whether or not, since this there had been made observations or reports of trips as to coal burned and how much time taken in shoveling coal, whether you had received reports of actual trips?

Mr. Carter: I have not even suggested such a trip be made, nor has any record of such a trip been made to me.

Mr. Stone: Not guilty here, either.

Mr. Sheean: Then, Mr. Cochran, you have not taken any steps, or asked any of your men to make reports on any of this other territory?

Mr. Cochran: No, except I have asked for the information on these trips, as to the beginning and ending, from the engineers, and the firemen, of course, are out of service. But I know, Mr. Sheean, it is not necessary for me to get the information of the other division. I have that all; the amount of coal they burned. I can tell it to you. They burn thirty-six tons of coal coming over the Rocky Mountains, and I have the record.

Mr. Sheean: On a particular trip?

Mr. Cochran: Well, they will average, when they have the tonnage, they will average 27, 28 and 30 tons of coal, and that Ferney coal at that.

Mr. Sheean: Now, have you also, in the same connection, caused any observation to be made, Mr. Cochran, as to how much of the time the fireman is actually engaged in the physical work of shoveling the coal?

Mr. Cochran: No, we go, Mr. Sheean, and get the record, the coal record, from the register at the roundhouse. We know the amount of coal shoveled on the run, and from the knowledge of the men on the committee and myself, who have had the actual

experience, we can readily tell how hard the work is, from the amount of coal consumed.

Mr. Sheean: That is what I had in mind, Mr. Cochran, when you had part of this trip—this first one here, being made in getting from Clearwater—or getting to the Clearwater yards, there is a couple of hours or longer put in in getting through the tunnels there.

Mr. Cochran: Yes.

Mr. Sheean: Well, during that particular part of the time, the proportionate part of the coal shoveled by the fireman would not give any fair idea of how hard he works, would it?

Mr. Cochran: That would all depend. It would depend upon what was required. If he took his tomage out of the Como yard, three miles up the hill, which is about a one per cent grade, why, he would be on the job pretty steady getting over there. Now, then, you understand, out of Minneapolis Junction, around those curves in the yard, is crooked, the tracks are all crooked in there, and trains handle hard in there.

Mr. Sheean: But to charge up all of that time—I think you said they allowed 2 hours and 55 minutes?

Mr. Cochran: Yes.

Mr. Sheean: And for that length of time, 2 hours and 55 minutes, figured on a per diem basis, he probably would not shovel as much coal proportionately as when he got in a day with the drag, would he? I mean in length of time.

Mr. Cochran: Well, I can only cite to you my own experience going over there. I can tell you my actual experience going over there.

Mr. Sheean: How long would it take in going over?

Mr. Cochran: That would all depend on how much switching the yardmaster would put on you. If the yardmaster would practice efficiency and run his engines down in the yard some place where they were supposed to put the train on, and require the particular crew to switch out the cars in that busy terminal, the fireman would be pretty busy, and would be as busy as he would any place, between keeping his fire up, and jumping up and down and watching for signals.

Mr. Sheean: That is what I mean. He would be busy in watching for the signals in the busy terminal; but where you are trying to divide, if you can, and ascertain how much of the

work puts a physical strain on the man, the part in there when he was going over the ground slowly would not put as much physical strain on him during that part, as it would in the latter part of the day?

Mr. Cochran: I can best answer that in this way. I could arrive at a good conclusion on your question if the men who made these tests had put in a statement here dividing the length of time between the firings. They total here the actual time that the fireman was putting in the coal. Nobody can dispute that, because you cannot go and make that trip over again with that fireman. But a man who fires, who runs over the division every day, knows the speed of the train in going over it, and how much time he has to get from Clearwater to Long Lake, and how much from Long Lake to Smith Lake to meet a passenger train. This test ought to show in here the space between the fires. If he did no firing during ten minutes, at any particular point, it ought to show that, and how many miles he was going. If it showed that, then I could arrive at a conclusion, whether the test was a fair test or not. But nobody could tell, the way he has got it in here.

Mr. Sheean: I was not talking about that, but simply the point of omitting this preliminary work.

Mr. Cochran: If the time was spaced out here, I could answer your question very clearly.

Mr. Sheean: On the two or three, or four points of difference, it might be while he was getting to this outer yard, the physical strain as distinguished from his other duties would not be as great as in the same number of hours on the road, would it?

Mr. Cochran: Of course, he would not burn as much coal in twelve miles as he would in ninety miles.

Mr. Sheean: That is precisely what I had in mind.

Mr. Cochran: But it all has a bearing on the day's work.

Mr. Sheean: But you understood, did you not, that these tests were made simply in connection with the one proposition which the firemen advance, that after a certain amount of tonnage, irrespective entirely of their responsibility, the physical strain on certain engines became greater than one man could stand, and this effort was to ascertain the physical strain about which they complained?

Mr. Cochran: Well, I had to do with the framing of that,

and the framing of it was on my actual experience; and while it may be true that one trip, with a light engine, would not require the physical strain that it would with the tonnage, that was based on the amount of coal consumed as we got it from the company's records. Even on a 180,000 engine, I can show you instances of those engines burning 35 tons of coal in sixteen hours.

Mr. Sheean: The 180,000 pound engines?

Mr. Cochran: Yes.

Mr. Sheean: On what trips?

Mr. Cochran: On several trips.

Mr. Sheean: And back how many years is that?

Mr. Cochran: Just within the last year or so.

Mr. Sheean: Within the last year?

Mr. Cochran: Yes. And by the way, of course, the fireman would have no way of knowing, when he left the terminal, whether he was going on an easy trip or a hard trip. They do not tell the fireman how much tonnage he is going to have, how many hours he has to go over the road, or how much coal he is going to have to shovel; so the fireman, in his proposition there, could not make a dividing line.

Mr. Sheean: Based either on hours, or on anything other than a certain tonnage-rated engine.

Mr. Cochran: He bases it on the size of the engine and the amount of coal consumed when the engine was worked anywhere near her capacity, and he goes on the assumption that she is going to be worked to her capacity all the time.

Mr. Sheean: But even on a considerably lower, or somewhat lower weight on drivers than the proposition here involved, if you have it out long enough, up to the extreme limit of the law, the fireman on that engine will shovel a very much larger amount of coal than is shown here.

Mr. Cochran: You mean a lighter engine?

Mr. Sheean: 180,000 pounds, I understood you to say up in the 30 tons.

Mr. Cochran: Well, yes, that is of San Coulee coal.

Mr. Sheean: So I take it that on the greater weight on drivers, if the length of time on the road be shortened up, the consumption of coal will also be lessened; and it is not merely the weight on drivers that determines the necessity for two firemen.

Mr. Cochran: Well, it is the capacity that the engine is worked at, that determines that. If you take a 180,000 pound engine, for instance, from Great Falls to Clancy, 114 miles, it is up a water grade, an average I should say of .7 of one per cent. Give that engine 2,500 tons, or 2,000 tons, her tonnage rating—I have not the card here—so that that engine would have to work all the time at about 14 inches cut-off, she will use up a lot of coal going up there.

Mr. Sheean: So that the necessity for two firemen, or for the relief fireman, is dependent not only on the weight on drivers, but the length of the run, the grade, the quality of coal, and a variety of other things.

Mr. Cochran: It all enters into it.

Mr. Sheean: It all enters into it.

Mr. Cochran: And, of course, in that connection, I assume that from the time the engine goes out, she is going to be worked to her capacity, because that is the experience—

Mr. Sheean: And it was upon that theory that the request was based?

Mr. Cochran: Yes, that it was too much for one fireman.

Mr. Sheean: It was based on the theory that every time an engine goes out, it was worked to its capacity, and to the limit of the law.

Mr. Cochran: Yes, and in that connection, Mr. Sheean, you know the fireman might work sixteen hours and burn 25 or 30 tons of San Coulee coal—say 25 tons—and then be tied up at some place where there was no place to sleep or eat, and he would have to sleep on the seat box, and you know that is a pretty tough place to sleep. He would have to stay there eight hours, or go back in the caboose, and the conductor and brakeman would not have any room for him, and then he would have to go to work in the morning and maybe work five or six hours without anything to eat, until he got into the terminal, and he would be in bad shape, wouldn't he?

Mr. Sheean: Yes, and it would be so, no matter what was the weight on drivers, would it not?

Mr. Cochran: No, take a nice little standard engine, of course, that is different. That is graduated. This graduation that we have in here, you will notice, the rates of wages from the standard engine are graduated, on the size of the engine, based

on the amount of work that the fireman performs on each one of these engines.

Mr. Sheean: Under the conditions you have stated here, it would be a pretty tough job, no matter what the weight on drivers was?

Mr. Cochran: I always found it that way.

Mr. Sheean: Mr. Cochran, on the Great Northern schedule to which you have referred, with reference to hostlers, the provision is that at main line terminals where hostlers are employed—

Mr. Cochran: What rule is that?

Mr. Sheean: Rule 37.

Mr. Cochran: In the current schedule?

Mr. Sheean: In the current schedule.

Mr. Cochran: I will find it in a second. Yes, I have it.

Mr. Sheean: The requirement of the rule is that at main line terminals where hostlers are employed, their duty will be to see that fires are cleaned, and coal, water and sand put on the engine.

Mr. Cochran: Yes.

Mr. Sheean: Under that schedule, who determines at what points hostlers shall be employed?

Mr. Cochran: I assume—of course, I would not be an authority to say, but—

Mr. Sheean: I mean, is it the company or the men who determine that question?

Mr. Cochran: Well, the company determines that, upon the expense of handling the engines.

Mr. Sheean: No matter on what they determine it, the company still determines, under the schedule, at what points hostlers shall be employed?

Mr. Cochran: I will give you an illustration of that. For instance, at Melrose, Minnesota—I take that because it is close to St. Paul, and I am very familiar with it, for that is where I hosted myself—if the business in the fall of the year and the winter, right now, falls down, so that there is only a tri-weekly way freight, that is, it runs three days a week one way and three days back, and they have a time freight once a day, there would be only two engines, and no passenger trains stay there. The passenger trains run through there. If it was cheaper to pay

the engineer thirty minutes, or the actual time he used in hostling the engine, than it would be to keep a hostler there, they would pay the engineer. But whenever the number of engines has increased to a point where the expense was greater to pay the engineers and firemen, than to pay the wages of a hostler, then they would put on a hostler. That does not concern us very much.

Mr. Sheean: The question I sought to ask was, whether the operating officers of the company still determined at what points hostlers shall be employed.

Mr. Cochran: I assume they do, on the expense, yes.

Mr. Sheean: Whether it be on the expense, or what, they still decide it, do they not?

Mr. Cochran: In the fourteen years I have been there, I have generally noticed that when they put a hostler on, it was at a time when there were enough engineers so that it cost more to pay the engineers than to pay a hostler. That is based on my past experience, and what I have seen done.

Mr. Sheean: "At ends of runs where this work is done by firemen, they will be paid for actual time consumed in doing the work at schedule rates, Provided, that in no case will less than five miles be allowed for this service?"

Mr. Cochran: Yes.

Mr. Sheean: That is the schedule rate of the firemen, is it?

Mr. Cochran: Yes, the schedule rate for the class of engine.

Mr. Sheean: So that at the end of any run where hostlers are not employed, the fireman continues as a part of his day's work, and under his regular schedule rates of pay.

Mr. Cochran: An arbitrary allowance in addition to all other time or miles made on the trip?

Mr. Sheean: That applies where it is less than 100 miles?

Mr. Cochran: Yes.

Mr. Sheean: So that ther would be 105 miles in every case where the fireman hostles his engine?

Mr. Cochran: Yes. This rule covers that point, Rule 7:

"Road firemen when required to perform switching service or turn their trains on wye before commencement or after the end of any run of 100 miles or less—"

You will notice the "or less." You see it emphasizes less than 100 miles —

“Will be paid for same at regular overtime rates in addition to pay for trip, this not to apply at turning points or turn-around runs except when such turn-around runs are computed as two separate trips, or when switching not in connection with their own trains is done.”

Now, so that you will be clear on that, if they went out on a branch run, a turn-around run of fifty miles, and it was necessary to take coal at the end of the run, and they turned their engine on the “Y” to come back, there would not be any overtime for that, unless it was after ten hours, and then it would be computed as two separate trips, and hostling paid for at both ends.

Mr. Sheean: But it would be necessary to make the entire ten hours before they would be entitled to overtime?

Mr. Cochran: No.

Mr. Stone: At pages 15-16 of the Engineers' schedule, you will see examples in the footnote.

Mr. Cochran: It is not necessary to make ten hours. It is an arbitrary allowance, whatever miles or hours are made on the trip.

Mr. Sheean: It is simply added to the time of the trip.

Mr. Cochran: Yes. If a man ran fifty miles and was an hour hostling his engine, he would get 110 miles.

Mr. Sheean. That hostling includes the actual putting of the engine into the roundhouse, across the pit.

Mr. Cochran: If there is a coal shed there, one of those that works automatically, if the fireman pulls the lever, sometimes it will come down and sometimes it will not, but the fireman will take the coal from the buckets. The watchman will put the coal on. They will then take the engine to the cinder pit, or wherever the watchman wants the cinders. Then he would clean it, and then the engineer and fireman will put the engine in the house.

Mr. Sheean: And that is what is described or designated as being a part of the hostler's work, putting the engine clear in the house if necessary?

Mr. Cochran: Yes.

Mr. Sheean: Under your operating Rule 461, which you referred to, in which the duties of hostlers are prescribed, if this award was granted, would it be necessary, at points where

hostlers were maintained, to pay the engineer his arbitrary preparatory time of thirty minutes, and the fireman also?

Mr. Cochran: It would if he handled the engine, yes.

Mr. Sheean: No, but I am talking about a case where the fireman and the engineer receive their engine at the passenger station.

Mr. Cochran: Yes?

Mr. Sheean: Get it from the hostler.

Mr. Cochran: They do not do that.

Mr. Sheean: What is that?

Mr. Cochran: They do not do that.

Mr. Sheean: Well, but they have a right to do that, haven't they?

Mr. Cochran: Our company?

Mr. Sheean: Yes.

Mr. Cochran: They have not done it in about fourteen years.

Mr. Sheean: No, but assuming that the engine is delivered by the hostler to the engineer at the passenger depot, is there any escape, under this proposal, from paying the engineer and fireman the thirty minutes arbitrary?

Mr. Cochran: If they have a hostler?

Mr. Sheean: Yes.

Mr. Cochran: Let me understand you right. For instance, at St. Paul, there is an outgoing train. The hostler or somebody brings the engine down and puts it on the train.

Mr. Sheean: Yes.

Mr. Cochran: Your question is, are you going to pay the engineer and fireman for that?

Mr. Sheean: I am asking what your proposal means.

Mr. Cochran: I don't know anything about the proposal.

Mr. Sheean: I thought you had a part in framing the proposal as to preparatory time?

Mr. Cochran: Hostling the engine is not preparatory time. Do not confuse the proposal. Bear in mind, so you will be clear on this. Take it on the Great Northern, on a branch line, where the fireman hostles the engine, they take the engine out of the roundhouse in the morning—by the way, they get it night and morning. For this service—

Mr. Sheean: Yes.

Mr. Cochran: He will take the engine out of the house in the morning, on the track, for which he is allowed thirty minutes, or five miles. Then, if the trip is computed in hours, he gets an additional thirty minutes for preparing his engine.

Mr. Sheean: Under your present schedule?

Mr. Cochran: Yes.

Mr. Sheean: What I am talking about is the proposal here?

Mr. Cochran: If this hostler took the engine down to the passenger station and put it on the train, the engineer and firemen would be paid thirty minutes preparatory time, which has no connection with the hostling of the engine.

Mr. Sheean: So that in a case where the hostler takes it down to the station, there would be thirty minutes arbitrary allowed to the engineer and fireman, because the hostling and the preparatory time are entirely distinct and separate propositions, as this proposal contemplates.

Mr. Cochran: There is not anything in the proposal about hostling. I am talking about our present conditions, and the preparatory time has nothing to do with the hostling of the engine.

Mr. Sheean: So, too, it not having anything to do with the hostling of the engine, where the same men do it, where under their present practice the engineer and fireman do this hostler's work, and are allowed this arbitrary that you provide for, if this rule were granted that would allow another arbitrary of thirty minutes for preparatory time.

Mr. Stone: Mr. Trenholm said it would mean—

Mr. Sheean: I want to know whether you confirm this view, that there are these two arbitraries?

Mr. Cochran: As I understand it, if the engine was brought to the passenger station, and it was necessary for the engineer to fill his cups, and the fireman to do his necessary work, and check up his supplies, and see that he had water and sand, and inspect the ash pan, and for the engineer to see that the eccentric was all right on the outside,—we have some on the inside too, that he has to go on the inside and see about,—and do all that work, we expect and ask that he be paid the arbitrary allowance for preparing the engine. That has no connection with hostling.

Mr. Sheean: And having no connection with the hostling, if this practice on the Great Northern obtained on the branches

where the engineer and fireman do this separate work, which you say is the hostler's work, they also. the same men, would have the hostling allowance plus the preparatory time allowance in each case?

Mr. Cochran: Now, at the present time?

Mr. Sheean: At the present time, if it runs into hours, yes.

Mr. Cochran: He gets the hostling anyway, whether it is miles or hours, but the preparatory time only counts in hours.

Mr. Sheean: I am talking about the possibility, if this proposal is granted.

Mr. Cochran: I cannot see where we gain anything in our proposal if the engine is delivered at the passenger station, that it asks for anything other than the thirty minutes for preparing the engine, if they do prepare it.

Mr. Sheean: Exactly. I am quite clear on that. If the engine is prepared by the hostler and taken down and delivered to the engineer and fireman at the passenger station, and they pay the engineer thirty minutes preparatory time. I am clear on that. But now, I want to get the other case, where the engineer does what you call hostler's work, and you are paying the engineer for his road trip, and before paying him for the road trip, you pay him for the hostler's work, and then you also pay the arbitrary preparatory time, and then his road trip.

Mr. Cochran: Only when he does the work.

Mr. Sheean: Yes, but I am assuming that the man on the branch lines takes it out of the roundhouse. Not less than 5 miles allowed for that.

Mr. Cochran: Let me get this in straight, Mr. Sheean. Maybe I don't get what you are driving at. As I understand your proposition, you say the engine is taken out of the roundhouse by the hostler.

Mr. Sheean: Yes. Now I have covered that unless you want to go back to it. I am talking about the engineer and fireman on these branch lines doing what they do now, take it right out from the roundhouse.

Mr. Cochran: I am not clear what you are talking about. Going to the passenger station with it?

Mr. Nagel: The witness evidently does not agree with your statement of the proposition, and wants you to explain it.

Mr. Sheean: I thought he did.

Mr. Cochran: As I understood your question a moment ago, you said the hostler took the engine out of the roundhouse and did the preparatory work?

Mr. Sheean: Yes.

Mr. Cochran: And delivered it down to the passenger station?

Mr. Sheean: Yes.

Mr. Cochran: And that then we wanted 30 miles arbitrary allowance, or an hour's arbitrary allowance, without doing any service. Do I get you right?

Mr. Sheean: I said you wanted? I didn't attempt to argue. I said the proposal meant that the fireman would be paid 30 minutes and the engineer 30 minutes, although the engine was delivered to them at the passenger depot.

Mr. Cochran: Now, let us get that straight. The taking of the engine out of the roundhouse by the hostler, and taking it down there to the passenger station, has no connection whatever with the preparation of that engine.

Mr. Sheean: Then you do agree with me. All I am seeking to develop is that you do agree with me that, even where the hostler delivers an engine at a passenger depot, the proposal means that the engineer and the fireman who go out on that engine shall be paid 30 minutes in addition to the time or miles made on their run.

Mr. Cochran: If they inspect and repair the engine for the trip at the passenger station instead of the roundhouse?

Mr. Sheean: Well, now, just what do you mean by inspecting?

Mr. Cochran: Well, you take these modern passenger engines, you know, they are run 300 miles on some divisions. I can best illustrate it this way. It is 330 miles from Grand Forks to St. Paul. On No. 2, the Overland Limited, the engine runs from Grand Forks to St. Paul, 330 miles. On that trip there are two engine crews handling that engine.

Mr. Sheean: Now, let us take time. The train leaves St. Paul in the morning at what time?

Mr. Cochran: No, just a minute. I am coming into St. Paul from Grand Forks. We don't care anything about the time.

Mr. Sheean: I want to make it clear as to whether we agree, Mr. Cochran. I am talking about preparatory time.

Mr. Cochran: Now, I am leading up to why it is necessary for the engineer—that is what I wanted to get at.

Mr. Sheean: All that I wanted, Mr. Cochran, is to find out what you were claiming.

Mr. Carter: Give the witness a chance and he will tell you.

Mr. Cochran: These engines will run from Grand Forks to St. Paul, 330 miles; the train is due there usually at about 8:30 in the morning. Now, they get down to the depot. That crew, of course, runs into the depot, and they have to be pulled back out of there by a switch engine, and come around the Burlington Y up into the yard. Of course, they are paid switching for that, paid for that in addition to the trip. Then the engine comes to the roundhouse and they examine the engine, and at 4:45 the Winnipeg Flyer leaves, and that engine that comes in on No. 2 may go out on the Winnipeg Flyer. If that was the case, as you are alluding to, the hostler took that engine down to go out on the Winnipeg Flyer and running 330 miles and it stays in the roundhouse from 9:30 in the morning until 3:30 in the afternoon, and the engineer went down there and didn't inspect that engine, and he got up around about St. Cloud, and he lost something off the engine which caused a delay, he would be given 30 days. So it is very necessary for the engineer to give the engine an absolute inspection before he leaves on the trip, to be sure his engine is in proper condition to make that run, so long as he is in charge of it, and turn it over to the other man in proper condition.

That is why they want the 30 minutes for inspection, even if the engine is brought down there and they are required to inspect it.

Mr. Shea: In other words, Mr. Cochran, I understand your contention is that it does not make any difference whether the engineer or the fireman prepare their locomotive at the roundhouse, or whether they prepare it at the train shed, if they actually do the work.

Mr. Cochran: Yes, that is the proposition.

Mr. Sheean: Now, just what does the fireman do? You have told us about the necessity of the engineer looking over the engine when he is going out of the train shed at 4:45. The engineer comes down to this train shed, and the hostler delivers the

engine to him. You have told us what the engineer has to do. Now, then, just what does the fireman do down at the train shed there?

Mr. Cochran: Well, if the hostler brought the engine down there to the train shed—these modern locomotives have considerable grease cups on them, and they are big machines, worth a lot of money.

Mr. Sheean: You have already been relieved of any duty in reference to these.

Mr. Cochran: Not yet. Not on the Great Northern. On other roads they may fill them for them. But, to get the proposition straight; the fireman would have to see and probably assist the engineer in filling his rod cups. He might not have time to do all the work. It would be necessary for the fireman to know they had ample water to get to the next water tank; also know that they had sand on the engine; also know that the engine is equipped with the necessary firing tools; to know that he had the proper amount of supplies; to know that his markers were on the engine; his signal lamps, and everything that was necessary to carry out the requirements of the trip with safety to himself and all others.

Mr. Byram: Mr. Cochran, did you say this trip you were speaking of was between Grand Forks and St. Paul?

Mr. Cochran: Yes.

Mr. Byram: 330 miles?

Mr. Cochran: Well, it might be a mile or more one way or the other.

Mr. Byram: Does one crew run through?

Mr. Cochran: No, one crew comes from Grand Forks to Barnesville.

Mr. Byram: They change at Barnesville.

Mr. Cochran: The crew changes there, but the engine does not?

Mr. Byram: Now, how much dead time is there at Barnesville?

Mr. Cochran: Well, while the engineer and fireman are getting off and the other engineer and fireman getting on. About, I should say—if it is over five minutes, some one will ring the bell and ask them what is the matter.

Mr. Byram: What would be the situation in regard to this preparatory time rule for the crew taking this engine out of Barnesville?

Mr. Cochran: They don't get any preparatory time.

Mr. Byram: They would not be allowed any under this rule?

Mr. Cochran: I am not making an interpretation of the rule. I am testifying as to what the actual conditions are at the present time.

Mr. Sheean: Well, you don't have any preparatory time rule now except where it runs into hours.

Mr. Cochran: Not on passenger.

Mr. Sheean: We were discussing here, as you seem to understand, that down in the train shed, under this proposition, it was intended that there should be thirty minutes paid to the engineer and fireman in addition to the time they ran.

Mr. Cochran: All I know, Mr. Sheean—

Mr. Stone: That is what Mr. Trenholtn said we would get under the application of the rule.

Mr. Byram: Now, if you please, let the witness answer me, and then you can talk all you want.

Now, you said that this crew changed at Barnesville?

Mr. Cochran: Yes.

Mr. Byram: And they were allowed five minutes dead time to make the change?

Mr. Cochran: Just as quick as they can get out of there.

Mr. Byram: Now, this new rule says every time an engineer and fireman go out they are to get preparatory time, does it, or does it not?

Mr. Cochran: Yes.

Mr. Byram: Well, now, this engine crew that takes this engine at Barnesville in the middle of this trip, would they, under this proposed rule, expect 30 minutes' preparatory time?

Mr. Cochran: If it was an arbitrary allowance, and they prepared the engine to continue on the trip to St. Paul, I should think they would.

Mr. Byram: How could they prepare it in the five minutes that is allowed to change engine?

Mr. Cochran: Well, they would have to, somehow. They all get in together, the two engineers and two firemen pitch in

and get the engine ready; the incoming crew assists the outgoing crew whatever is necessary.

Mr. Byram: And the outgoing crew would be the only one that got any pay for it?

Mr. Cochran: I presume so.

Mr. Burgess: Mr. Cochran, I am in the same pew that Mr. Sheean is. He wanted to find out from you just what the fireman did after you explained what the engineer did in getting the engine ready. Now you stated, if I recall your testimony, that he would have to look at his supplies. Now, momentarily considered that seems as if that would take a very small amount of time. Now would the fireman not have to see that his tender was full of water?

Mr. Cochran: Oh, yes.

Mr. Burgess: And that the sand box was full of sand?

Mr. Cochran: Yes, sir.

Mr. Burgess: Now, in order to perform that service, he would have to go to the rear end of the tank?

Mr. Cochran: Climb up over the tank.

Mr. Burgess: To see about what?

Mr. Cochran: How is that?

Mr. Burgess: He would have to go there to see about the water.

Mr. Cochran: To see about the water.

Mr. Burgess: Then he would have to climb down from the tank?

Mr. Cochran: Yes.

Mr. Burgess: And up on top of the boiler to see about the sand?

Mr. Cochran: Outside.

Mr. Burgess: Now, the mere act of seeing those two places would be only a second or two, but to get into a position to see whether the engine was properly supplied, would take seven or eight minutes, wouldn't it?

Mr. Cochran: I should think so. Of course it would take me longer than that.

Mr. Burgess: I know, but you are too heavy now.

Now, in regard to the headlight. He would have to see about that, wouldn't he?

Mr. Cochran: When they use oil they have to see they have

oil in the headlight, and when they use electric light they have to see the carbon is properly located.

Mr. Burgess: That means they come down from the sand box and climb to the head of the engine and climb up again.

Mr. Cochran: Yes, to get to the headlight.

Mr. Burgess: Then when he gets up there he has to know whether his ashpan is properly cleaned, hasn't he?

Mr. Cochran: Very necessary.

Mr. Burgess: Then he has to come down from the front end and go where the ash pan is?

Mr. Cochran: Yes.

Mr. Burgess: All of which takes time?

Mr. Cochran: Yes.

Mr. Burgess: Then he has to see that his markers and signals and classification marks are there?

Mr. Cochran: Yes.

Mr. Burgess: And that is what really consumes the time?

Mr. Cochran: Yes. And if the engineer finds anything is necessary—

Mr. Burgess: He must assist him?

Mr. Cochran: He must assist him.

Mr. Burgess: Hand him tools or wrenches. And during this time it is necessary for him to prepare his fire?

Mr. Cochran: Yes.

Mr. Burgess: I understood that was what Mr. Sheean wanted to bring out, and I wanted to know that too, if that is the way they did on the Great Northern.

Mr. Cochran: He does.

Mr. Sheean: And he does this all in this five-minute stop that you just answered to Mr. Byram was gone through when the crew was changed and the engine went on, and if there was more than five minutes taken on that there would be a bell rung.

Mr. Burgess: I don't believe Mr. Sheean wants to misrepresent anything—

Mr. Sheean: He does all the things for which they obtain the allowance of thirty minutes preparatory time in this five-minute stop?

Mr. Cochran: No.

Mr. Burgess: Now let us get it right. Mr. Sheean, where

that engine is prepared at that time, under those circumstances all that duty is performed by other men.

Mr. Sheean: No. This is the engine run through, Mr. Burgess.

Mr. Burgess: I know.

Mr. Sheean: The engine goes right on through, and the crew changes, and the whole stop is only 5 minutes in there, but they want 30 minutes, both engineers and firemen want 30 minutes for work which is done during the five minutes that the engine stops at this depot.

Mr. Burgess: But, Mr. Sheean, pardon me, I only want to bring this out because I don't think you want to change the color of the painting, so to speak. Now, when this engine starts out and runs through, the crew that got on this engine at the initial point sees that the supplies and things that are necessary are there; then when this engine comes into the terminal, if she takes water there, that is about the only thing that they have to see to.

Mr. Sheean: But I understand, Mr. Cochran, just to assent to Mr. Byram that at this intermediate point, the engine running through, the crew changing, that both the engineer and fireman would claim 30 minutes, in addition to the miles run, if there should be any such rule as this adopted.

Mr. Cochran: We always got it at this point until they discovered they could run for coal from Hillsboro to Evansville, and for water from Hillsboro to Fergus Falls, and then cut it out at Barnesville.

Mr. Sheean: Now, we have that covered, I think, Mr. Cochran, as to where a hostler, who does nothing but coal engines, delivers it at the passenger station. Now, in these branch runs, where the Great Northern practice now is that at the end of the line the actual hostler work may be done by the fireman and engineer, and at the beginning of the day—

Mr. Cochran: Yes.

Mr. Sheean: Because of your belief that the hostler's duty and the period of time are entirely separate propositions on these runs at the ends of runs or on branches, there would be for the Great Northern to pay, if there should be awarded, this arbitrary or minimum, hostler's pay, plus the preparatory time, plus the initial delay, in addition to all the miles run and time on the road.

Mr. Cochran: They pay the hostling first. They pay that now.

Mr. Sheean: They pay that now?

Mr. Cochran: And they pay initial terminal delay now.

Mr. Sheean: What I mean is this, Mr. Cochran, that, under this practice on branch lines, the engineers and firemen who take the engine actually out of the roundhouse and do the hostler work that you have described before, receive their five miles for that, under this schedule?

Mr. Cochran: Yes, sir.

Mr. Sheean: Having taken the engine, having themselves prepared the engine, hostled the engine, and having gotten it ready for the road trip, then, under this award, they charge another thirty minutes for seeing that they did this work properly for the road trip.

Mr. Cochran: Now, Mr. Sheean, let us get that in straight. I would like to help you make your point there. Now, taking the engine out of the roundhouse is not preparing the engine. The mere fact of running that engine out of the roundhouse over to a new track close to the main line, where the brakeman will come and get the engine, is not preparing the engine.

Mr. Sheean: No, that is hostling.

Mr. Cochran: That is hostling. You said the man was going to get 30 minutes for hostling the engine and then another 30 minutes for seeing that he did the hostling. Now, that is not a correct statement.

Mr. Sheean: I want to get it just correct. The hostler's duties are prescribed by your rule now which you read?

Mr. Cochran: Yes.

Mr. Sheean: And those hostlers "will be held responsible for the proper care and safe-keeping of engines placed on receiving or furnish tracks and will see that same are properly secured and as prescribed by Rule 485.

"It will be their duty to maintain water at proper heights in boilers of engines fired up standing in roundhouses or upon receiving or furnish tracks.

"They must know that engines going out of roundhouses or being turned for service are supplied with coal, water, and sand and must see that engineers' tools and oil cans are placed on same."

Those are the hostler's duties.

Mr. Cochran: The watchman fires the engine up and has the water at the proper level.

Mr. Sheean: Is it the hostler's duty; simply that "they must know"?

Mr. Cochran: Now, the fireman, when he goes in to get the engine puts the tools on the engine—

Mr. Sheean: Well, just wait a minute, Mr. Cochran.

Mr. Cochran: He hasn't any tools to put on, because they were on the night before when he went in.

Mr. Sheean: But the hostler must know that the engine going out of the roundhouse or being turned for service, is supplied with coal, water, and sand, and must see that engineer's tools and oil cans are placed on same.

Mr. Cochran: We did not want that rule when we got it.

Mr. Sheean: That is the operating rule.

Mr. Cochran: We did not want that rule about—well, it is the same as the hostling rule, about hostling the engine. We did not want that rule. The company did not want the watchmen to handle the engines, and previous to 1901,—January 1, 1902, you know we did that service for nothing.

Mr. Sheean: At the present time, Mr. Cochran. I am talking about your present schedule.

Mr. Cochran: Of course that is when it began.

Mr. Sheean: Under your present schedule, "at ends of runs, where this work is done by firemen, they will be paid for actual time consumed in doing the work, at schedule rates. Provided, that in no case will less than 5 miles be allowed for this service."

Mr. Cochran: Yes.

Mr. Sheean: Now, Mr. Cochran, I want to be fair and follow you on your line. Where is a point now where the hostling work is done by the fireman?

Mr. Cochran: Well,—

Mr. Sheean: I don't care where it is—anywhere.

Mr. Cochran: Well, I want to get a point where I will be familiar with it, so there won't be any question about it. Huron, S. D., would be a good place.

Mr. Sheean: At Huron, South Dakota. Now, coming out

in the morning, taking his engine out of the roundhouse, the hostler there is paid by the fireman, paid 5 miles?

Mr. Cochran: Yes, sir.

Mr. Sheean: For performing these hostling duties here prescribed?

Mr. Cochran: Well, he takes the engine out of the roundhouse in the morning, and the engineer runs it out, and he helps the engineer get the engine out of the roundhouse in the morning.

Mr. Sheean: Both the engineer and fireman at Huron, South Dakota, are now paid five miles for together performing the hostler's duties as described by these rules?

Mr. Cochran: Yes, or take the water.

Mr. Sheean: Now, then, if this award should be made, would these men at Huron, South Dakota, be entitled, in addition to the five miles which your present schedule gives you for performing the hostler work—be entitled to an additional time of 30 minutes as preparatory time?

Mr. Cochran: Why, most assuredly, because the company insists and have insisted that the engineer and fireman move the engine. They get paid that now. We get the preparatory time now, in addition to the hostling.

Mr. Sheean: If it runs into time.

Mr. Cochran: Into hours. What is the difference? We got it before anyhow.

Mr. Sheean: All right. Are you willing that your proposition should be so modified that the preparatory time should apply only when the men were paid in time and not in miles?

Mr. Cochran: Not by any means.

Mr. Sheean: I thought you said they were the same.

Mr. Cochran: No. Now, let us get right about that.

Mr. Sheean: I thought you were going too fast.

Mr. Cochran: I might have got it confused, but the point I want to make is this, where we got the rule wherein we were paid the preparatory time if the trip was computed in hours. Previously, we got the time from the time we showed up at the roundhouse, and we had to show up at the roundhouse anyhow, half an hour before we went out, so it was a distinction without a difference. They merely specified it. That is what I mean.

Mr. Sheean: Now, Mr. Cochran, let us get this clear. At

Huron, South Dakota, as preparatory time, the engineer and fireman are paid not less than 5 miles, in addition to their miles run or hours on duty, for performing hostler's duties.

Mr. Cochran: On one engine.

Mr. Sheean: On one engine?

Mr. Cochran: Yes.

Mr. Sheean: And their hostler's duties on that engine, according to the rules of the company, include among other things (Rule 464): "They must know that engines going out of round-houses or being turned for service are supplied with coal, water and sand, and must see that engineer's tools and oil cans are placed on same."

Mr. Cochran: Oh, yes.

Mr. Sheean: Under the present schedule, they are paid that 5 miles for performing this among their other duties as hostlers at that point?

Mr. Cochran: No, they are paid the five miles for taking the engine out of the house.

Mr. Sheean: For performing the duties as hostlers.

Mr. Cochran: There is the proposition. The man that puts the supplies on the engine at this passenger depot, it would not be necessary for him to check himself up in the morning to see if he had come on the night before or not.

Mr. Sheean: But, under the proposal, he would be entitled to 30 minutes for checking himself.

Mr. Cochran: Still, the company must have recognized that we were entitled to and should get the 5 miles at night and 5 miles in the morning, because they knew what it was necessary for him to do.

Mr. Sheean: I am talking about your preparatory time there, to be added on to that.

Mr. Cochran: Well, that is another service.

Mr. Sheean: I know it is.

Mr. Cochran: Another service.

Mr. Sheean: Quite correct, it is. But, at Huron, South Dakota, if for performing the work as hostler, for which they get five miles, if that work is properly done, there is no preparatory work necessary, is there?

Mr. Cochran: Oh, yes.

Mr. Sheean: What?

Mr. Cochran: Help the engineer fill the road cups and inspect the ashpan, and inspect his grates, and see that he has the lamps properly on.

Mr. Sheean: But has he not done that under rule 464 at Huron?

Mr. Cochran: According to your theory, he must check himself up.

Mr. Sheean: What is it?

Mr. Cochran: According to your theory he must check himself up.

Mr. Sheean: Must he not, under your proposal here—**must** not the preparatory time for which you claim an allowance of 30 minutes at Huron, South Dakota, be simply to ascertain whether he has properly done his work as hostler?

Mr. Cochran: Well, Mr. Sheean, we can settle that in a very few words without confusing the matter.

The Great Northern Railway Company has insisted ever since I went to work on the railroad that the engineer and fireman put the engine in the house at night and take the engine out in the morning, for which the company was willing to pay them 5 miles, or the amount of time consumed. Now then, later on, they made an agreement with the men that 30 minutes would be paid for preparatory time if the trip was computed by hours. The company recognizes that is right and equitable, because they pay the men the 30 minutes for hostling, or more if it takes it, and 30 minutes preparatory time now, without any question. Now, Mr. Sheean, all the difference would be upon the point you are trying to make, whether or not the men would be entitled to the thirty minutes if the trip were counted by miles. Now, the company recognizes they are entitled to it now. They certainly would recognize they are entitlely to it when it is computed in miles.

Mr. Sheean: Then I am not misstating your position that, at Huron, South Dakota, the engineers and firemen who now do this work at that point would receive on every trip that they make, if this proposal is granted, 5 miles for hostling the engine and 30 minutes as preparatory time.

Mr. Cochran: Yes.

Mr. Sheean: And all time from the roundhouse down to the

outer switch, and then, in addition to that, whatever miles they ran.

Mr. Cochran: That is what, as I understand it—if I may be permitted to quote, as I understand the testimony of the railroad company's witnesses, that is what they contend the proposal means. So there could not be any argument about that.

Mr. Sheehan: Then there cannot be. In case the interpretation that Mr. Trenholm has placed upon what that proposition means, is not controverted by any witness here, it is to be assumed by the Board of Arbitration that the interpretation which he did place upon them is what will be insisted upon by the men.

Mr. Cochran: Except at Huron, South Dakota, the company might say to the engine watchman, "You fill the road cups and you prepare the engine, and when the engineer walks it out of the roundhouse he will walk on down with it down to the train, instead of stopping there, fill his road cups and inspect his engine, and we will assume the responsibility for the proper inspection; if there is an engine failure, we won't charge it to the engineer. Therefore, the engineer won't get the 30 minutes.

Mr. Sheehan: The suggestion has been made here that the railroad company were putting an extreme interpretation on some of the articles as to this preparatory time and hostler service and so on; the interpretation was not extreme.

Mr. Cochran: We are getting that pay now except when a trip is——

Mr. Sheehan: That doesn't answer my question.

Mr. Cochran: We get the initial terminal delay and time from roundhouse down to passenger station, at St. Paul and other points enumerated in our schedule. We get that now.

Mr. Sheehan: Then the interpretation placed upon this, the meaning of this rule, was not extreme.

Mr. Cochran: Well, I assume if it had been extreme, so far as we have it, the Great Northern would not have granted it.

Mr. Sheehan: I am talking about Mr. Trenholm's interpretation of the possibilities of the proposal as made.

Mr. Cochran: Except he did not put in how much he could cut out of it.

Mr. Sheehan: We are talking about the present situation. If operating conditions continue as they are and operate in the

same way, the only way of avoiding claims of the character here under discussion would be by changing the operating conditions.

Mr. Cochran: Well, as I understand the proposal, Mr. Stone submitted a letter designating what they apply to and what they do not apply to. That is the way I understand it here in the record, and all I know is this, Mr. Sheean, on a certain railroad, where they have granted 30 minutes arbitrary allowance for preparing the engine, when trip was made on miles, previous to that time they required the engineer and fireman to go to the roundhouse to get the engine ready, but after that was granted they got it ready and took it down to the depot, so all they had to do was to start on the train, and they did not get the thirty minutes. Mr. Trenholm did not show how much of that they could cut out. For instance, when we get the initial terminal delay.

Mr. Sheean: Now, let me go back just a minute on that. I thought we had that straightened out a moment ago, that even at passenger depots, if the engineer——

Mr. Cochran: Performed the service.

Mr. Sheean: Or even at place of changing crews, but the engine running through, that Mr. Byram spoke of, although the engine was there five or ten minutes, that this proposal meant that this preparatory time would have to be paid.

Mr. Cochran: If he did the service.

Mr. Sheean: In what way is it possible to avoid paying that? How could you relieve him of any work?

Mr. Cochran: Here is a possibility, I assume. Suppose the superintendent of the St. Paul, or the Master Mechanic, said to the engineer, "Your engine is ready; cups filled, properly inspected; and we are responsible for that engine until you make the first water plug stop, and all you have to do is to get on that engine and open the throttle and let her go." Then he would not pay him the thirty minutes, Mr. Sheean.

Mr. Sheean: But if you tested the air to see whether the air was working, thirty minutes would accrue?

Mr. Cochran: Oh, testing the air in those big passenger terminals is done by an air testing plant.

Mr. Sheean: But if that was done, just assume that was done.

Mr. Cochran: That does not come in in preparing the engine.

Mr. Sheean: That was not a part of the preparatory time?

Mr. Cochran: I don't know that it is. I never heard of it. We have got about all there is in it, but we never got that in on the Great Northern.

Mr. Sheean: So that, without incurring a payment of preparatory time, it is your belief, is it, that by having an engineer report on that engine, and simply testing his air and requiring that of him alone, that the company would be under no obligation to pay preparatory time?

Mr. Cochran: If they went that far with it, they would test the air before he went on, so they would not give him any possibility of preparatory time, if that was included.

Mr. Sheean: That does not answer my question?

Mr. Cochran: Yes, it does.

Mr. Sheean: No. If they required nothing of him other than to test his air, could they escape the payment of preparatory time?

Mr. Cochran: Well, I don't know—

Mr. Sheean: Now, that can be answered yes or no, Mr. Cochran.

Mr. Cochran: Yes, I know it might be answered yes, or it might be answered no.

Mr. Sheean: I am trying to get your answer, one way or the other.

Mr. Cochran: I will give my answer, Mr. Sheean.

Mr. Stone: If I might be allowed a minute. I have enjoyed this badgering of the witness first rate, and I can stand it as well as any one, but I will say this, for the engineers, as executive officer, that if the preparatory time is allowed, we would expect to be paid for the thirty minutes.

Mr. Sheean: Well, that settles it. That clears it up. That is all then, Mr. Cochran.

Mr. Nagel: Mr. Cochran, do you think it would be good practice to prepare the engine and have the engineer just take charge of it, prepared by other people?

Mr. Cochran: I don't believe so. I don't think it would be.

RE-DIRECT EXAMINATION.

Mr. Carter: Do you believe it would be good business practice on the part of the railroads, to pay the engineer and fireman to prepare the engine, and thus place the responsibility upon them for the proper preparation?

Mr. Cochran: Well, that is what is required, that is, responsibility.

Mr. Carter: Isn't it really a double responsibility or inspection?

Mr. Cochran: Yes, sir, it is double the responsibility.

Mr. Carter: The hostler is supposed to do the thing, and the engineer and fireman are supposed to see that he did it, isn't that right?

Mr. Cochran: Well, to make it clear, the hostler has nothing to do with the inspection of the engine, by the mere fact of moving it out of the roundhouse, unless it is a combined job of hostler and inspector. Now, if they have an inspector on, the engine may be inspected in the roundhouse but the engineer is held absolutely responsible, and if he gets out and anything goes wrong for failure of proper inspection or any defect that he failed to discover, he is disciplined, regardless of whether they had an inspector in the roundhouse or not.

Mr. Carter: And if the railroads in this arbitration, through their representative, the counsel for the railroads, would say that henceforth engineers and firemen will not be held responsible for the condition of their engines, or accidents that occur because of defective engines, why then it will be time enough for us to consider "no pay" for it.

Mr. Cochran: I think so.

Mr. Carter: Now, let me ask you another thing: at this intermediate point where the train comes in and stops five minute, and goes out, doesn't the engineer go to that terminal and inspect the bulletin board and check up the register, and do other very important work in addition to looking at his engine?

Mr. Cochran: Yes, he does all that, besides registering his time and comparing his watch.

Mr. Carter: And is not that a very, very important duty for an engineer to perform?

Mr. Cochran: Yes, it is.

Mr. Carter: To see that all the trains are in, that are supposed to be in, and to read all the bulletins that might have been posted since he last left that station?

Mr. Cochran: He must see the bulletin board and he must compare his watch.

Mr. Carter: And isn't this engineer called an hour in advance of the arrival of that train?

Mr. Cochran: Yes, the engineer and fireman are called an hour in advance of that train. They must be there on duty and ready for service before the train arrives.

Mr. Carter: And is there any more important duty that an engineer performs at any time than right at this place that you are talking about before that train comes in, when he goes in and checks up the register and checks up the bulletin board, and registers, and sees that his watch is correct? He does that before the train arrives, does he not?

Mr. Cochran: Yes, he performs that service.

Mr. Carter: Under the idea expressed here, though, he should assume that responsibility, and do that for nothing. Is that right?

Mr. Cochran: That is it.

Mr. Carter: Now, about that fireman. Does that fireman have to see every time he goes out on an engine from a terminal, in addition to what you have told about the sand and the coal and the water, and the ash pan, has he got to see that the proper supplies are on the engine, and the oil is on the engine? Isn't he held responsible for seeing that it is there?

Mr. Cochran: Yes, sir. Also he must inspect his watch.

Mr. Carter: He must inspect his watch also?

Mr. Cochran: Yes, sir.

Mr. Carter: Well, suppose he got out on the road and found that a "new importation" working in the oil house, had put engine oil in all of his cans, and he had no valve oil for lubricator, and no signal oil perhaps for his gauge light. Would he be held responsible for the mistake of this "latest importation?"

Mr. Cochran: Yes, sir.

Mr. Carter: He must know that the valve oil is in the valve oil can, must he not?

Mr. Cochran: Yes, sir.

Mr. Carter: And that the signal oil is in the signal oil can?

Mr. Cochran: Yes, sir.

Mr. Carter: And that the engine oil is in the engine oil can?

Mr. Cochran: Yes, sir.

Mr. Carter: And every tool is on the engine?

Mr. Cochran: Yes, sir.

Mr. Carter: Fuses, red lights, white lights?

Mr. Cochran: Yes, sir, he has to see all that, and then, in addition thereto, there is a big box on the back of the tank, that contains frogs and switch chains, and blocks, and all the paraphernalia that are necessary to block up an engine if it breaks down, and those are sealed in that box, and he must go back and inspect that and see that the seal is not broken, and if the seal is broken, he must make an examination and find the condition of the box, and if anything is missing from that box he must make a report of it and put it in.

Mr. Carter: Isn't it often, before leaving a terminal, that the fireman finds that something is missing?

Mr. Cochran: Yes.

Mr. Carter: And he has to go and get it?

Mr. Cochran: Yes, sir.

Mr. Carter: Does he have such a thing as a fire to attend to, before he pulls out with a heavy train?

Mr. Cochran: Well, yes, more so nowadays than in former years.

Mr. Carter: Isn't the fire banked by the hostler before the fireman takes charge?

Mr. Cochran: The general condition that prevails in a roundhouse now, with big, modern power, when business has got to be transacted very fast, when the engine is ordered, and it happens to be cold in the roundhouse, it requires a considerable length of time to get the engine hot, and by the time they get the engine fired up and steam in the engine, the hostler pulls it out on the cinder pit, the hostler puts in just enough coal to keep that fire alive.

Mr. Carter: How does the hostler put coal enough in to keep the engine alive without getting the engine too hot?

Mr. Cochran: When the engine is taken out of the house,

she may have only 80 to 100 pounds of steam on, and then he banks the fire.

Mr. Carter: And then the hostler banks the fire?

Mr. Cochran: And the steam pressure won't go up very high, so when the fireman comes down he must take his clinker hook and break up those banks and get the engine hot and ready to go.

Mr. Carter: Is that a considerable amount of work on a big engine, to pull a train out?

Mr. Cochran: Well, it takes quite a bit of coal to get an engine in condition.

Mr. Carter: So there is some work, Mr. Cochran, pertaining to the preparation of the engine, entirely independent from the hostling of the engine?

Mr. Cochran: I think, Mr. Carter, there is work from the time a man reports until he is relieved from duty, all the time.

Mr. Carter: How long is a fireman required to get to the roundhouse before the train leaves?

Mr. Cochran: Well, if the train is called to leave at 7 o'clock, in the yard—that largely depends, of course, on the distance from the roundhouse to the yard, and the size of the yard, and the convenience for getting down there. They must be at the yard and ready to leave at the time designated, and they must be at the roundhouse at least an hour before.

Mr. Carter: Now, why are they at the roundhouse for an hour unless there is something that would require their presence there?

Mr. Cochran: Well, their presence there is very necessary to get the engine, and to see that all this work that we have described, has been done, and to get the engine down in the yard, sometimes a distance of two miles, maybe, or a half a mile, or a mile, and the fireman has to get it down there, and get into the yard, be on the train and ready to leave at 7 o'clock.

Mr. Carter: And then when they make rules for the fireman to report for duty, he has got an hour's work ahead of him, but when they are talking about pay for it, they do not pay him, isn't that right?

Mr. Cochran: That is the schedule history in the making of rules and agreements.

Mr. Carter: That is the old story; isn't it?

Mr. Cochran: Yes.

Mr. Carter: Let me ask you something else.

Mr. Nagel: Before you get to that, I would like to ask you, Mr. Cochran, a question, because I think I am a little more confused now than I was when you started. If hostlers are provided to take the engine from the roundhouse to the train, would it be necessary for the engineer or fireman to report just as early as they do now?

Mr. Cochran: Well, Mr. Nagel, here would be the proposition. I could illustrate it to you by this condition at St. Paul. If the hostler took the engine from the roundhouse to the St. Paul station—they have a registering station there nearby for the train conductor to register, and the bulletin board, and the time register is there, just the same, so that the engineer and fireman, instead of going to the roundhouse to examine the bulletin board, would go down to the St. Paul station, and go over to the Burlington freight house and go upstairs there and examine the bulletin board, and check the train register, and he and the fireman would register their watches, just the same.

Mr. Nagel: They would not have to report at the roundhouse?

Mr. Cochran: No. If they had to go to the roundhouse, there would be this proposition. They would have half an hour to get up to the roundhouse, and half an hour to get back down to the passenger station, and the length of time they would be there.

Mr. Nagel: Well, in other words, wouldn't the engineer save something by having the hostler take the engine from the roundhouse?

Mr. Cochran: Why, I think our people would prefer, in a general way, to have the engines delivered on the trains. But to understand that proposition, we run probably twenty-five or thirty passenger engines out of St. Paul, and it is three miles, or two miles and a half from the roundhouse down to the depot, and there is a very narrow space in there, and there are two tracks and a lot of cross-overs, and it is used by several railroads operating in there, and it is used by all the passenger trains and all the freight trains coming in to Chicago on the Burlington, and some of those other roads, and they all come up in around there, and cross over these passenger tracks.

Now, the hostler would have to start with the engine at least an hour and a half before the train was to leave, in order to be sure of being there, in case he should possibly be blocked on some of those cross-overs by a Mallet coming up there with 2,500 tons of freight, coming up the hill, which would probably take ten or fifteen minutes.

Now, if the company attempted to operate there, by having the hostlers taking the engines to the passenger station, they would need about fifteen hostlers, because when they would come down there, if there was not an engine for them to go back up to the roundhouse on, they would have to take a street car and it would take two hours and a half to make one movement, and so there is not much advantage to them in doing this, to take the engines up from the St. Paul roundhouse. And that condition prevails at Seattle and various other points on the road. You see, the passenger trains leave in the morning, that is, they are spread over a period of time probably between 7 o'clock and 10:30 or 11 o'clock in the morning. You see, all the trains leave, a great majority of them, within that period, and then in the evening again, between 3:30 or 4 o'clock up to, say, 9 o'clock in the evening.

Mr. Nagel: That reads very well, but what I want to find out is whether the engineer saves anything by having a hostler take the engine from the roundhouse to the station.

Mr. Cochran: Why, he would in every instance, because he would go direct from his home to the station.

Mr. Nagel: He would save time and labor both?

Mr. Cochran: Yes.

Mr. Nagel: Now, at the present time the engineer gets five miles allowance for doing the hostling work from the roundhouse to the station?

Mr. Cochran: No.

Mr. Nagel: I mean at some point.

Mr. Cochran: No, he gets more, Mr. Nagel. At the point that was discussed, Huron, South Dakota, he gets five miles for putting that engine away at night, and that includes taking the engine from where he leaves the passenger train, or the freight train, to the roundhouse. Then, in the morning, that engine has to be taken out of the house, and he gets five miles for taking that engine out of the house. That has nothing to do with going

to the passenger station or anything of that kind. That is an individual proposition. That has nothing to do with going to the depot.

Mr. Nagel: It has something to do with this question, I think. He gets the five mile allowance at Huron, taking the engine from the roundhouse to the station, and he gets thirty minutes preparatory time. Those are two distinct allowances, would you think?

Mr. Cochran: Two distinct allowances.

Mr. Nagel: What?

Mr. Cochran: Yes, two distinct allowances.

Mr. Nagel: Now, if new rules are made, providing for a hostler to take that engine from the roundhouse to the station, it relieves the engineer from something, doesn't it?

Mr. Cochran: Why, certainly, and I think all the men would prefer getting on at the passenger station, in place of drilling around through the yards, in the night.

Mr. Nagel: Now, accepting that relief from that work, does the engineer propose to surrender anything of his allowance?

Mr. Cochran: Well, I couldn't see where we could claim five miles for the hostling of the engine when we do not hostile the engine.

Mr. Nagel: That is what I wanted to get at.

Mr. Cochran: When we do not go to the roundhouse to hostile the engine, I don't see how we could get five miles.

Mr. Nagel: You think that should be surrendered, but you think the preparatory time should be allowed, notwithstanding, because the inspection has to be made by the engineer?

Mr. Cochran: Well, that has been interpreted by Mr. Stone.

Mr. Nagel: That is all.

Mr. Stone: Mr. Cochran, just one or two questions before you close, and it will only take one or two minutes, Mr. Chairman. If the engineer could take his engine at the depot, in accordance with the question that Mr. Nagel was asking, and that he was bringing out, instead of being required to report at the roundhouse two hours before the leaving time of the train, the company would probably have him report at the depot thirty minutes before the leaving time of the train?

Mr. Cochran: Yes, they would have to.

Mr. Stone: The company would save that time?

Mr. Cochran: Yes.

Mr. Stone: And all that that would take, would be thirty minutes preparatory time?

Mr. Cochran: Yes.

Mr. Stone: Under your present rule, where you are allowed five miles for hostling, five miles for preparatory time, they can only work you 15 hours between terminals?

Mr. Cochran: That is all.

Mr. Stone: You have already used up one hour of your time?

Mr. Cochran: Yes.

Mr. Stone: So, in making that allowance you do sacrifice one hour's time out on the road?

Mr. Cochran: Yes, sir.

Mr. Stone: Now, it is also a fact, in this agreement, between the company and the engineers here—and I wish, Mr. Chairman, that I might be allowed to read this—I see examples of runs of 100 miles or less, and this is put in by the company, so there may be no chance of misunderstanding, and here is an example on page 6:

“Hostling, allowance five miles. Called to leave designated track at 7:00 A. M.

“Work, 7:00 A. M. to 9:00 A. M. Allowance 20 miles.”

That is for terminal delay.

“Leave terminal 9:00 A. M.

“Arrive distant terminal 3:00 P. M., Allowance 100 miles.

“Work 3:00 P. M. to 5:30 P. M.” That is final terminal delay. “Allowance 25 miles.”

“Preparatory time. Allowance 5 miles.”

Total for the trip, 160 miles.

Note: “In above examples, if inspection of engine is done by Engineer, fifteen minutes more will be allowed.”

So it is very clear that the company had that in mind when they made these examples of the allowance.

And all told, in this 160 mile allowance, he was on duty 10 hours and 30 minutes. That is all.

Mr. Sheean: That is all.

The Chairman: We will now adjourn until tomorrow

morning. We will hold a forenoon session, beginning at 10 o'clock.

(Whereupon, at 5 o'clock P. M., March 12, 1915, an adjournment was taken to March 13, 1915, at 10 o'clock A. M.)

IN THE MATTER OF THE
 ARBITRATION
between the
 WESTERN RAILWAYS
and
 BROTHERHOOD OF LOCOMOTIVE
 ENGINEERS
and
 BROTHERHOOD OF LOCOMOTIVE FIRE-
 MEN AND ENGINEMEN
*under the Act approved July 15, 1913, by agree-
 ment dated August 3, 1914.*

Chicago, Illinois, March 13, 1915.

Met pursuant to adjournment at 10:15 o'clock A. M. Present: Arbitrators and parties as before.

The Chairman: Are there any proposed corrections in the record this morning?

O. W. KARN was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: State your name and address.

Mr. Karn: O. W. Karn, San Francisco.

Mr. Carter: What is your present employment, Mr. Karn?

Mr. Karn: General Chairman of the Brotherhood of Locomotive Firemen and Enginemen, representing the firemen on the Pacific system of the Southern Pacific Railroad Company.

Mr. Carter: How long have you been an employe of the Southern Pacific Railroad?

Mr. Karn: About 14 years.

Mr. Carter: Did you enter the service of the Southern Pacific Railroad as a fireman?

Mr. Karn: Yes, sir.

Mr. Carter: Were there coal burning locomotives on the Southern Pacific Railroad when you began firing there?

Mr. Karn: Yes, sir.

Mr. Carter: You fired these coal burning locomotives?

Mr. Karn: Yes, sir.

Mr. Carter: How many years did you fire coal-burning locomotives before they began the introduction of the oil-burning locomotives?

Mr. Karn: Well, I think oil was introduced on the road about the latter part of 1902 or early in 1903.

Mr. Carter: And as the oil was introduced you began to fire oil burning engines, did you not?

Mr. Karn: Well, yes and no. My first regular run in freight service was on an oil-burning locomotive, and after that I fired on coal on two or three different occasions.

Mr. Carter: Have you any considerable experience as a coal burning fireman?

Mr. Karn: Not so much as that of an oil-burning fireman.

Mr. Carter: You have fired the oil more than you have coal?

Mr. Karn: Yes, sir.

Mr. Carter: But you have fired both classes of fuel?

Mr. Karn: Yes, sir.

Mr. Carter: You were then promoted, were you?

Mr. Karn: Yes, sir.

Mr. Carter: And you were elected as General Chairman of the firemen on the Southern Pacific system?

Mr. Karn: Eventually. Between the time of my promotion and my election to the office of general chairman, I was back firing about a year and a half.

Mr. Carter: That is, you were promoted and demoted?

Mr. Karn: Yes, sir.

Mr. Carter: As has been explained by others here, the usual process of promotion and demotion of engineers on account of variations in traffic.

Mr. Karn: In seniority order, yes, sir.

Mr. Carter: Were you a member of the Firemen's and Hostlers' Committee in 1910 when they negotiated the present schedule on Western railroads?

Mr. Karn: Yes.

Mr. Carter: That resulted in arbitration, did it?

Mr. Karn: Yes, sir, resulted in arbitration.

Mr. Carter: And an award?

Mr. Karn: Yes.

Mr. Carter: Did that board establish a differential between the rates of wages paid to firemen on oil burning engines and on coal burning engines?

Mr. Karn: A differential of 15 cents per 100 miles was established by that arbitration.

Mr. Carter: Is it your understanding that the only increase in wages that the oil burning firemen got at that time was a fifteen cent increase, and that was entirely on account of the increased cost of living?

Mr. Karn: Yes, that was my understanding of it.

Mr. Carter: There were, however, some special rates on some extra large engines, which establish a uniform rate in both oil and coal?

Mr. Karn: Yes.

Mr. Carter: But aside from these large engines, specially named, there was a 15 cent differential established?

Mr. Karn: Between oil and coal.

Mr. Carter: Do you and the other men on the oil burning engines believe that that was just to oil burning firemen?

Mr. Karn: No, sir, we think it was very unjust.

Mr. Carter: You have read the testimony of Mr. Clewer with regard to the duties and work of an oil burning fireman, have you not?

Mr. Karn: Yes.

Mr. Carter: You do not contend, do you, that the physical labor of an oil burning fireman is similar to that of a coal burning fireman?

Mr. Karn: No, sir.

Mr. Carter: You do not agree with some of the statements made by Mr. Clewer that oil burning firemen should receive but little consideration in this matter?

Mr. Karn: I do not know that Mr. Clewer testified that he thought they should receive but little consideration.

Mr. Carter: How is that?

Mr. Karn: I do not recollect Mr. Clewer saying that they should receive no consideration.

Mr. Carter: You think Mr. Clewer believes they should receive consideration?

Mr. Karn: I think, from the burden of Mr. Clewer's testi-

mony, that his attempt was to show that because of the fact that the physical labor required of a fireman on a coal burning locomotive was greater than that required of a fireman on an oil burning locomotive, the fireman on an oil burning locomotive should receive less compensation than the man on the coal burning locomotive.

Mr. Carter: And probably not receive any increase in wages. Is that your understanding of the purpose of his testimony?

Mr. Karn: I think that was one of the purposes, and I think probably they had other things in mind as well.

Mr. Carter: After this award of 1910, which, for the first time established a differential between oil and coal burning engines, do I understand you to say that there was a feeling that the oil burning men had been treated unfairly in the matter?

Mr. Karn: Well, I could best answer that question by saying that we had had oil for a number of years on our line, and after the first conference, after oil was established, there never was an attempt nor a suggestion on the part of the officials of our company that we fire oil for any less pay than we fired coal.

Mr. Carter: At no time, then, from the introduction of oil, was there an attempt on the part of the officials of the Southern Pacific Company to establish a differential paying the oil burning firemen a less rate than the coal burning firemen?

Mr. Karn: Well, I was not a member of the committee that negotiated the 1903 schedule. I have been told by members of the committee, and the records that I have in my office bear that out, that the officials of the company suggested to the firemen of the Southern Pacific Railway, that with the introduction of oil that they thought they should fire the engine at a lower rate of pay.

Mr. Carter: What was the agreement?

Mr. Karn: Just a minute. But the position was taken by that committee that was taken by the management at that same date. And, in order to make that clear, I assume I shall have to go to some length to explain it. In 1900, the schedule of the firemen on the Southern Pacific Railroad provided for a rate of pay based upon a sort of a classification of locomotives. It was

not based upon a weight on driver basis. For instance, it said Class E-B, or Class G-A, or Class G-H.

Mr. Carter: Pardon me, Mr. Karn, while they were classified in that manner, was it not a fact that the larger the engine the higher the rate?

Mr. Karn: I will get to that in just a minute. The class of engines I speak of varied so much that the men made a request that they get back to the old trip basis that was in effect prior to this schedule. And the company said no, that they did not want to go back to an old trip basis; that that was not the proper way to determine the compensation of firemen. The men who said that were H. J. Small, Superintendent of Motive Power, J. A. Fillmore, Manager of the Pacific system, R. Kohler, Manager of the Lines in Oregon. I guess those were all the members of the committee. And they did say this, early in the conference, and immediately upon this proposition being presented by the men to go back to the old trip basis, that "We believe the only proper way to determine the compensation of a fireman is upon the tractive power of a locomotive." And our men asked them how we were going to determine tractive power, and they said there was but one proper method to determine tractive power, and that was weight on driver basis. Then, when the company made the proposition to the firemen that they fire the locomotive for less money in oil than they were firing it in coal they turned their own argument against them and told them that if that was the method with coal burners, they wanted it to hold good with the oil burner, and to the best of my knowledge and belief that is the only time that the differential between coal and oil was ever broached on our railroad.

Mr. Carter: Well, let us go back. Previous to adopting the weight on drivers as a basis—

The Chairman: Just a minute, Mr. Carter. What is the differential between coal and oil?

Mr. Karn: The differential, Judge, was established in 1910 by arbitration, and is 15 cents. In 1910, the firemen based their request for an increase in wages on two distinct propositions, more work performed by the firemen, and the increased cost of living. In view of the fact that the firemen did not contend that there was more work or added work on the part of the fireman on an oil-burning locomotive, the only increase that the fireman

received at that time was the increase supplied on the increased cost of living, which was 15 cents, while the fireman on the coal burner got 30 cents.

The Chairman: Well, did they contend that there was as much work on an oil burner as on a coal burner?

Mr. Karn: No, sir. I testified at that arbitration, and my testimony is a matter of record. No such statement was made by me. I don't know what others testified to.

The Chairman: Well, do you think the work is equal to that of a coal burner?

Mr. Karn: Oh, no. In physical labor, Judge, in the actual generation of steam, there is no comparison between that at all: between the work of the fireman on a coal-burning locomotive and on an oil-burning locomotive. But the generation of steam is only a small part of the fireman's duties.

The Chairman: Well, upon what theory do they insist that they shall be paid the same rate that is paid to the fireman who fires a coal burner?

Mr. Karn: Well, would you just as lief that that be brought out in regular turn, Judge?

The Chairman: Yes, all right. That was just in my mind now.

Mr. Carter: Now, Mr. Karn, will you explain how this 15 cents was applied? Did the Award not say that 15 cents flat increase would apply to both passenger and freight engines on all railroads, but that on freight engines burning coal an additional 15 cents would be awarded?

Mr. Karn: That was the way it was finally construed. I don't know whether that was the way it read or not.

Mr. Carter: Well, that was the way the differential was established?

Mr. Karn: Yes, that was the way the differential was established.

Mr. Carter: And it was stated that with the exception of this additional 15 cents on freight coal-burning engines the Award was entirely on account of the increase in cost of living up to the year 1910?

Mr. Karn: Read that question.

(Last question read.)

Mr. Karn: Do you mean for the oil-burning fireman?

Mr. Carter: For all firemen. The 15 cents was accorded entirely on account of the cost of living in the correspondence that was interchanged after the Award.

Mr. Karn: My recollection of that is, Mr. Carter, that after the Award had been handed down there was some question as to its application to passenger service, and after the Board was again reconvened, they ruled that that was on the cylinder dimensions, I believe. I am not clear on that. That is too long ago.

Mr. Carter: You probably never saw the correspondence?

Mr. Karn: I don't think I did.

Mr. Carter: Then I would not have you testify to something you never saw. Now let us go back to the time they adopted weight on drivers as a basis of pay. I understood you to say that the company had a classification of its own on which the wages of firemen were based.

Mr. Karn: In 1900.

Mr. Carter: In 1900?

Mr. Karn: Yes. That is the point I tried to make clear awhile ago.

Mr. Carter: Now, please answer these questions. Now, was it not a fact that even with the company's classification, there was a graduated rate of wages of the firemen something in proportion to the size of the locomotive?

Mr. Karn: Yes. We got a 5 and 10 per cent differential on the larger locomotives over the standard rate. That applies here.

Mr. Carter: Now, at all times up to the arbitration of 1910, the same rates of wages were paid on oil burning engines as on coal burning engines, by these railroads having oil burning engines?

Mr. Karn: Prior to 1910—I think we had better make it a little clearer.

Mr. Carter: Make it clear.

Mr. Karn: In 1903, this weight on drivers basis was put into effect, based upon the statements I made a while ago, that were made by the company officials, that that was the only proper method of determining a fireman's compensation, and they agreed with us that the fuel used was not a compensation determining factor.

The rates that went into effect in 1903, based on weights on drivers, were carried out for the firemen on the coal and the oil burning locomotives, on the same graduations and the same rate of pay per 100 miles or less, for each, until the award of 1910, which gave us no increase for one contention, and 15 cents for the other.

Mr. Carter: Now, at this same time, when this award was made, there was, however, an award on certain large engines, to be the same in oil and coal, was there not?

Mr. Karn: Yes, sir.

Mr. Carter: Take the Mikado. What rate was established on the Mikado engine, regardless of the fuel?

Mr. Karn: Well, I think that the Award read that on locomotives having 24-inch cylinders, even if the rate would be \$3.75, possibly the 215,000 pound's pay applied to Mikados. I am not familiar with the weights on drivers.

Mr. Carter: And then they had a special rate on Mallet engines, did they not?

Mr. Karn: Yes, a special rate on Mallet engines.

Mr. Carter: That was \$4.00?

Mr. Karn: \$4.00 per 100.

Mr. Carter: And they made no distinction between the fuel?

Mr. Karn: No, sir, none whatsoever, nor on 24-inch cylinder engines.

Mr. Carter: The fact remains that there was no change in the graduated rates of pay of firemen which would establish a differential between coal and oil, up to the Arbitration of 1910?

Mr. Karn: No, sir; none whatever.

Mr. Carter: It appears then that the Arbitration Board established a precedent that had never been insisted upon by the railroads themselves?

Mr. Karn: Yes.

Mr. Carter: I believe you said at the beginning of your testimony that the men felt that a great injustice had been done them. Were any special investigations conducted at that time, and since that time, and very recently, which would sustain their position that it was wrong to pay the oil-burning firemen a less

rate than the coal-burning firemen are paid, simply because labor saving devices had been introduced?

Mr. Kern: At the time the Award was handed down, I was very much surprised to learn that a differential had been established, and I personally made an investigation, confining myself chiefly to work of a similar nature, for instance, the firemen on steamships where oil had been substituted for coal, and the work of firemen in stationary plants where oil had been substituted for coal, and I think it was just prior to our conference with the managers, when we were putting that schedule in effect, which was probably along about September or October, 1910. I went down to the Labor Council and ascertained the addresses of the various representatives, and visited them, and then visited the men themselves, and made sure of what I was talking about; and I found that on steamships where oil had been substituted for coal, there had been no differential established at all, that the men firing oil on the steamships got just as much money as the men firing coal.

I found that in all stationary plants in San Francisco using oil, the same thing obtained.

I took the matter up from time to time, and recently, possibly along in November or December of last year, in order to ascertain what the conditions were at this time, an investigation was made through various sources, with the end in view of ascertaining whether the United States Government, when they put oil on their boats, had made any change, whether the same condition obtained on steamships where oil had been substituted, and in stationary plants, and so forth. The investigation disclosed the fact that, on steamers where oil had been substituted for coal, on the Pacific Coast, since the installation of that oil, a 5 per cent, and in some instances a 20 per cent increase had been granted. The 20 per cent increase is explained, however, by the representative of the Marine Firemen, Oilers and Water Tenders Union of the Pacific Coast, to apply only to a small number of boats, because of certain conditions which I do not just recall.

The officials of the Government say that no differential has been established, that the increase granted by some Act is still in effect, that the firemen receive just as much money in the fire holes—I believe they called them—as they ever did.

In the stationary plants, the same thing obtained. The firemen receive just as much money today in stationary plants fired with oil as they used to receive when they fired with coal, and I have a very vivid recollection of a member of our organization just recently accepting a position of that kind in San Francisco, and making comparisons between the plant that he was on, in Oakland, which was fired with wood, and the one which he was on then, fired with oil, and I noted how much better the man looked after three or four months' employment there than he did before. Still there was no differential established.

Mr. Carter: So I understand that the result of your investigation of the effect of the introduction of oil on marine firemen and stationary firemen is, first, that there was no differential established when oil was introduced as a fuel, and in subsequent wage increases no differential has been established for marine or stationary firemen using oil, so far as your investigation goes?

Mr. Karn: No, sir; they have been granted the suggested rate of pay. They received at the outset the minimum rate of pay—

Mr. Carter: Your answer is that you did not find that any differential has been established?

Mr. Karn: I did not find that any differential had been established.

Mr. Park: What is the rate of pay of marine firemen?

Mr. Karn: I have never investigated along the lines of rates of pay at all.

Mr. Carter: Have you anything there at all that shows their rate of pay?

Mr. Karn: No, sir, we did not look for rates of pay. We sought to ascertain whether a differential had been established, and did not inquire as to rates of pay.

Mr. Park: Would not the question whether it was a very low rate in comparison with the pay of locomotive firemen, have some bearing as to whether a differential should be allowed, in your opinion?

Mr. Karn: Mr. Park, if a locomotive fireman could earn as much money as a marine fireman, and get his board and room, he would be tickled to death.

Mr. Park: Do you think the compensation of the marine fireman is greater, taking their perquisites into consideration?

Mr. Karn: Yes, greater than the average pay of the firemen on locomotives.

Mr. Park: Still, you do not know that for a fact?

Mr. Karn: No, sir, I have no data whatever, did not seek to determine that point at all; but in discussing that matter the impression left on my mind was that at the rates which applied at that time, that I was informed were paid at that time, coupled with their board and room, I simply made a mental calculation, and the impression left with me is that our firemen, if they could do that well, would be much better off than they are today on the locomotives.

Mr. Carter: Did you make a general investigation very recently to ascertain if employes of labor had habitually reduced wages when labor-saving devices were introduced, or if differentials had been established? For instance, I do not believe you were in service before the institution of the air brake, were you?

Mr. Karn: Do you mean on railroads?

Mr. Carter: Were you in the service of the Southern Pacific Company when air brakes were substituted for hand brakes?

Mr. Karn: No.

Mr. Carter: Have you a general knowledge of the fact that when brakemen were required to control a train by hand brakes on top of cars, they were required to exert great physical effort?

Mr. Karn: Oh, yes, I know all about that. I have seen that done frequently.

Mr. Carter: Did you ever hear of any railroad suggesting that brakemen should work for less money when there were air brakes on the train than when there were not air brakes?

Mr. Karn: No, sir, I never heard it suggested, and never knew of its having been suggested.

Mr. Carter: Was it not a fact that, instead of the brakeman having a differential established because his labors had been reduced, he has seen his wages increased in proportion to the wages of employes in most other industries?

Mr. Karn: Yes.

Mr. Carter: At no time have you ever heard of a railroad company advocating the proposition that a brakeman employed on a train where he had to control the train with hand brakes

and exert great physical effort, should have a differential over the brakeman on the air-brake train, where the engineer controls the train for him?

Mr. Karn: No, sir.

Mr. Carter: Did you ever go to sea, or make any sea trips?

Mr. Karn: Yes, I have made several sea trips.

Mr. Carter: What points have you made on ocean-going vessels?

Mr. Karn: Oh, I have made several trips on the Pacific coast from San Diego as far as Seattle, and on two different times to Alaska by way of St. Michaels.

Mr. Carter: Did you ever make a trip on a comparatively small or old steamboat?

Mr. Karn: My last trip back from Alaska was on a schooner, a lumber schooner.

Mr. Carter: How did the helmsman control that vessel?

Mr. Karn: With a wheel.

Mr. Carter: He had a wheel to turn the rudder?

Mr. Karn: Yes.

Mr. Carter: Did it require great physical skill to turn the wheel?

Mr. Karn: Well, I remember one time when it required great physical effort for quite a while. We coasted up and down the Aleutian Islands there for four days, trying to get through the pass, and it was so stormy that the ballast shifted on two different occasions, and that is about as near as you get to sinking on a vessel.

Mr. Carter: The helmsman was required to put forth great physical effort in order to steer that ship?

Mr. Karn: Yes. Two of those days I was permitted up on the deck, because of having a room up there.

Mr. Carter: Were you ever on any ship where the helmsman, by a valve similar to the valve on an oil-burning engine, controlled the direction of that ship by steam?

Mr. Karn: No.

Mr. Carter: Well, describe how they did it with steam then?

Mr. Karn: He controlled it in the same manner, by a wheel; but the wheel is operated by steam.

Mr. Carter: Does the wheel operate a valve? How does the

steam get out of the boiler into the machine that operates the wheel? Isn't there a valve there somewhere?

Mr. Karn: Yes, there is a valve that controls the steam.

Mr. Carter: And he operates and closes a steam valve by some method that can control the rudder of the ship, instead of doing it by the old strong-arm method?

Mr. Karn: There must be a device of that kind.

Mr. Carter: Do they have a difference in the wages of the men which steer the ship by the modern method of turning a valve which controls the steam which operates the rudder, from those wages which were paid to the man who operated the rudder by the old strong-arm method?

Mr. Karn: No, sir.

Mr. Carter: Did you ever hear of a steamship company suggesting that the helmsman on a ship where they used steam to steer the ship rather than physical effort should be paid a lesser rate?

Mr. Karn: No, sir.

Mr. Park: Mr. Karn, in your observations on those trips, was it not brought to your attention that there were differentials? I have a memorandum here that the firemen on the Alaska Steamship Company's first class steamers get \$52 a month; second class steamers, \$65 a month, and through all the rates of pay, to quartermasters and steersmen, and so forth, there seems to be a differential in the class of service they are in, a difference between wooden steamers and steel steamers and particularly a difference in the pay paid to the firemen. Was that your observation?

Mr. Karn: I think you find—I am glad you brought the point out, because it will save some time probably in the end—I think you will find that in your statement there of the graduations based upon the earning capacity of the steamer for the owner, and the tonnage that it can carry, I think you will find it applies all along; that firemen as well as engineers are paid a graduate rate of pay, based upon the earning capacity of the vessel for the owner.

Mr. Carter: Or else a great many firemen employed.

Mr. Karn: It naturally follows that on a large steamer a great number of firemen are employed, and I am sorry that we did not go into it to a greater extent in finding what the rates are.

Mr. Park: Then, from your observation, the pay was not based on the amount of fuel consumed, but more on the class of the ship and its register.

Mr. Karn: I did not seek that, Mr. Park, with reference to the firemen at all. I assume from what you have read there that the firemen's rate of pay—I know the rest of it, about the mates and quartermasters and pilots and engineers and assistant engineers is based upon the tonnage of the vessel, upon whether it is first, second, third or fourth class, and according to the number of the crew assigned. But as far as the fireman is concerned, I didn't have any way to get at that, in fact did not think of it. The only thing we were striving for was to see if a differential had been established.

Mr. Park: Well, all of these sea-going workmen, as you might express it, are organized, are they not? They have their organization.

Mr. Karn: They are, on the coast.

Mr. Park: These wages are standard, are they not?

Mr. Karn: I should judge that they have standard wages, from what the secretary of their union says, that they went from the minimum to the standard wage.

Mr. Park: Even to the stevedores, they have an organization.

Mr. Karn: I think so.

Mr. Burgess: Mr. Karn, how many hours does the fireman work?

Mr. Karn: Well, they have all kinds of shifts. Sometimes they are on four hours and off eight, and sometimes on six and off twelve. That is the result of reading these schedules. It is not a matter of absolute knowledge. I simply have read in their schedules that is a fact; that that is the way they work.

Mr. Burgess: Do you know of any steamboat in that section of the country on which the firemen work 10 or 12 hours continuously?

Mr. Karn: No, I know they don't, and correspondence in this matter shows there was an attempt on the part of the Southern Pacific Company, who own a line of boats on the Pacific coast, to lengthen the hours; but they finally compromised.

Mr. Burgess: Mr. Karn, is it not a fact that the fireman gets his board, in addition to the rates just quoted?

Mr. Karn: And his room.

Mr. Burgess: And his room.

Mr. Sheean: How many hours out of the 24 do the stokers work?

Mr. Karn: If he would be on four hours and off eight, he would work eight hours out of the 24.

Mr. Sheean: What is that?

Mr. Karn: If he would be on four hours, on a shift of 4 hours on and off 8, or on 6 and off 12; if he is on 6 and off 12 he could not work more than 12 hours on any one day; the next day he couldn't work as long. If he worked 6 hours a day on a 6 and 12 hour shift, that would give him 12 hours work today and only 6 tomorrow.

Mr. Sheean: Six off and twelve on?

Mr. Karn: Yes.

Mr. Sheean: That is he would work 12 out of this 24?

Mr. Karn: No, he would work 12 hours today on that 6 on and 12 off basis; if he was off 6 and on 12, and then on 6 again, that would consume 24 hours, don't you see, right there.

Mr. Sheean: And of that 24 he would work?

Mr. Karn: Today?

Mr. Sheean: Yes.

Mr. Karn: If he worked 12 hours today and was off 6—or rather he would be—well, he would have to be off 6; if he began with the 12 off hours tomorrow, and worked 6, and then have 12 hours off again, he would only work 6 hours the second day, which would be an average of 9 hours a day.

Mr. Sheean: And the other way they worked four and eight?

Mr. Karn: Well, if he began this morning at 12 o'clock and worked until 4, and was off again at 12, he would work 8 hours of the 24. He would be on 4 and off 8.

Mr. Sheean: And then the next shift?

Mr. Karn: That would rotate.

Mr. Sheean: What is it?

Mr. Karn: That would just rotate every day.

Mr. Sheean: It would rotate in just the same way?

Mr. Karn: No, if you are on 4 and off 8, you work 8 hours. You work from 12 to 4 every day on that basis; 12 to 4 A. M. and 12 to 4 P. M.

Mr. Burgess: Well, Mr. Karn, if the boat was tied up at the away from home terminal, as you call it, would the fireman receive his board free?

Mr. Karn: Well, the best evidence of that is what the schedule says, and I have it here, not for firemen but for other lake employes. The schedule provides that where they are fitting out or laying up these ships, those schedules that we have here, which provide for engineers and their assistants, provide that they will be paid a standard rate of pay and allowed their meals, and allowed their board; and it further states that they will not be required to sleep in a stateroom until steam heat has been installed; and it says further that when they are to report at the ships at the beginning of the season they will be furnished transportation from their homes to the ship, and likewise when the boat is laid up for the winter they will be furnished transportation from the ship to their homes.

Mr. Burgess: And do the firemen have to pass any examination?

Mr. Karn: Pardon me. And regardless of the fact that a boat may be laid up for repairs, the time goes right on.

Mr. Burgess: And do these firemen have to pass any examination for eyesight or hearing?

Mr. Karn: I don't know.

Mr. Burgess: Or valvular heart trouble?

Mr. Karn: I don't know anything about that. I don't think they do.

Mr. Park: I think not, Mr. Burgess. They are never promoted.

Mr. Karn: The firemen are never promoted?

Mr. Park: Yes.

Mr. Karn: I beg to differ with you, Mr. Park. The firemen on these vessels are promoted to the position of water tender, and from water tender to the position of oiler, and from the position of oiler to assistant engineer, third and fourth, as it may be, and on up to chief engineer.

Mr. Park: Is it not a very rare thing that a fireman ever becomes an engineer?

Mr. Karn: I don't think it is rare. We have two or three members of our organization on the Pacific Coast who are on steamers of this kind, members of Lodge 143 at Oakland.

Mr. Park: Well, they may have been qualified in other ways, and run around the regular firemen.

Mr. Karn: I think they began on those boats in that same manner and I think that in most instances—and possibly all three instances, that they became firemen on locomotives after they were engineers on marine boats.

Mr. Park: Is it not a fact that a marine engineer must have mechanical qualifications and a certain amount of work in the shop, before he becomes an engineer on a steamer?

Mr. Karn: Is it not a fact what?

Mr. Park: That he must have some mechanical knowledge? That is, he must—

Mr. Karn: The marine firemen?

Mr. Park: No, the engineer.

Mr. Karn: The marine engineer?

Mr. Park: Yes.

Mr. Karn: Well, I couldn't say as to that. But I think that about everything that one would need to learn with respect to the handling of any class of power could be learned in a steamship in the same manner that it is learned on a locomotive by a fireman before he becomes an engineer. They have all the appliances there, even to the tools for making their own repairs.

Mr. Park: Yes, they run a machine shop, and that is under the charge of the chief engineer.

Mr. Karn: Probably so. I don't know about that.

Mr. Park: In order to operate that ship and take care of it running properly and meet all emergencies, don't you think from your experience and knowledge of seafaring, he should have.

Mr. Karn: My experience and knowledge of what?

Mr. Park: On your trips that you have made, and your observations that you have made on these steamers, that the engineer should have an intimate knowledge of mechanical matters and all things that might be necessary in connection with the repair of his machines.

Mr. Karn: You will have to limit that to my trips. The only trips I made on a steamer in any way, shape or form, was made as a passenger, and it was not made for the purpose of making any of these investigations. They were made, in fact, prior to my entering the service of the railroad.

Mr. Park: I understood you to say that you have made a

special investigation, and have had special privileges on these trips.

Mr. Karn: No, sir, I did not make that statement at all. I made a special investigation of the differential between coal and oil.

Mr. Park: Are these marine firemen organized, do you know?

Mr. Karn: Yes, I think they are.

Mr. Burgess: Well, Mr. Karn, if a fireman was required to answer six or seven hundred mechanical questions, would that not indicate that it was necessary for him to have some mechanical knowledge?

Mr. Karn: What kind of a fireman are you talking about now; any kind?

Mr. Burgess: A locomotive fireman.

Mr. Karn: Well, I think it is a well-known fact that a locomotive fireman has to have a mechanical knowledge. In fact, he answers more questions on some roads than you mentioned.

Mr. Burgess: Well, that was the purpose of the question. At least one member of the Board wanted to find out if firemen were promoted on a locomotive with no mechanical knowledge.

Mr. Karn: Well, I did not understand the question that way, I am sure.

Mr. Burgess: Well, you don't know of any fireman that has been promoted unless he demonstrated his competency by examination, do you?

Mr. Karn: Of course, as far as the promotion of firemen is concerned, I have got to confine myself to my own observation, and I know that our rules are very strict with respect to it, and very rigid examinations are taken by our men, and having passed one of them myself, I thought it was rigid—perhaps due, I believe, to my lack of knowledge—but I thought it was rigid, and I am satisfied in my own mind that it was very rigid.

Mr. Burgess: Not only did you have to pass an examination on mechanical matters, but on transportation matters as well; is that true?

Mr. Karn: Oh, yes, particularly transportation.

Mr. Park: Mr. Karn, the boilers in a steamer are somewhat remote from the machinery. Does a fireman there, do you think, have the same opportunity to observe the operation of

machinery, and is he so much in contact with the engineer as a fireman on a locomotive would be?

Mr. Karn: Well, feeling that your question is leading up to the qualifications, and so forth, I will answer that this way. In view of the fact that the fireman on a steamship is promoted from the position of fireman—this is after he becomes an engineer, or is going to become one—in view of the fact that he is promoted from the position of fireman to that of water tender, and later to that of oiler, and assistant engineer, and all that, I would say that he had much better opportunity to observe the machinery than the fireman on the locomotive, because the fireman on the locomotive is very seldom promoted to handle the locomotive without the consent of the master mechanic, and then only under the supervision of the engineer, and on most of the roads, because of the fact that the company holds the engineer responsible for any mistakes that the fireman makes, he does not care much about letting him handle it.

Mr. Park: Then, you are in a position to testify that the engineer on a steamship is not required to have a certain amount of experience in a shop.

Mr. Karn: I am in no position to testify: I said I did not know.

Mr. Park: You don't know but what these firemen that are promoted to engineers may have had that experience?

Mr. Karn: I have no idea at all whether they have or not.

Mr. Park: Do you know whether the firemen that you say obtained these positions as engineers, had such experience?

Mr. Karn: No, I don't know that they had, but I qualified that statement. Mr. Park, by saying that if they maintain on these boats—I did not say that, but we are going to say it now—that if they maintain on these boats the machine shop and the complete equipment that you describe, in charge of the chief engineer, and it is a practice for firemen to be promoted through these various channels, he will then have greater opportunity—and this is what I said—to observe and familiarize himself with the duties that will be his later, of chief engineer, or any other engineer, because of those facilities which the fireman on the locomotive does not have. He must acquire much of his knowledge from books, and couple it with his practical knowledge.

Mr. Park: You think it requires greater ability to become the chief engineer of a marine engine than a locomotive engine?

Mr. Karn: No, I don't think the marine engineer has a one-thousandth part of the responsibility that a locomotive engineer has.

Mr. Park: That is, the mechanical responsibility?

Mr. Karn: The mechanical responsibility is a matter that I am not familiar with. I don't know, really, and I could not tell you what kind of machinery they have in a steamship. I never was down in one of the steamships at all, in the engine-room of a steamship at all, except on very small boats.

The Chairman: In the railroad service, suppose some break in the machinery occurs, and it is of such a character that it can be repaired without the engine being taken to the round-house or the machine shop, does the engineer possess sufficient mechanical knowledge to make that repair?

Mr. Karn: In the examinations, Judge, that the fireman takes, when he becomes an engineer, all of those questions are asked of him: what he would do if a certain thing broke, and how he would disconnect his engine if it was necessary to disconnect, and if repairs could be made to such and such an instrument. Those questions are all brought out, and the engineer does those things on the road if it is possible to do so, assisted by the fireman.

The Chairman: He is equipped with wrenches and other tools?

Mr. Karn: Well, not always. The tools that they furnish on the modern locomotive would be of very little use in case of breakdown. In fact, in the large locomotive of today, the parts are so large that they cannot be handled, you see, by the two men, or four or five men of the crew. They have got to have jacks, as a rule, to handle them, and really a breakdown on the railroad from the machinery viewpoint is really a breakdown. You cannot handle it. It must be repaired by other methods.

Mr. Shea: Mr. Karn, did you ascertain as to whether or not the steamers carried a corps of extra machinists, and that when they have engine failures or some mechanical defects, the chief engineer instructs the machinist to perform this work?

Mr. Karn: No, I did not, Mr. Shea.

Mr. Shea: You don't know whether they have those machinists or not?

Mr. Karn: No, I do not.

Mr. Shea: Would you be surprised if you did know that they carry extra machinists to do the work on these large steamers?

Mr. Karn: I would not be surprised. It seems to me that it would be economy to do so.

Mr. Shea: And that the chief engineer does not dirty his hands from one end of the trip to the other?

Mr. Karn: He lives in a state room which is about as good as they have in any of these hotels in Chicago; I know that.

Mr. Shea: You don't doubt but what that fact could be established, if necessary.

Mr. Karn: Not the least question in my mind.

Mr. Park: Mr. Karn, isn't the mechanical responsibility of the railroad engineer, to the extent to which he exercises that in the discharge of his duties, confined to putting his locomotive, in case of an engine failure, in such condition as that he could bring it to the shop, without doing any repair work?

Mr. Karn: Unless he could handle his train, or a portion of it, set out a portion of it and handle it.

Mr. Park: If a side rod should break, and it was necessary to disconnect the engine, he would simply lock up the guides, and do the necessary things to bring that engine to the shop. He would not attempt any repairs? He could not?

Mr. Karn: Well, that is what I tried to make clear a while ago, that it could not be handled.

Mr. Park: Have you a recollection of a number of years ago when locomotive engineers were required to work in the shops with the engines, when they were in?

Mr. Karn: No, sir, I have no such recollection. Nothing of that kind existed since my time.

Mr. Park: So that now there is no requirement of that kind?

Mr. Karn: To work in the shop?

Mr. Park: To work in the shop, on the part of a locomotive engineer?

Mr. Karn: I do not know of any road that has that requirement.

Mr. Park: There are no repairs that he could make on a locomotive that would be more than sufficient to take it to a shop where it could be repaired by the mechanics?

Mr. Karn: There are no repairs that he could make on the road that he is not required to make, and if anything happens to a locomotive on the road that that man should have attended to, they will surely discipline him most severely, if he does not make them.

Mr. Park: The mechanical examination and the requirements are simply those which enable him always to make a successful trip, and bring his engine in, in case of any failure.

Mr. Karn: That is the line of examination.

Mr. Park: He is not required to have a mechanical knowledge or be in any way a machinist?

Mr. Karn: No, I do not think there is any requirement for him to be a machinist, but he would have to know as much about his locomotive as a machinist does. That is, he might not have the technical knowledge of a machinist, as to how to do certain things on the road, but he would not have the material to do them with, either.

Mr. Park: Do you think an engineer could set a valve as well as a mechanic in the shop?

Mr. Karn: What do you want to know; whether it could be done on the road as well as in the shop?

Mr. Park: You said an engineer could do anything about a locomotive, or had all the knowledge of a locomotive that a machinist had.

Mr. Karn: I do not think I said he could do anything to a locomotive that a machinist could in the shop.

Mr. Park: As I remember your answer, it was that an engineer was required to be as proficient as a machinist.

Mr. Karn: I said he was required to know as much about his locomotive as a machinist.

Mr. Park: That conveyed the impression to my mind that he was equally competent as a machinist or foreman, to make any repairs. If it was necessary, in an emergency, to put him on a lathe, or other machine, to do certain work, he would not be competent to do that, would he?

Mr. Karn: He would not have had that experience, I think.

If he had not had the experience, he could not very well perform the service.

Mr. Park: But that class of work is done on these ships, is it not?

Mr. Karn: I do not know whether it is or not. If it is, it is probably done by machinists and boiler makers. I think they probably have boiler makers and machinists on those ships, the same as they have in the shops. If they maintain these machine shops on board, they surely do.

Mr. Park: But the chief engineer of a ship is in charge of all the mechanical men on the ship, is he not?

Mr. Karn: I could not say as to that. He might direct them, might be in charge of them. I have no knowledge of that and have not made any investigation of that.

Mr. Burgess: Is it not a fact that the locomotive engineer is required to know whether he can repair an engine in order to get her to a terminal, if anything happens on the road?

Mr. Karn: Do you mean something of minor importance?

Mr. Burgess: I mean any accident. He ought to know whether he can repair her or not.

Mr. Karn: Yes, or whether a machinist will have to be sent for, to take her down, do you mean?

Mr. Burgess: No, I mean if anything happens to his engine, he is supposed to know whether he can repair it or not?

Mr. Karn: And report it, yes.

Mr. Burgess: And that is one of the reasons for these mechanical examinations, is it not?

Mr. Karn: Yes.

Mr. Burgess: Now, locomotive engineering and the trade of a machinist are two separate and distinct trades, are they not?

Mr. Karn: As I understand it.

Mr. Burgess: And on these ships they do carry machinists and boiler makers, and helpers, on the large ships, do they not?

Mr. Karn: I cannot say under oath that they do, because I don't know. I never saw them there, and have no personal knowledge whether they do carry them or not.

Mr. Burgess: Is it not a fact that in the event that a side rod breaks, the engineer is usually crippled so that he could not repair that engine?

Mr. Karn: I would think that if a side rod broke on a modern locomotive, the engineer would be pretty well mixed up with the machinery in about three seconds.

Mr. Burgess: So that they would need a doctor or an undertaker more than they would need a machinist, under those circumstances, on account of the side rod coming around and tearing into the cab. That is the usual result, is it not?

Mr. Karn: That would depend largely on where the rod broke, whether it reached that far back or not.

Mr. Burgess: Do you know of many engineers who have been seriously crippled by the breaking of side rods?

Mr. Karn: I cannot say many, because I might be called upon to name them, and I can only think of four or five who have been injured in that way.

Mr. Burgess: But if there was any defect with the air, or anything that he could repair on the road, he would be expected to do it, would he not?

Mr. Karn: Oh, yes.

Mr. Burgess: And if it was impossible to repair the locomotive on the road he would be expected to know that fact and so report it?

Mr. Karn: And so report it.

Mr. Burgess: Is it not a fact that a man might be very proficient in the law, and yet not able to tell how a law book was printed, or how the binding was put on? Is not that an entirely different profession?

Mr. Karn: That is a possibility: but I think if I had been a lawyer, I would have studied the cover as well as the inside.

Mr. Burgess: Is it not a fact that the general manager of a railroad is the general manager of all the departments?

Mr. Karn: Yes.

Mr. Burgess: And some of those gentlemen, while they are general managers, probably could not disconnect an engine if they were required to do so?

Mr. Karn: Aside from the men who have come up through the ranks to the position of general manager, I do not think any of them could do it.

Mr. Burgess: But that is no reason for believing that they are in the slightest degree incompetent as general managers, is it?

Mr. Karn: No, not at all.

Mr. Burgess: That is all.

Mr. Shea: Neither could a general manager go into a shop and operate a lathe successfully, and face valves and set valves, could he?

Mr. Karn: I do not think he could, unless he had had some experience in that work.

Mr. Shea: And it is no reflection on a general manager, simply because he cannot do that?

Mr. Karn: No, sir.

Mr. Shea: That is not his business.

Mr. Karn: I do not think most general managers can do that.

RE-DIRECT EXAMINATION.

Mr. Carter: Mr. Karn, I think you were asked a question by a member of the Board with regard to the possibility of marine firemen becoming marine engineers. Do you know that it is a fact that on all government vessels special schools of instruction are maintained for the benefit of sailors and firemen, so that they can advance?

Mr. Karn: I do not know that from my personal knowledge, but I have read that such is the fact.

Mr. Carter: Do you not believe that a marine fireman would have just as much opportunity to acquire complete knowledge of a vessel, or the machinery therein, as a locomotive fireman would have to acquire knowledge of a locomotive?

Mr. Karn: I think the government is at some considerable pains to make clear to the men that they enlist in that service, that those are some of the opportunities awaiting them. I think you will find that on their posters.

Mr. Carter: Let us go back to another question that was discussed a few moments ago between yourself and a member of the Board, with regard to graduated rates. Have you any information as to the graduated rates of marine masters, mates, etc.?

Mr. Karn: Yes, I have here some statistics published by Captain William A. Wescott.

Mr. Carter: Who is Captain William A. Wescott?

Mr. Karn: He is the president of the Masters, Mates and Pilots of the Pacific.

Mr. Carter: Have you the scale of wages there?

Mr. Karn: Yes, and in order to get close to the railroads that we are dealing with at this time, we will take the Atlantic service. Here is the Morgan Line, out of New Orleans, operated and owned, I should judge from statements made, by the Southern Pacific Company. They have twenty-three steamers which are named in this report, and the tonnage runs from 6,888 to as low as 3,205.

The statement made by Mr. Wescott is:

"The Master's pay on the above named ships varies, the maximum being \$275 per month, and the Mate's vary from \$180 and \$160."

Mr. Carter: Does it show there that the bigger the vessel, the higher the rate of pay is?

Mr. Karn: It is not tabulated.

Mr. Carter: Haven't you something there from some other source, where it shows that vessels are classified according to their size?

Mr. Karn: For engineers and assistant engineers, yes.

Mr. Carter: Just read that.

Mr. Karn: This is the wage scale and crew list, and is effective during the season of 1911. This is the marine engineers.

Mr. Carter: The lake carriers?

Mr. Karn: Yes.

Mr. Carter: Out of Chicago here?

Mr. Karn: Out of Chicago, for steamers operated on the Great Lakes. On steel bulk freight steamers, first class, all steamers of 5,500 tons or over.

Second class, all steamers over 4,000 tons and less than 5,500 tons.

Third class, all steamers of 2,100 tons and less than 4,000 tons.

Fourth class, all steamers of 500 tons and less than 2,100 tons.

Mr. Carter: Before going any further, we have a point in our examination where we are going to take this up. Let us suspend that right there. But it does show, does it not, that the wages of these engineers, while not based on weights on drivers.

has a similar basis, of the weight of the ship, or the tons of the **ship**?

Mr. Karn: The tonnage of the ship, and I am informed by their representative here, Mr. George A. Grubb, who is the National Secretary, that the policy of the owners of the vessels is to graduate the rates of pay upon the earning capacity of the vessel for the owner.

Mr. Carter: We have a special point in the examination where we will take that up.

Mr. Karn: All right.

Mr. Byram: Does that graduation extend to the firemen on those vessels?

Mr. Karn: I have no knowledge of that. This is only engineers.

Mr. Byram: You have not the firemen?

Mr. Karn: No, I did not seek for that. All I sought to find out with reference to them was whether a differential had been established between oil burners and coal burners.

Mr. Byram: You were not interested in the firemen's pay then?

Mr. Karn: In actual dollars and cents, no, sir.

Mr. Byram: Or whether it was graduated?

Mr. Karn: No, sir, but as to whether the wages had been increased since oil had been introduced as fuel, and as to whether there was a differential.

Mr. Byram: So far as your testimony is concerned, this graduation does not apply to firemen?

Mr. Karn: On vessels, you mean?

Mr. Byram: Yes.

Mr. Karn: I have no knowledge of the rates paid there.

Mr. Byram: Your testimony is confined to engineers and assistant engineers?

Mr. Karn: My testimony is confined to engineers—yes, there are other graduations.

Mr. Byram: Not of firemen on those vessels?

Mr. Karn: No, sir, not as to firemen, as to graduation.

Mr. Byram: You do not testify that they get more or less, based on the size of the vessel?

Mr. Karn: I have no wage rate for them. I do not think

there is anything in the correspondence that bears on their wages, whether they are graduated or not.

Mr. Byram: You are testifying from the firemen's standpoint in this hearing, are you not?

Mr. Karn: For the purpose of establishing certain matters, yes.

Mr. Byram: You are testifying from the standpoint of the firemen in most of these matters that we are speaking of, are you not?

Mr. Karn: Just what do you mean by that?

Mr. Byram: You are not testifying as an engineer; you are testifying as a fireman, are you not? That is what I mean.

Mr. Karn: I am offering testimony for the purpose of showing that there should be no differential between the rates paid to firemen on an oil burning locomotive, and the rates paid to firemen on a coal burning locomotive. And also will strive to show that owners and operators of almost every endeavor that has to do with transportation, base the rate of pay for the employe, whether he be engineer, fireman or what not, on the ability of the machine to earn for the owner.

Mr. Byram: That is just what I mean. Now, you say for any employe, whether he be an engineer or fireman. You are giving this testimony as to marine operations, but you do not offer any information about the firemen, whether the fireman's pay is graduated on any of these vessels.

Mr. Karn: I do not know whether it is or not.

Mr. Byram: When you were making an investigation for the purpose of testifying as to what the fireman does on these marine vessels, do you not think you should have got the rate of pay, and found out whether it was graduated or not?

Mr. Karn: If I had been seeking what you think I was seeking, I would answer yes; but what I was striving to do was to secure from all people who had substituted oil for coal, information to show whether there had or had not been a differential established.

Mr. Byram: Yes, but you just said that you also found out that the other mechanical employes on these boats had their pay graduated according to the capacity of the vessel.

Mr. Karn: Yes, I made that statement.

Mr. Byram: But you omitted to find out anything about the firemen.

Mr. Karn: Because that point was not at issue, as far as the firemen were concerned.

Mr. Byram: And you do not think it is important to the firemen whether the vessel is one of large tonnage or small tonnage?

Mr. Karn: It makes all the difference in the world whether there were graduations for the firemen on the large vessels. Even though their rate of pay was the same, the large steamer would require many more firemen, many times the number of firemen.

Mr. Byram: The large steamer would have to have more men?

Mr. Karn: Yes, she would have to have more men, and probably that might offset this. I do not know that, however.

Mr. Byram: Would that necessarily involve the question of the individual fireman, whether it was a large vessel or a small one?

Mr. Karn: I do not know whether you understand my point or not, or whether I understand you; but I strove to make it clear that, as to firemen on oil burning steamers and in oil burning stationary plants, the only information we sought was not the matter of their compensation in dollars and cents per month, but whether or not the introduction of oil had established a differential.

Mr. Byram: I believe those rates you read just before I began questioning you, were for the lake vessels, were they not?

Mr. Karn: Yes.

Mr. Byram: Do they burn oil or coal on those vessels?

Mr. Karn: I suppose they burn coal.

Mr. Byram: Then that would not be relevant to the question of whether there was any differential?

Mr. Karn: No, there could not be any differential, because no oil had been introduced. If there had been oil introduced, they probably would have got their wages, because they would have got their schedule.

Mr. Byram: You would not have been interested in their rates if they burned coal?

Mr. Karn: No, there could not have been a differential unless both fuels were used.

Mr. Park: In making your investigation as to whether there should be a differential as between oil burning stokers and coal passers in steamers—

Mr. Karn: Hold on. Get that right. What do you mean—oil burning stokers and coal passers?

Mr. Park: Firemen, the men who furnish fuel to the boiler.

Mr. Karn: Yes.

Mr. Park: Would it not be necessary to take into consideration the working conditions and the wages, and the possibility for promotion, in order to make any kind of a comparison between the locomotive firemen and that class of service, as to whether that differential should obtain in one and not in the other.

Mr. Karn: If you will cut that question up into about seven, I will try to answer it.

Mr. Park: The idea that I was trying to get at, is this, that if a fireman, say, was getting \$35.00 a month, and living on very ordinary food, and sleeping in a hammock, with fifteen or twenty others, and perhaps some Chinamen and different nationalities—

Mr. Karn: It would be a pretty good sized hammock that would hold fifteen or twenty.

Mr. Park: And if the fireman was not promoted to be an engineer, and had nothing ahead of him, that it might be considered just to give him the same \$35.00 a month whether he was using oil or coal, because he could not live on any less, and had nothing ahead of him to look forward to in the way of promotion.

Mr. Karn: The chief thing that concerned me in your original question was talking of promotion, and lesser possibilities, and all that. I think, Mr. Park, as a representative of some of the Harriman Lines, you are fairly familiar with the promotion of firemen, and I think the best and most shining example I can cite to you is that of a man on one of our divisions, who has stood first out for firemen, since 1907, and he has never been able to hold a decent run since that time, and he must have had six or seven years' seniority since that time. That is eight years ago

now. If it is true that a fireman on one of these steamships has to serve ten or fifteen years before he can advance, possibly he may not become a chief engineer, but he will get up to that point sooner or later. You do not become a chief engineer on a railroad, until you have worked forty years or so. You work extra most of the time.

Mr. Park: These requirements in the service for engineers apply to fourth class, the same as first class. The requirements as to engineers are that:

“All are certificated men and on boats of the first class have a certificated man attached to each watch in the stokehold, to insure the proper care and operation of the boilers.”

And this engineer must be twenty-one years of age before sitting for examination for fourth class engineer, and must have served thirty-six months in a steam engine shop. An engineer could then be serving on a duly approved steamer of certain nominal horsepower, and take his examinations for Third, Second or First class certificates.

It would appear from this that there is very little prospect of a stoker on a steamship being promoted, unless he is an exceptional mechanic, and has had an opportunity to serve some time before or after he leaves that position, for a period of three years as a machinist. Taking that into consideration, and that he is getting this \$35.00 or \$40.00 a month as a fireman, it would seem to me at least, that it would be very proper to continue his pay at that rate, whether he was using oil or coal. Now, the prospects of a locomotive fireman are entirely different. You may know of some man that waited eight years for a locomotive.

Mr. Karn: Yes, and eighteen.

Mr. Park: In my experience during the last ten or fifteen years, it has been possible for men in many instances to obtain a locomotive after three years' service.

Mr. Karn: In recent years?

Mr. Park: Not since we have had these hard times.

Mr. Karn: Since you have had the large locomotives, has that been true?

Mr. Park: I think so, on a great many roads. Of course, there is no question but that their period of service is being extended by reason of the railroads not building new lines, and

there not being so much progress; but quite likely some of these conditions will obtain again, and we will build railroads and go ahead, and the opportunities for promotion will be just as good as they were before. It seems to me there is some difference between a fireman on a locomotive and one on a steamship. And I know of a great many ships which have Chinamen and that class of labor as firemen, and I think you know of it, too.

Mr. Karn: That use Chinamen? No, I do not know of any ship that uses Chinamen for firemen. I know there are boats that come into San Francisco that have Chinese crews on deck. I do not know what they have below.

Mr. Park: The United Fruit Company, running out of New Orleans, is a line that I am quite familiar with, and they have Chinamen firing on all of them.

Mr. Karn: I do not know anything about that.

Mr. Burgess: Mr. Karn, do you think the men who are firing locomotives today are the kind of men who will sleep in a stokehold and eat chop suey, and sleep with Chinamen?

Mr. Karn: No, and I do not think anybody else sleeps with Chinamen. I do not think there are any hammocks built for fifteen or sixteen people on steamers, either.

Mr. Burgess: Suppose a hammock was made to accommodate one man, do you understand that the men you are trying to testify for have been, or are expected to be, the associates of Chinamen in the stokehold of a ship?

Mr. Karn: No, sir. I understand that the men I am testifying for are a class of men who are supposed to be eligible to the position of locomotive engineer, a position which I assume, from what has been said here on both sides, is one of the most important that any man can be called upon to fill.

Mr. Burgess: If it came to the knowledge of the general public, or the Interstate Commerce Commission, that, even by implication, this Board were trying to adjust wages for the associates of Chinamen, do you not assume that the Government would feel that it was necessary to enact some drastic legislation to put competent men on the locomotives?

Mr. Karn: I think they would. I know they would.

Mr. Burgess: That is all.

Mr. Park: Mr. Karn, the government does take jurisdiction over all marine work, does it not?

Mr. Karn: I don't know to what extent. I have a general knowledge of the fact that they require certain examinations of marine engineers. Whether they do from anyone else or not I don't know—the captains and pilots.

Mr. Burgess: Is there any regulation that you know of that the government requires these Chinamen that sleep in stoke-holes and eat chop suey to pass an examination?

Mr. Karn: No.

Mr. Park: Mr. Burgess very skillfully brought out the point that I was trying to bring out, that the fireman on the steamer was a very ordinary individual, and he did not have in him that which was capable of promotion, he did not in any way compare with the locomotive fireman, and for that reason he received low wages and only enough to live on, and you could not very well make a differential between oil and coal under the circumstances. I do not want any questions that Mr. Burgess may have asked here to carry the inference into the record that I am comparing the fireman on an American locomotive with a Chinaman or anything of that kind. I know that the firemen on these steamers sleep in hammocks and they sleep in the fore-castle, and 15 or 20 of them sleep in one room, and that their food is very ordinary, and that they are not in any way to be compared with an American locomotive fireman, as to his pay or his conditions or his capabilities or his habits.

Mr. Burgess: And yet, Mr. Karn, notwithstanding that statement, we have the indisputable evidence in front of us that because he is of a low grade of humanity, willing to associate and be the bedfellow of a Chinaman, that yet this steamboat company recognizes the fact that he should have \$52 per month, plus his expenses while away, a very much higher rate than this American nobleman, we will call him, that is trying to make himself an engineer by firing a locomotive; is that right?

Mr. Karn: I would rather not burden the records with an opinion as to the views of yourself and Mr. Park, but I think that Mr. Park's simile was unnatural. I think that he possibly intended to convey the idea, and that idea only, that the man who fired one of these boilers on a steamer was a man whose mentality was not such, that were all of the conditions equal that

are enjoyed by a locomotive fireman, that he would be able to pass the required examinations if opportunity offered, and become in regular order a marine engineer. Am I right, Mr. Park?

Mr. Park: I think substantially, yes.

Mr. Karn: If that is true, then I want to say that I think that either one or the other of us have failed in our observations. I have met a good many men, and I meet them many times in their committee rooms that are firemen on these steamers, who are intelligent men, and whether or not the opportunity is afforded them to take this examination, in many instances they could pass, and become marine engineers. It may be true that they have some that are not, but possibly not to the extent of 85 per cent of them passing. But I think that the same proposition faces the transportation world in steamships today that faces the transportation world on railroads. That is, that the time has come when they have got to introduce something that will permit them to get a class of men in the service who have brains as well as muscle. And I think it applies to the steamers.

Mr. Carter: I think it was Bobby Burns that said, "The best laid plans of mice and men aft gang a-gley." We ordered ham and eggs and it is now an omelette. We started out on a certain line of investigation and examination, first, to show the unfairness of a differential between the wages of oil and coal burning firemen on locomotives and were then going to show whether there should be a graduated wage in accordance with the basis of wages of weight on drivers. Now, as I say, our ham and eggs, have become omelette. We are all scrambled. Now, I am going to ask the permission of the Board that when we get through we may be allowed to just go over the whole case again in a brief manner so as to bring out a constructive line of evidence. Now, it may take some time to do that, but most of the questions that we have been discussing we intended to discuss later when we came to those exact points. Now, I think that in justice to ourselves when we get through with all this that we should be permitted, even if it takes considerable time, to go back and then try to introduce our evidence in the manner that we have planned.

I do not object to these questions, because I want all the light

on the subject possible, but I mean to say that I would like to present it in an argumentative manner.

The Chairman: Mr. Carter, as I have heretofore stated, the question of time that may be taken by either side in the presentation of this case is immaterial. Of course, I should like to get through with this hearing at as early a date as possible, but I do not want counsel for either side to feel that they are hampered in the slightest in the presenting of their case.

Mr. Carter: I have got quite a collection of questions that were suggested by the other questions, which I will pass. I believe, Mr. Karn, that our first subject was to show the unfairness of the differential between oil and coal-burning firemen, so far as the rates are concerned. I believe you said you made investigation in other lines of business to ascertain if, with the introduction of labor-saving machinery, there came a decrease in wages, or else a differential in wages because of the introduction of labor-saving machinery. I think we had started in with the steamships. We began with the marine firemen. I believe there is no use going any further on that, except to ask you this—and I don't know that you can answer it—is not the compensation of a marine fireman graduated in the aggregate, on the size of the vessel? For instance, if there was a vessel of a certain tonnage where they had one fireman, and then they took another vessel of double the tonnage, would they not probably place two or more firemen on the larger vessel.

Mr. Karn: They would place firemen on the larger vessel—

Mr. Carter: Say yes or no, please. If you don't know, I will say that I think they will, and I think you will find, Mr. Chairman, that that is so—I guess the witness does not know, Mr. Chairman, so I will proceed further.

The Chairman: You have supplied that part of the testimony, Mr. Carter.

Mr. Carter: I think it is a matter of common knowledge, although the witness does not seem to know it is a fact, but it is a matter of common knowledge that the aggregate compensation of firemen increases with the increased size of the ship. For instance, while one of these Chinamen might not receive more individual wage, why, they would have two Chinamen or a dozen Chinamen, and, in the aggregate, the compensation of

the firemen would increase in proportion to the tonnage of the ship. Now, that, I think, is a matter of common knowledge, but as the witness has told us, he has not made investigation, and perhaps it is unfair to ask him.

Mr. Karn: I did not say that, Mr. Carter.

Mr. Park: I think the witness does have a very extended knowledge of these matters, and I suggest that you let him at least try to answer your question before you answer it.

Mr. Carter: Well, have you, then, any knowledge of the fact that with the increased size of vessels they have a greater number of firemen?

Mr. Karn: Yes, sir.

Mr. Carter: Now, so far as the employer is concerned, they do pay a greater compensation to firemen on large vessels than they do on small vessels, do they not?

Mr. Karn: In the aggregate.

Mr. Carter: Now, here we have asked, in this proposition, that when these locomotives get very large that two firemen be employed. Have you discovered that the railroad employer is very much opposed to giving the one fireman any relief as the locomotive gets larger?

Mr. Karn: Well, they have not done so.

Mr. Byram: What have they done for him on the larger locomotives? They have increased his pay, have they not?

Mr. Karn: He is talking about relief from labor.

Mr. Byram: Yes. Now I am asking you if the railroads have not recognized the increased labor performed by this man by allowing him a higher rate of pay on the larger engine?

Mr. Karn: I could not say, Mr. Byram, as to just on what basis they allowed the increased rate, but they did, on our road, allow the increased pay on the larger locomotive because of the greater earning capacity of that locomotive for the company.

Mr. Byram: You know that was the reason? I thought you said you did not know what reason they did allow it for.

Mr. Karn: I said on other roads.

Mr. Byram: On your road they do allow a higher rate to the firemen on the large engines?

Mr. Karn: Yes, sir.

Mr. Byram: He gets more pay than on the smaller engine?

Mr. Karn: Yes, he gets paid on the graduated basis, and

they assigned as their reason because of the greater earning capacity for the company.

Mr. Park: Mr. Karn, have you made a schedule or fixed the rate of pay on the Southern Pacific outside of the conferences of 1907 and 1910?

Mr. Karn: Yes, 1913.

Mr. Park: Well, then, it must have been that particular conference in which the increased productivity of the locomotive was taken into consideration, because I don't think you will state that it was in the other two conferences that the rate was made on increased productivity.

Mr. Karn: Have I to go back all over that again to make it clear?

Mr. Park: No.

Mr. Karn: If necessary, I will be glad to do it.

Mr. Park: But you and I were both in those two conferences and there was not anything said about productive efficiency.

Mr. Karn: I think you are mistaken, Mr. Park. I don't think I ever sat in a conference with you in my life.'

Mr. Park: Well, your memory is not as good as mine.

Mr. Karn: Oh, you are talking about the General Conference.

Mr. Park: Yes.

Mr. Karn: Oh, I beg your pardon. I thought you meant the schedules on the railroad. You asked if I ever made a schedule, and I had reference to my own schedule.

Mr. Park: Well, the increases in pay of the firemen on the Southern Pacific were made in 1907 and 1910, and the conference of 1910 ultimately resulted in an arbitration, but those were the two occasions upon which the pay of the fireman was increased on the Southern Pacific as well as on other roads.

Mr. Karn: You seem to lose sight of the fact, Mr. Park, that I am discussing schedules from a Southern Pacific basis and no other road. I don't know about how schedules are made on other roads at all, and the only thing we have ever done on the Southern Pacific is to apply any award or an increase that might have been granted during the conferences that you mentioned awhile ago.

Mr. Park: Your answer to Mr. Byram's question gave me the impression that there was some reason for the greater

pay on the large locomotives on the Southern Pacific than had been advanced in the arguments in these conferences that I was conversant with, in which those increases were made.

Mr. Karn: I would be very sorry, Mr. Park, to have you get a mistaken impression of any testimony that I may have given, and for your benefit I would like to go back over it again that you may be clear.

I said that in 1900, when our agreement was made with the Southern Pacific Company, that locomotives were classed in groups, the E-B group and the G-S group, and the G-H group and possibly some other group. That is all I see here now. And that in 1903, when the firemen came in to make a schedule on the Southern Pacific road, they insisted that they go back to the old basis, the trip basis in effect prior to this schedule.

Mr. Park: That was in 1900?

Mr. Karn: That was in 1900, when this was made. This is 1903, when they were striving to go back to the old trip basis. The company said to them—and I can give you the names of the men who said that—that they did not want to go back to the old trip basis; that they were willing to make any adjustment of any classification of the locomotives with the end in view of paying the fireman in accordance with his earnings on the class of locomotive that he fired; with the earning power equal to the ability of the locomotive to earn for the company. They said that they believed that the only proper method to determine firemen's compensation was upon the tractive power, and the only manner to determine tractive power was the weight on drivers basis. That statement was made in reply to Mr. Carter's question about differentials in oil and coal.

Then, later in that same identical conference, they broached the subject of providing a like rate of pay for firemen on these locomotives, and the committee told them that if it was proper to base the compensation of a fireman on a coal burning locomotive upon the earning capacity of that locomotive for the employer, that it was proper to base the pay of a fireman on an oil-burning locomotive in like manner, and it was and has always been carried out on our lines on that basis ever since.

Mr. Park: Well, I can understand how they agreed with you that the pay should be based on the larger size of the locomotive, but I would like to see their side of it, and hear their

side of it, as to whether they specifically said that it would be on account of the increased productivity of the locomotive, or its earning power.

Mr. Karn: I didn't say that. I did not say they said that.

Mr. Park: Or its earning power, which means the same.

Mr. Karn: I did not say they said that. I said they said they wanted to base the rate of pay upon the tractive power of a locomotive.

Mr. Park: Which means the same, doesn't it?

Mr. Karn: That is the idea. And, as an interjection, I said that you must understand that that means that, the larger the locomotive the greater the tractive power of the locomotive, the greater its ability to haul freight tonnage.

Mr. Park: It naturally follows.

Mr. Karn: Yes. Hence it must be upon its ability to earn money for the company.

Mr. Byram: Mr. Karn, you are advocating weight on drivers as a basis for determining the rate of pay of engineers and firemen?

Mr. Karn: Yes.

Mr. Byram: Do you think that would be desirable?

Mr. Karn: I think that is the best way of determining it.

Mr. Byram: Now would it be satisfactory to you and the men you represent if this Board should decide to adopt that basis, without any increase in pay.

Mr. Karn: Just what do you mean by "without any increase in pay?"

Mr. Byram: Apply the weight on drivers basis to the present rates of pay, we will say.

Mr. Karn: What would be our object in coming here if we were going to adopt something we already had, without an increase?

Mr. Byram: I thought you wanted the weight on drivers basis.

Mr. Karn: We have always had it.

Mr. Byram: You have on the Southern Pacific?

Mr. Karn: Yes.

Mr. Byram: You don't know how the men on the other roads would feel then, who don't have that basis?

Mr. Karn: I should judge that the men on the other roads, in view of the fact that they presented a proposal asking for it, do want it; that they consider it fair and equitable.

Mr. Byram: They consider the weight on drivers desirable as a basis. Would they consider it desirable if it did not also carry with it increase in pay?

Mr. Karn: I don't know, Mr. Byram. I am not familiar enough with the proposition to say whether the matter as submitted on weights on drivers would mean much in the way of increases on some railroads.

Mr. Byram: Well, whether it did or not, the question is—I want to understand from you—I believe you have the weight on drivers basis, do you not?

Mr. Karn: Yes, sir.

Mr. Byram: And you think that is a desirable way to determine that?

Mr. Karn: I did not say desirable. I said equitable. I think it is equitable.

Mr. Byram: Then it is better than any other way?

Mr. Karn: I think it is the only true way.

Mr. Byram: Then, if that is so, why should it not be also equally satisfactory to arrange the basis of pay on weight on drivers on other railroads, even if it did not involve an increase in pay, if that is the correct basis. That would be one step in the right direction, wouldn't it?

Mr. Karn: The request to you people is—while it is based on the weight on driver basis, that is simply a line of demarcation. To show a locomotive of a certain size will earn a certain amount of money for the company, and we feel we should have the amount we ask for on that size locomotive, and whether or not you put it on a weight on drivers basis, without compensating the men, or whether you compensate them, I cannot see that it has anything to do with it.

The Chairman: Mr. Byram, I would like to ask you a few questions. If we were to adopt the weight on drivers basis and not go any further, would that involve any increase of wages on any of these roads, to the firemen?

Mr. Byram: I should think that would depend entirely on how you applied it.

The Chairman: I am in the dark about the matter, and

I would like to have some light. I presume, if we adopt that, we standardize; that is, we say that we have one standard method by which you ascertain the amount of wages that an engineer or fireman is entitled to. Now, are there certain men so situated that, if we did adopt a weight on drivers basis, their wages would be increased from what they are now?

Mr. Byram: Not necessarily. That is just the point I was trying to draw from the witness, whether the request for the adoption of a weight on drivers basis is the essential part of this request, or whether the increase in pay is essential, and the weight on drivers merely incidental.

Mr. Karn: I will answer the question, Mr. Chairman. The intent of this Arbitration is to get an increase in wages, and we suggest the weight on drivers as the most equitable universal method of determining compensation.

Mr. Byram: But the basis is not as important as the increase in pay?

Mr. Karn: Why, the weight on drivers basis is only a method, Mr. Byram, the best method that we could think of, and we base that method on the assertion of these managers of the railroads that it is the best method of determining compensation.

Mr. Park: Some of them.

Mr. Karn: How is that?

Mr. Park: That is, some of the managers.

Mr. Karn: I beg pardon.

Mr. Park: I say, based on the expression of some of the managers, not all of them.

Mr. Karn: It is based on an individual speaking for all the Western railroads in a conference.

Mr. Stone: Eastern and Western.

Mr. Karn: I don't know about the East. The West I am speaking of.

Mr. Byram: That is all.

Mr. Burgess: Mr. Karn, Mr. Byram asked you one question, in which he stated that for a large engine they received larger pay. That word "larger" is somewhat ambiguous to me. What I would like to know is, do the firemen on these large engines, or any other engines, receive sufficient pay, in your estimation?

Mr. Karn: Why, Mr. Burgess, there is no comparison with

what they should have and what they receive. The firemen on a large locomotive, if he received proper compensation, would surely receive a good deal more money today on this very large locomotive than \$4.

Mr. Burgess: You understand even if he received one cent more per hundred miles, that would allow them to say that he received larger pay?

Mr. Karn: Yes, greater compensation.

Mr. Burgess: But it would not bring the true picture before the Board. What I wanted to ascertain was, if, in your judgment, the increase of the firemen's compensation had kept pace with the increase in the size of the locomotive?

Mr. Karn: No, sir, by no means.

Mr. Burgess: That is all, Mr. Karn.

Mr. Carter: Mr. Karn, let us go to sea again, get back on that ship proposition. I believe that without making a special investigation you recognized the fact, which is of general knowledge, that the wages of marine firemen in the aggregate are based upon the size of the ship. That is, the larger the ship the greater the number of firemen.

Mr. Karn: That is true, yes, sir.

Mr. Carter: Then when we ask, and have secured, practically on all railroads, a rate of wages for firemen based in some manner upon the size of the engine, we have only asked the railroad to pay that which has been recognized by the owners of ships, so far as marine firemen are concerned.

Mr. Karn: Yes.

Mr. Carter: That is, instead of putting one fireman on a locomotive weighing, we will say, 80,000 pounds, two firemen on a locomotive weighing 100,000 pounds, and so on up, they pay a higher rate. Is that not true?

Mr. Karn: Yes, sir.

Mr. Carter: Now, let us go back to that book you have there. Aside from firemen, is there a graduated rate of compensation?

Mr. Karn: For just any particular service, or for all?

Mr. Carter: Well, for the service, as you have them, just as they pay now.

Mr. Karn: Yes, there is a graduated rate all the way through.

Mr. Carter: At the proper time, when we are discussing that matter, we will take that up.

Now, with regard to this marine engineer, what would be thought by the passengers—I suppose you know what passengers think sometimes, having been one—if they would see the engineer of a train swaggering back through the train with a nice gold band around his cap, talking to one of the lady passengers on the train and being quite a masher with the ladies on the train? Who would be running the train?

Mr. Karn: Well, there would be only one man to run it. That would be the fireman, I suppose.

Mr. Carter: I believe you said you have been a passenger on ocean ships. Did you ever notice how conspicuous the Chief Engineer was with the ladies?

Mr. Karn: I have never been a very close observer.

Mr. Carter: Well, do you think if the Chief Engineer on board a ship could spend much of his time entertaining the ladies that he would not be held quite as responsible personally for the operation of the machinery as a locomotive engineer?

Mr. Karn: I know, Mr. Carter, as a matter of fact that the Chief Engineer of steamships spends most of his time with the passengers.

Mr. Carter: He is a good fellow. Now, is it not a fact that we have presidents of railroads who pride themselves on the fact that they once were locomotive firemen?

Mr. Karn: I don't know that to be a fact.

Mr. Carter: Do you know Mr. Dan Willard, president of the Baltimore & Ohio Railroad?

Mr. Karn: No, sir.

Mr. Carter: Mr. Willard began life as a locomotive fireman, so far as railroad life is concerned, and he takes considerable pride in it. Did you ever hear another very prominent railroad official say he began life as a brakeman?

Mr. Karn: No, I never knew the gentleman very well.

Mr. Carter: Is it not a fact, Mr. Karn, that many of the most successful railroad officials today began life as firemen and brakemen or telegraphers?

Mr. Karn: The General Manager of our road began life as a fireman.

Mr. Carter: And do you believe he is a very efficient manager, so far as the railroad is concerned?

Mr. Karn: Yes, a very efficient man.

Mr. Carter: Therefore, a man can acquire positions where he has supervisory authority over other men, without being able to do each of those men's work?

Mr. Karn: Yes.

Mr. Carter: Now, I believe we had got as far as the brakeman, where, after the introduction of the airbrake, and when he was relieved of his great physical labor, there was no difference in his wages because of the introduction of the air brake, was there?

Mr. Karn: No, sir.

Mr. Carter: And, since the introduction of the air brake, his wages have been increased as much as the fireman who shovels coal, have they not?

Mr. Karn: I think to a great extent.

Mr. Carter: Well, the switchmen. Formerly they had the old link and pin coupler, where the switchman had to go in between the cars and actually couple the cars with his hands. Has there not been introduced a labor-saving device known as an automatic coupler?

Mr. Karn: Yes, sir.

Mr. Carter: The cars are coupled by impact?

Mr. Karn: Yes, sir.

Mr. Carter: And uncoupled by raising a lever from the outside?

Mr. Karn: Yes, sir.

Mr. Carter: And unless the coupling is defective in some manner, he does not have to go in between the cars?

Mr. Karn: No, sir.

Mr. Carter: They have relieved him of that labor?

Mr. Karn: Of coupling, yes, sir.

Mr. Carter: Have you ever heard of any attempt being made by railroad companies to establish a differential in the pay of switchmen who handle an automatic coupler, or who handle a link and pin coupler?

Mr. Karn: No, sir.

Mr. Carter: Is it not a fact that the switchmen's wages

since the introduction of the automatic coupler have increased perhaps more than any other class of railroad employees?

Mr. Karn: I think they have.

Mr. Carter: Are they receiving very much more money in yards than firemen in the same yards?

Mr. Karn: Yes, sir, a great deal more.

Mr. Carter: And they are receiving a differential of two cents an hour in night work over day work?

Mr. Karn: Yes, sir.

Mr. Carter: Notwithstanding the fact that this labor-saving device was introduced.

Mr. Karn: Yes, sir.

Mr. Carter: Now we will go to sea again, and take up this helmsman that we were talking about. I understood you to say that you never found any instance where a helmsman who controlled a ship by steam received a differential and less money than the helmsman who controlled the ship by muscular exertion.

Mr. Karn: My investigation along that line was done with the Vice President of the Seaman's Union, Mr. V. O. Lander, and he assured me that the same rates apply to the man on the steamer who steers with steam as applied to the one who steers by hand, "armstrong."

Mr. Carter: Now we will take the hod carrier. Do you remember when a hod carrier would put so many bricks on a hod, and then climb a ladder up to the top of a building and dump the brick?

Mr. Karn: Yes.

Mr. Carter: Do you know that within recent years they have introduced elevators, and the hodcarrier now becomes a wheelbarrow man; places the brick on a wheelbarrow, wheels it onto the elevator; a man blows the whistle, and the stationary engineer takes the brick up to the top floor; here another man wheels the brick off and dumps it. Do you know that to be the fact?

Mr. Karn: A hoisting engineer?

Mr. Carter: I am talking about the man who wheels the wheelbarrow.

Mr. Karn: Yes, I know that to be the fact.

Mr. Carter: Well, now, was that a great labor-saving device for the hod carrier?

Mr. Karn: Mr. Moreschi, the business agent of the Hod Carriers, says it reduced their labor about 75 per cent.

Mr. Carter: It reduced their physical effort about 75 per cent?

Mr. Karn: Yes, sir.

Mr. Carter: Did the building contractors ever even suggest that when they put in these hoists there should be a differential paid to these hod carriers?

Mr. Karn: No, sir. It never was suggested.

And this same gentleman, Mr. Moreschi, says that at the time the hoist was introduced they were paying hod carriers 25 cents to 31 cents an hour, and that the standard wages today are 40 cents per hour.

Mr. Carter: That is, when the man who was known as a hod carrier had to carry the brick up the ladder to the top floor, he got 25 cents an hour.

Mr. Karn: To 31½ cents.

Mr. Carter: And now the man who has his brick carried up on an elevator gets more money?

Mr. Karn: Forty cents. That is the standard wages in the city of Chicago.

Mr. Carter: I see it has been suggested in newspaper reports sent out that engineers had got to the point where they were desiring or demanding a vanity bag to be carried. Do you think these hod carriers also ought to have vanity bags?

Mr. Karn: Two of them.

Mr. Carter: The engineer has been relieved of as much labor, responsibility and work during these same years as a hod carrier has?

Mr. Karn: Why, the labor of—you are talking about the engineer, or the fireman?

Mr. Carter: I am talking about the engineer, the man who, the newspapers have said in published reports of these hearings, ought to now have a vanity bag.

Mr. Karn: Well, I would say that the engineer's responsibility has been increased 50 per cent since the introduction of this elevator have decreased the wages of the hod carrier.

Mr. Carter: And notwithstanding the great reduction of

physical labor and dangers of the hod carrier, his wages have been greatly increased?

Mr. Karn: Yes, sir.

Mr. Carter: Now, do you know anything about the work of a blacksmith's helper?

Mr. Karn: Yes, sir. I worked at it quite a while.

Mr. Carter: Where did you work as a blacksmith's helper?

Mr. Karn: San Bernardino, Cal.

Mr. Carter: For what railroad company?

Mr. Karn: The Santa Fe.

Mr. Carter: Now will you explain what was the work of that time of a blacksmith's helper?

Mr. Karn: Well, I don't think there is any necessity for explaining all the duties of a blacksmith's helper. But the greatest and most arduous labor that a blacksmith's helper had to perform was the reduction of great heats.

Mr. Carter: Welding?

Mr. Karn: Welding; yes, sir. They piled huge piles of iron on the anvil, and worked it down, and get it out in shape work.

Mr. Carter: What size hammer did you have to swing?

Mr. Karn: Oh, they run from 12 to 20 pounds.

Mr. Carter: Did it require great physical effort to swing that hammer, in order to reduce the heat before it got too cold?

Mr. Karn: I have swung a 20 pound hammer and a 16 pound hammer so long—you have to act, of course, while the heat is right—that I was almost ready to fall when I let loose of the hammer, and I was practically blinded with perspiration.

Mr. Carter: Have they within recent years introduced steam hammers and air hammers and such?

Mr. Karn: Yes, sir.

Mr. Carter: Did they establish a differential between the wages of the blacksmith's helper, after the introduction of steam hammers and air hammers?

Mr. Karn: No, sir.

Mr. Carter: Do they pay more wages now, a great deal, to the men operating the steam hammers, than they used to to the men who operated the old hammers in the old days?

Mr. Karn: You mean the helper when used as an operator of a steam hammer?

Mr. Carter: Yes.

Mr. Karn: Yes, he gets more money than he used to at the same work.

Mr. Carter: Then these same companies did not think of introducing a differential when they put in steam hammers and helped the blacksmith's helpers to swing this steam hammer?

Mr. Byram: Does the steam hammer operator get more than the blacksmith's helper now?

Mr. Karn: My testimony was to the effect, when a helper was used as an operator of a steam hammer, that there was no differential between his wages as an operator of a steam hammer and an operator of a sledge.

Mr. Byram: At the present time?

Mr. Karn: At that time.

Mr. Byram: How is it now?

Mr. Karn: I don't know. I know the wages of blacksmith's helpers have not been reduced.

Mr. Byram: How long ago was that?

Mr. Karn: 1900.

Mr. Byram: You don't know what the situation is now?

Mr. Karn: I have not been in a shop recently, no. I know the blacksmith's helpers have had two or three increases of pay since that time.

Mr. Carter: Then they did not establish a differential in the wages of the blacksmith's helpers because they had introduced labor-saving machinery?

Mr. Karn: No, sir.

Mr. Carter: Now, Mr. Karn, have you not noticed in nearly all industries that there has been a general tendency to introduce labor-saving machinery?

Mr. Karn: Yes, sir.

Mr. Carter: Now we will take around a railroad shop. Do you remember the time they had the old screw jacks with which to twist a screw to raise a locomotive?

Mr. Karn: Yes.

Mr. Carter: Now they have either oil or alcohol jacks, which are much easier handled.

Mr. Karn: Yes.

Mr. Carter: Did that relieve the labor of the machinist's helper to a great extent?

Mr. Karn: Very much.

Mr. Carter: Did they establish a differential between the machinists' helper, who was handling the old style screw jack which is so difficult to use, and the modern, what we call the whiskey jack?

Mr. Karn: No, sir.

Mr. Carter: They had not thought of making the differential because of the introduction of machinery?

Mr. Karn: I don't know what they thought of, but they didn't do it.

Mr. Carter: Do you notice around railroad shops that now when they want to move an object they have cranes operated by electricity?

Mr. Karn: And air.

Mr. Carter: And air. That lift up huge objects and relieve helpers around the shops of lifting those by bodily strength?

Mr. Karn: Yes.

Mr. Carter: Have they established any differential, where they will pay the man who has a labor-saving device less money than the man who still continues to work in the old way?

Mr. Karn: No, sir, not to my knowledge.

Mr. Carter: In fact, in nearly every industry, there has been a tendency to introduce labor-saving machinery?

Mr. Karn: Yes.

Mr. Carter: Now, with regard to this oil-burning fireman, is not a fireman on an oil-burning locomotive more profitable to the railroad, even at the same rate of wages, than the coal-burning fireman would be?

Mr. Karn: Yes, I think he is.

Mr. Carter: Do you believe that when a railroad substitutes oil for coal it is done because oil as fuel is cheaper to the company, and perhaps makes a locomotive more efficient?

Mr. Karn: It makes the locomotive much more efficient.

Mr. Carter: Have you any information, personally, that an oil-burning engine is more efficient than a coal-burning locomotive? That is, that it will pull more cars? The same weight on drivers, I mean?

Mr. Karn: There is absolutely no question about that, I have fired the Mogul locomotive in both coal and oil, and I

know that we pulled anywhere from 10 to 25 per cent more tonnage with that locomotive, in fact its ratings were from 10 to 25 per cent greater after it had been put on oil than it was when it was in the coal, and we always had a good locomotive in oil, while in coal it depended on whether you had steam or not as to whether you had 100 per cent efficiency.

Mr. Carter: Now do you mean to say that on coal-burning engines, particularly the larger engines, a fireman is not physically able to maintain the steam pressure at 100 per cent efficiency, or maintain the locomotive efficiency at 100 per cent?

Mr. Karn: That is what I mean?

Mr. Carter: I have here a statement made at the American Railway Master Mechanics Association in 1912, on page 85. The Master Mechanics and others present were discussing a report of a committee on mechanical stokers, and the necessity of the installation of mechanical stokers in order to make all locomotives 100 per cent.

I am going to quote from Dr. Angus Sinclair. Do you know who Dr. Angus Sinclair is?

Mr. Karn: Yes, sir. He is the editor of the *Railway Locomotive Engineering Journal*?

Mr. Carter: Is that considered about the leading railroad mechanical publication in the United States, if not in the world?

Mr. Karn: I think it is the leading one in the United States.

Mr. Carter: I will quote from Dr. Sinclair:

"On the Southern Pacific Railway, I know for a fact that there are engines using 150 gallons of water per minute. That calls for the evaporation of an immense quantity of water. You have to look forward to getting your coal-burning locomotives up to the capacity of oil-burning locomotives, and if that is the case it is far beyond the capacity of any man to fire them. And when you take the matter into consideration in that way, I think the demand for mechanical stokers is liable to increase very rapidly, instead of diminishing." Your experience as both a coal-burning fireman and an oil-burning fireman, leads you to agree with Dr. Sinclair?

Mr. Karn: Unquestionably.

Mr. Carter: Then, when railroads substitute oil for coal, there is another factor in addition to the actual cost of the fuel,

is there not? That is, this factor of increased productive efficiency?

Mr. Karn: Oh, yes.

Mr. Carter: If there be anything in the theory of increased productive efficiency, it is marked to a higher degree on oil-burning engines than on coal-burning engines, isn't that true?

Mr. Karn: Yes, sir, because of the ability of the man to keep that engine hot all the time.

Mr. Carter: Now, having disposed of the fact that the oil burning fireman is the only man we have been able to find who has been punished because of the introduction of labor-saving machinery, will you explain then what an oil-burning fireman does do instead of shoveling coal?

Mr. Karn: Why, the oil-burning fireman—do you mean in the generation of steam, or everything?

Mr. Carter: I am talking about his work from the time he is called to the time he returns.

Mr. Karn: The oil-burning fireman's duties are precisely the same as those of the coal-burning fireman—

Mr. Carter: Except he does not shovel the coal?

Mr. Karn: Well,— They are precisely the same as the duties of the coal burning fireman. He generates the steam just the same as the coal burning fireman does, but he does not perform or expend the same amount of physical energy, of course, because he is not called upon to shovel the immense quantities of coal that the coal burning fireman is called upon to shovel. But with the oil burning fireman, and I speak particularly of the road on which I am employed, he is held absolutely responsible for everything the same as is the coal burning fireman, but I think much more closely to the failure to observe orders, blocks, or any other signals, or note obstructions on the track, than the coal burning man, and when he does fail to do these things, and call the engineer's attention to the position of signals, or any obstructions, or to his failure to observe orders, that that fireman is always held—and he should be—responsible with the engineer.

If the engineer is disciplined, the fireman is disciplined. There may be extenuating circumstances once in a thousand times, when the discipline would not be identical. But the coal burning fireman, who has so many duties to perform with respect

to getting his coal into the fire, and his care of that fire, and particularly after night, with respect to his having to look into that fire, and not being able to see everything as he should, because of the glare of the fire, those are considered extenuating circumstances in many instances, and frequently, if properly presented, and they are truthful, consideration is given that man for failure to observe all of these things, that the oil burning fireman is never given consideration for.

Mr. Carter: In your experience, have you found that the officials of the Southern Pacific Railroad held the fireman on an oil burning engine, equally responsible with the engineer for the safety of the train, so far as train orders are concerned, the observation of signals, and other matters, more than they did when their engines burned coal?

Mr. Karn: Oh, yes, to the extent just described by myself.

Mr. Byram: Mr. Karn, you don't think, then, the physical labor on the part of the fireman is as important as his other duties, in determining the amount of compensation he should receive?

Mr. Karn: I did not make that statement, Mr. Byram.

Mr. Byram: Oh, what did you mean then, by showing that the oil burning fireman, who did not perform this labor, should receive as much compensation as the coal burning fireman who does perform it?

Mr. Karn: I did not make any statement to that effect, yet.

Mr. Byram: Do you make it now?

Mr. Karn: I will presently, yes,—or now, if you like.

Mr. Byram: Yes, I would like to know.

Mr. Karn: The fireman on a locomotive is employed by a railroad company to perform certain services, among which is the generation of steam. Insofar as the fireman is concerned, he has absolutely no choice of fuel. He takes the machine and goes out on the road, and does the best he can with the machine and the fuel furnished. If it be oil, and he succeeds in generating steam for that engineer, he has earned just as much money for the company with whom he is employed, as it were possible for the coal burning fireman to earn for the company that he is employed by.

Mr. Byram: Has he worked as hard?

Mr. Karn: He has performed the same identical service without an equal expenditure of physical exertion.

Mr. Byram: He has not worked as hard?

Mr. Karn: No.

Mr. Byram: And it does not make any difference whether he works hard or not, as long as he produces the results he ought to get the same compensation?

Mr. Karn: It makes absolutely no difference at all, as long as he produces the same results. And I presume, Mr. Byram, that the men on the Southern Pacific probably are better trained to that, because of that being the position taken, as I described a while ago, by our own officials, and we have held to that since oil went into general use on the road.

Mr. Byram: Then, the hard work of the fireman who shovels a great deal of coal is not a great factor in determining this compensation, providing he gets over the road and hauls the same amount of tonnage that the oil burning engine does, that should not make any difference in determining his compensation?

Mr. Karn: The position that I take, and that our men, and I think the officials of our railroad take, and I am pretty sure that the railroads in this Western country, if we can take the word of the Chairman of the Managers Conference Committee, and I believe we can, is that the proper method of determining compensation for firemen, is upon tractive power, and the tractive power can only be adequately and properly determined by the weight on drivers basis, not by cylinder dimensions, or draw bar pull, or any other method of computation.

Mr. Park: Isn't the cylinder a factor?

Mr. Karn: The cylinder is a factor with respect to moving the load of the train, yes.

Mr. Park: Isn't it a factor in determining tractive power?

Mr. Karn: I don't know about that end of it. I know that the weight of drivers on locomotives—that is, I am not prepared to go into a discussion—I am not capable of discussing the question from a tractive power basis, except what I actually know—but I know the tractive power of locomotives to determine the ability of that locomotive to pull tonnage. Whatever she can haul, and what the rails will hold, is what she can pull.

Mr. Park: The pressure of the steam on the piston head has something to do with it?

Mr. Karn: That moves the engine, yes.

Mr. Park: Were you through?

Mr. Byram: Yes.

Mr. Park: Does the Southern Pacific in its book of rules, in the transportation department, distinguish between a coal fireman and an oil fireman, as to their responsibility in the observation of the rules?

Mr. Karn: Oh, no, they don't do that. No road whatsoever; I don't believe they do on any road.

Mr. Park: And you say the fireman is held equally responsible with the engineer. In case the engineer forgets a train order, and has an accident, is the fireman held equally responsible with him?

Mr. Karn: In order to save a lot of questions, I will tell you what the letter of the rule is. In order to determine that feature we took it up with Mr. Scott, about 1912, I think, early, possibly, in that year, asking him concerning the responsibility that he proposed placing on firemen where failure to observe orders, block signals, or any obstructions on the track, or anything of that kind, resulting in wrecks or damage, or whatever it did or did not. And Mr. Scott's letter to us in substance is as follows:

"That we will hold the fireman responsible with the engineer for the observation of all signals, the proper carrying out of all train orders, and shall expect that he will call the attention of the engineer in every instance to the proper position of signals, and if the engineer is going by a point where he should have met another train, or that his orders provided that he should not have gone by without further orders, that the fireman shall be expected to call attention to it, and failing to do so, he shall be held equally responsible with the engineer."

Mr. Park: Now, in practice, does the fireman go to the engineer and say, "Now, you remember that you have got an order to meet a train at A or B?" In actual practice, does he do that?

Mr. Karn: No, and I did not intend to imply that that was the general, commonly accepted way of doing business on locomotives. I meant to imply this, that the fireman knows that you have a meet with No. 1 at A, and it is his business to see that you do not go by A unless you meet that train. And there

is no necessity for the fireman calling the engineer's attention to it every fifteen minutes, or two minutes, or any other length of time, but when he does arrive near that point, that is the time to call the engineer's attention to it.

Mr. Park: In case the engineer forgot his order, or went by that meeting point, in actual practice—

Mr. Karn: And the fireman did not remind him of it—

Mr. Park: Is it customary to discharge the fireman with the engineer for having overlooked that order?

Mr. Karn: Why, certainly it is. What I am saying is that if they go by the meeting point, and the fireman fails to call the engineer's attention to the fact that he should have met them there—one of your managing officials not so very long ago said that if the engineer failed to observe it, the fireman ought to get down and cut the hose, if necessary, to stop the train.

Mr. Park: I understand it is generally the desire of the managers to have the firemen and the brakemen active to prevent accidents.

Mr. Karn: They ought to be.

Mr. Park: Yes, they ought to be, very properly. But is it not very unusual, if the practice on the Southern Pacific is as you state, that in case an engineer overlooks a block signal, or goes by a meeting point, the fireman is held equally responsible with him, and with the conductor?

Mr. Karn: If you do not believe my statement you can ask Mr. Campbell. I said yes, you can verify that.

Mr. Park: And that is the practice on that line?

Mr. Karn: I have quoted you the rule, and it is absolute.

Mr. Park: And that rule is no different as to coal firemen than as to oil firemen?

Mr. Karn: We have no coal firemen.

Mr. Park: You have some coal firemen on some parts of the Southern Pacific System, have you not?

Mr. Karn: No, sir. We might have two or three on the fire trains up in the shed, but that is all.

Mr. Park: Do you burn oil out of Ogden?

Mr. Karn: Yes.

Mr. Park: And on the other divisions?

Mr. Karn: Yes, all over the system.

Mr. Park: So that you have no coal firemen?

Mr. Karn: No, only one of Mr. Campbell's wood burners, that is all.

Mr. Park: That is all.

Mr. Carter: The rules, so far as coal firemen and oil firemen are concerned, would be the same, but would there be a disposition on the part of the railroads to accept as extenuating circumstances, to relieve from discipline, in the case of an oil burning man, that they would in the case of a coal burning man?

Mr. Karn: I cannot speak for other railroads; but at the time we had coal on the road, we were not held responsible to the degree that we are since we have had oil.

Mr. Carter: That is, if the coal fireman could demonstrate that he was actually back in the tank shoveling coal, and could not have seen the signal, and that it was necessary for him to shovel that coal, that would be considered an extenuating circumstance, and relieve him, at least partially, from discipline.

Mr. Karn: We had one case just recently, where an engineer and a fireman were backing a locomotive through the round-house. This was on an oil burning locomotive. The fireman was doing something on the deck, and not looking out ahead, and then ran over a man and cut off his leg, and he finally died, and they discharged the fireman, and give the engineer fifteen days, because the man happened to be on the fireman's side.

Mr. Carter: With regard to the work—or we will not call it work, because I believe it is described here as pleasure—with regard to the pleasure of the oil burning fireman, has he constantly to control that firing valve while the engine is being worked? For instance, as the throttle is worked, does he also have to work the firing valve?

Mr. Karn: Here is what the fireman does. I want to make this statement in a manner that will be fair to every one concerned, and at the same time call attention to the inconsistency of the statement made by Mr. Clewer.

Mr. Clewer's testimony was, in effect, that on a one per cent grade, where the engine was going right along, the fireman would not have to do anything for an hour. Now, that is not as I have found it. I find that on a one per cent grade—I believe the distance stated was forty miles—it is necessary for the fireman to change that valve at least every thirty seconds, to a slight

degree, possibly only one notch, one way or the other; but I have never yet found a valve on an oil burning locomotive that you could set and go back on the tank, and she would keep right up. Now, even though it were possibly the least amount of oil too much, it would in time, and gradually, coat your flues with soot. Of course, that is a gradual process. You would have to move your valve to overcome that. You do not want to get down and be putting sand into the locomotive all the time and cut the beads off the flues; but you will gradually move the valve backward or forward. Mr. Clewer says that after you have sanded this locomotive, that is all that is necessary, because that cleans her out. After you have cleaned your locomotive out, you have got a bright surface on your flues, but your fire is too much or too little all the time; and as I said before, I never yet saw a valve that you could set and make it hold at any point. You have got to move it continually.

This statement is not made for the purpose of showing that the man performs manual labor, either, that is, that the physical work exhausts him, but it is made to show that it is impracticable for a fireman on an oil burning locomotive to care for it properly and economically, and get the proper combustion, without giving strict and almost constant attention to that valve. You do not sit there and look at that valve, or keep your eyes glued to the steam gauge. You simply move your valve a little forward or back, and then you glance at the steam gauge again in a couple of seconds, and it may have gone down a couple of pounds, and you move it back again. That is the operation of an oil burning locomotive, as I have found it, and I worked as a fireman practically seven years on the Southern Pacific Railroad; and aside from ten days that I received for trying to help the company, I never had a day against my record in my life, and I believe I was considered a very fair fireman.

Mr. Carter: Does not the oil burning fireman always watch the smoke to see whether there is too much oil or too little oil, or whether the combustion is proper?

Mr. Karn: The stack is an indicator if you are using too much oil, or not enough. If you find that your stack is smoking, that smoke is emanating from the stack, why, naturally, you are going to cast about for some means of determining what the trouble is, and you will look in your fire box and find out whether

there is an equal diffusion of heat, to begin with. You know it is not the fault of the flues. You know that they are not dirty, because you have just sanded them. Perhaps it is your dampers. From what Mr. Clewer says, you would think there was very little about an oil burning locomotive that the fireman was required to know. You might lower one of those dampers, or you might raise it, or open the slides on the side. You might perform any kind of service that would be required. You might find a black spot in your box where you were not getting the proper amount of heat, that there was no flame there. You would strive by the manipulation of your dampers, and the side openings where they have them, to regulate your fire so that it would be uniform, and at least to have as little smoke as possible emanating from your stack; because every bit of smoke that comes out of the stack means just that much loss of heat unit energy.

Mr. Carter: Do you believe that if an oil burning fireman attends to his duties, he has duties to perform a large portion of his time?

Mr. Karn: Why, I have just described what he does, and I think that covers the ground fairly, to all concerned.

Mr. Carter: Has there been an increase in the number of block signals on the Southern Pacific Railroad in the last four or five years, that is, more track put in block signals?

Mr. Karn: Oh, yes.

Mr. Carter: Do not block signals add to the responsibility of both the engineer and fireman, in the operation of trains?

Mr. Karn: Yes.

Mr. Carter: That is, under the old plan, the despatcher looked out for the safety of the train and gave a train order. They had to watch and see that that train order was complied with, but now have they not got to watch for every signal on the road, to see that it is in proper position?

Mr. Karn: One of the requirements of our company is that the fireman shall call the position of that signal to the engineer.

Mr. Park: You said there had been a very large installation of the automatic signals.

Mr. Karn: Will you read my testimony to see whether I said that? If you will read my testimony, I think you will find—

Mr. Park: I will ask you the question, then, has there been a very large installation of automatic signals on the Southern Pacific in the last three years?

Mr. Karn: I think your report shows about 3,200 miles, about a 6 per cent increase since 1912.

Mr. Park: About 6 per cent.

Mr. Karn: Yes.

Mr. Park: That is not a large installation.

Mr. Karn: I did not say it was.

Mr. Park: I understood you to say there had been.

Mr. Karn: I did not say that. If Mr. Carter asked that, I did not so understand it.

Mr. Park: Will the stenographer read Mr. Carter's question and Mr. Karn's answer?

(The stenographer read as follows:)

"Mr. Carter: Has there been an increase in the number of block signals on the Southern Pacific Railroad in the last four or five years; that is, more track put in block signals?"

"Mr. Karn: Oh, yes."

Mr. Park: Now, by your answer, "Oh, yes," you did not mean there has been a large installation? Is it not a fact that it had been pretty well installed before the last Conference?

Mr. Karn: Before the last Conference?

Mr. Park: Before the last General Conference which adjusted the wages of the firemen, there was a large installation of automatic signals on the Southern Pacific—prior to that.

Mr. Karn: I do not know just when they began putting them on the Southern Pacific, but we have had the block signal system on there quite a while, and one of the best advertisements of the Southern Pacific is "Block signals all the way, safety first; for five or six years we have not killed a single passenger," and the Harriman Medal, and all that sort of stuff, and it is good, and the block signal system is good, and the firemen are not objecting to it; and Mr. Carter's only point is, as I understand it, did it or not increase the responsibility? To that I answer yes.

Mr. Park: I wanted to clear up the record in my own mind, that that condition existed prior to the last adjustment of wages.

Mr. Karn: What did?

Mr. Park: The automatic signals.

Mr. Karn: I tried to make clear that I did not know the percentage. I said I thought your reports showed about 6 per cent since 1912.

Mr. Park: That answers the question.

Mr. Karn: Just when they installed those blocks before that I do not know, and I could not say.

Mr. Park: It is not a new thing on the Southern Pacific?

Mr. Karn: No, sir.

The Chairman: We will take an adjournment until 10 o'clock Monday morning.

(Whereupon, at 12:30 o'clock P. M., March 13, 1915, an adjournment was taken to March 15, 1915, at 10 o'clock A. M.)

IN THE MATTER OF THE
 ARBITRATION
between the
 WESTERN RAILWAYS
and
 BROTHERHOOD OF LOCOMOTIVE
 ENGINEERS
and
 BROTHERHOOD OF LOCOMOTIVE FIRE-
 MEN AND ENGINEMEN
*under the Act approved July 15, 1913, by agree-
 ment dated August 3, 1914.*

Chicago, Illinois, March 15, 1915.

Met pursuant to adjournment at 10:15 o'clock A. M.

Present: Arbitrators and parties as before:

O. W. KARN was recalled for further examination, and having been previously sworn, testified as follows:

Mr. Carter: Mr. Karn has two or three corrections he would like to make.

The Chairman: Yes.

Mr. Karn: In the first place, I want to correct the date when I said the firemen requested that they go to the old trip basis. I said the request was made in 1903. It should have been 1900.

I find that the record states on page 6934, my reply to Mr. Burgess' question:

"Do you know of any steamboat in that section of the country on which the firemen work ten or twelve hours continuously?"

"Mr. Karn: No, I know they don't, and correspondence in this matter shows there was an attempt on the part of the Southern Pacific Company, who own a line of boats on the Pacific Coast, to lengthen the hours; but they finally compromised."

I made that statement, but I said that it would be proper to state that it was the Pacific Coast Steamship Company, which I understood was owned by the Southern Pacific Company. That

statement does not appear in the record. I said that because I was not positive.

On page 6946, the statement appears that I said "makes wages vary from \$180.00 and \$160.00." I said "\$100.00, \$80.00, and \$60.00."

On page 6966, the record makes me say, "Well, I would say that the engineer's responsibility has been increased 50 per cent since the introduction of this elevator have decreased the wages of the hod carriers."

I said, "has decreased the labors of the hod carriers."

On page 6976, I am quoted as saying that an engineer and fireman were "backing a locomotive through the roundhouse." I said they were "taking it out of the roundhouse."

Mr. Carter: When we adjourned Saturday I believe we had about completed the first subject that we had to present, which was what we believed to be the unfairness of any differential for the oil burning firemen.

I think, during the course of the day, we had shown that by your investigation it appeared that marine and stationary firemen, where oil had been substituted for coal, had not been required to take a differential in wages because of the reduction of the physical labor of the firemen.

I think we had dwelt upon the fact that the automatic air brakes were introduced, thus relieving the brakemen of arduous physical efforts; there was no differential established there.

We then took up the question of the helmsman, or the man who steers a ship, and showed that when steam steering gear had been substituted for the old method of controlling the vessel, by muscular effort, there had been no differential established between the helmsman directing the ship with steam steering gear, and where he directed the course of the ship by muscular effort. We had then taken up the hod carriers, and had shown that whereas hod carriers had formerly carried brick up a long ladder and deposited them on the upper floor of a building under construction, the hod carrier now loads the brick into a wheel barrow, wheels it to the elevator hoist, the engineer elevates the brick for him to the top floor, and another so-called hod carrier takes the same wheel barrow load of brick and dumps it, but not withstanding this great saving of physical labor by the substitution of labor saving devices, instead of the physical

labor of the hod carrier, there was no differential in the wages of hod carriers because of the reduction of physical effort.

I think we then took up blacksmith's helpers, and showed the great physical effort necessary to reduce a heat, as the technical term is, when blacksmith's helpers had to wield hammers weighing from 16 to 20 pounds, very rapidly, in order to have the heat reduced before it became chilled.

I think you testified that when the steam hammer or air hammer was introduced, that there was no differential established between the blacksmith's helpers, because of this introduction of labor-saving devices. I think we also dwelt upon the subject of "liquor" jacks, for the old screw jacks, for elevating locomotives in shops and so forth. In fact, I think it was pointed out during Saturday's session that you had no knowledge of any place where labor-saving machinery had been introduced, where they established a differential between the wages of the men who formerly did the work by muscular effort, and who subsequently did the work by labor-saving devices; and I think, at adjournment, we were reviewing the work of the oil-burning fireman. Now, will you very briefly review the work of an oil-burning fireman?

Mr. Karn: What do you mean?

Mr. Carter: Does the oil-burning fireman do anything but sit on the seat box?

Mr. Park: Are you going all over Saturday?

Mr. Carter: No, sir. Mr. Chairman, I think it is due us that we should have a chance to kind of pick up the wreck, after the catastrophe of Saturday, because the witness never had a chance at any time to progress in a proper manner in his testimony. We are just simply kind of gathering the threads. Now, will you briefly state what an oil-burning fireman has to do?

Mr. Karn: The oil-burning fireman is required to perform the same service that any other fireman is—generates steam; looks out for block signals and all other signals; watches to see that all orders are properly observed, and is held responsible for their proper observance and for proper appliances and tools on the engine.

Mr. Carter: I believe, when we adjourned, we were discussing the block signal, and I think I had asked you if it was

your opinion that the introduction of block signals on the Southern Pacific Railroad had increased the responsibilities of both the engineer and fireman. I think your answer was in abeyance when we adjourned.

Mr. Karn: There can be no question but that the introduction of any safety appliance, where the requirements are such that both engineer and fireman are held responsible, that the responsibilities are increased, and that applies with the block signal.

Mr. Park: Mr. Karn, I don't just quite understand how the block signal increases the responsibility of the locomotive engineer. He had that responsibility, and to my mind it has always conveyed the impression that it rather decreased it, in that it afforded him a greater refinement and greater opportunity to detect broken rails and broken switches, and trains in the block, and conditions of that kind, without exercising, perhaps, as acute observation as he might without the signal. Now just how does it increase his responsibility?

Mr. Karn: The engineer and fireman?

Mr. Park: Yes.

Mr. Karn: Well, the blocks are there, and whether they are out of order, or whether you have some man out there shaping them, so that he must observe them, and his failure to do so results in his being discharged or disciplined, whether it is real or imaginary—that is, whether the signal being at danger is real or imaginary. Therefore, it is a test, and those tests are made and are required to be made by the official of each division, about so often each month, I understand, and if, because of the fact that an engineer might, because of close attention to his duties, fail to observe one of those block signals when his order showed conclusively that there was not a single train on the road, between the point he was headed for and the point he left, he would still be held responsible for going by one of those signals—both he and the fireman.

Mr. Park: Well, if by requiring him to pay strict attention to all that concerned his train in the way of safety statistics should show that a great many less engineers have been dismissed, and a great many less engineers have been injured or killed, by reason of such refinements of the service, would it

not seem that there was less responsibility and less danger of losing a position on the railroad?

Mr. Karn: I don't know how to answer that question better than to say that I feel assured that the cause of the lesser accidents and the cause of the lesser injuries to employes, and the cause of anything you have cited, it is because the class of men that are in the service observe those things. They are there for the purpose of observing them, and they don't make a practice of going by.

But I do know that on many railroads, where you make tests, and you make them unfairly—a recent occurrence, I received correspondence on a line you were connected with just prior to your present position, where in a fog, where it was practically impossible for an engineer to have seen the distance signal, which was yellow, until he was practically on top of it, and where he claims that he immediately applied the emergency brake, and ran by six car lengths, by the home signal, he was disciplined, and in fact, he is out of service today, and will probably be discharged.

Mr. Park: I don't see why that has any bearing, or how the automatic signals increased the responsibility of the engineer.

Mr. Karn: Why, it increases the hazard of the possibility of his holding his job, surely. When the block signals were not there, the engineer and fireman had their orders to guide them, and while there were more accidents at that time than there are now, I don't believe there was any less regard for orders at that time than there is now. The introduction of the block signal just made that one more, wherever one is installed, one more thing that the men must now make observations of. His failure to observe those signals in some instances, and unfair tests in others, have resulted in his discharge. And if the hazard of the man's employment does not mean increased responsibility, I don't know what the word means.

Mr. Park: In your railroad experience, you have run a railroad locomotive, you know full well it is human to err, and that frequently conductors and engineers overlook their train orders, and that that in the past has been one prolific cause of accidents. Now, with the fore and aft installation of the automatic signals, in case that should occur, the signals prevent an accident, and

to that extent it would seem to me it relieves the engineer of responsibility. He is less apt to get into trouble from an accident of that kind; frequently trouble that might cause him to lose his life.

Mr. Karn: Oh, I agree with you, Mr. Park, that the block signal is a good thing for both the engineer and the company. But I could not possibly agree with you that they had not increased his responsibility, even though the measure of protection you describe is afforded the engineer.

Mr. Park: Well, I never had given me a reason why it increased the responsibility of the engineer. If you can't explain that, we will just drop it.

Mr. Carter: Are you through, Mr. Park?

Mr. Park: Yes.

Mr. Carter: Mr. Karn, is it not a fact that all railroad employes hope that all railroads will equip all of their track with automatic signals?

Mr. Karn: Yes.

Mr. Carter: Is it not recognized by all railroad employes that there is no greater life saving device than automatic signals?

Mr. Karn: Yes, sir.

Mr. Carter: Notwithstanding that fact you contend that it has placed an additional burden upon engineers and firemen, because they are required to observe each and every signal. Isn't that true?

Mr. Karn: Yes, sir, and have an understanding with each other as to their position.

Mr. Carter: And I understand that on the Southern Pacific Road, where they burn coal, the fireman is required to call every signal to the engineer.

Mr. Karn: The Book of Rules covers that point.

Mr. Carter: I understand on the Southern Pacific Road the firemen are required to call every signal to the engineer, and the engineer is required to repeat the position of the signal back to the fireman.

Mr. Karn: No, sir; I don't know that to be the fact. The only requirement is that they have an understanding of how they shall do it. I don't think that is fully set forth, but they must have a full and complete understanding.

Mr. Carter: What is the custom?

Mr. Karn: The custom is that the fireman will say to the engineer "clear" or "red." Whether the engineer replies, I don't know.

Mr. Carter: That is what I meant. But is that responsibility placed on both the engineer and fireman, to note each and every one of those signals?

Mr. Karn: Yes. When the fireman says "clear" or "red" the engineer usually answers that by commonly called understandings.

Mr. Carter: Without saying, he acquiesces in the statement of the fireman, as to the position of the signal.

Mr. Karn: By shaking his head, or moving his hands; that answers many questions in railroading.

Mr. Carter: Do not injectors often become defective by corroding, or by sediment forming on the interior passages of the injector, so that great difficulty is sometimes found in keeping water in the boiler? The injector will not start properly, as we call it.

Mr. Karn: Yes, from various causes.

Mr. Carter: Are there not other mechanical mishaps while operating the locomotives, that distract the attention of the engineer and fireman both?

Mr. Karn: Yes, sir.

Mr. Carter: More so for the engineer?

Mr. Karn: Yes, sir.

Mr. Carter: Do you remember of reading of the great wreck of the Lehigh Valley on the Central of New Jersey track, in the state of New Jersey, about ten years ago, where they ran into the rear end of a train and killed about fifty people, and the excuse was that the engineer and firemen were working with the injector, and did not see the signal?

Mr. Karn: I have no recollection of the details.

Mr. Carter: That was so notorious I thought perhaps you had read it.

Mr. Karn: Oh, I have read it. I don't remember the details.

Mr. Carter: The Interstate Commerce Commission made a complete report on it. The fact remains, does it not, Mr. Karn, that the necessity of watching each and every signal, and at-

tending to all the other duties of the engineer and the fireman, has placed added responsibility upon the engineer and the fireman?

Mr. Karn: Yes, sir.

Mr. Carter: And on the Southern Pacific Road, where they burn oil, I understood you to say that the firemen are held equally responsible with the engineers, for the observance of all rules, train operation?

Mr. Karn: Yes, all train operation.

Mr. Carter: Now, Mr. Karn, while we are on this subject, do you believe that when the old "armstrong" brake, as we called it, was abandoned, and the automatic brake substituted therefor, that there was a great and added responsibility to the engineer's duties?

Mr. Karn: Yes, sir.

Mr. Carter: Yet you wouldn't find an engineer who would be willing to go back to the old hand brake method, would you?

Mr. Karn: No, the present engineer would not feel safe with that method, particularly with the trains they haul today.

Mr. Carter: The fact remains, it is absolutely necessary to have these automatic air brakes, in order to control the trains with any degree of safety, is it not?

Mr. Karn: Yes, sir.

Mr. Carter: And yet it has placed great additional burdens upon the engineer, has it not?

Mr. Karn: Of responsibility, yes.

Mr. Carter: Do you know how modern trains are lighted?

Mr. Karn: Passenger trains?

Mr. Carter: Yes.

Mr. Karn: By electricity, as a rule.

Mr. Carter: Do you remember when they were lighted by kerosene oil, or Pintsch gas?

Mr. Karn: Yes, sir.

Mr. Carter: Was there danger to the passengers, in wrecks, from such a system of lighting?

Mr. Karn: Well, in case of wrecks, yes.

Mr. Carter: Now, how is the lighting done; is it done by dynamo on locomotives?

Mr. Karn: No, I think the dynamo is carried in the baggage car, or in the cars.

Mr. Carter: Well, sometimes they have a dynamo on the locomotive, that operates both the train lights and the head light, sometimes in the axles of the baggage car, but in any event, the steam to supply the lighting system is supplied by the fireman, isn't it?

Mr. Karn: Yes, sir.

Mr. Carter: Now, that adds responsibility to the fireman?

Mr. Karn: Yes, sir.

Mr. Carter: But you would hardly find a fireman who would insist on going back to the old system of lighting, because the new one has added new responsibilities to them?

Mr. Karn: No, I don't think they would like it.

Mr. Carter: Do you remember the old system of heating passenger cars? Do you remember the old Baker heater?

Mr. Karn: Yes, sir.

Mr. Carter: Sometimes they exploded, and when cars turned over, the fire from the Baker heater ignited the cars, and they were burned up?

Mr. Karn: Naturally.

Mr. Carter: Now, in modern practice, that train is heated by steam supplied from the locomotive, is it not?

Mr. Karn: Yes, sir.

Mr. Carter: And does that add heavily to the burdens of a fireman, in very cold weather?

Mr. Karn: Yes.

Mr. Carter: Is it not a fact it often becomes necessary to cut off the steam heat on an engine, in order to make steam on a heavy grade?

Mr. Karn: Yes.

Mr. Carter: And then it is turned on immediately, as soon as it is possible to do so?

Mr. Karn: Yes.

Mr. Carter: Why do they have to shut off that steam on the train?

Mr. Karn: So it is possible to keep the necessary pressure on the boiler, to move the train.

Mr. Carter: Is it beyond the capacity of the fireman to supply steam for the heating system and to pull the train at the same time under certain conditions?

Mr. Karn: And also beyond the capacity of the boiler in some instances to supply the steam, regardless of the fireman.

Mr. Park: On these oil-burning engines, do I understand you that you have shut off the steam heat to help out the engine?

Mr. Karn: I have done it many times, have shut off the steam heat so that it would be possible for the boiler to supply the necessary steam to the cylinders.

Mr. Park: In what locality do you do your firing?

Mr. Karn: On the Tucson Division.

Mr. Park: Does it get very cold there?

Mr. Karn: No, sir; except that when it does get cold the people who live there are a little bit thinner skinned than others, and they notice the cold at night and in the winter time.

Mr. Park: Then, do you say it is an ordinary practice to shut off the steam heat for that purpose?

Mr. Karn: No, sir, I did not say that. I said I had done it many times.

Mr. Park: Then as I understand you, it is an extraordinary practice?

Mr. Karn: It is the practice to shut it off whenever it is impossible, because of the hard track, to keep up the steam and, of course, you will understand, that when it is impossible to keep up the steam there is something wrong with the heating surface of the boiler, something wrong with the locomotive. On an oil burner it would not be necessary to shut off, if she was in good shape.

Mr. Park: Who runs the dynamo on the head end, the lighting system?

Mr. Karn: I could not answer that. I think you have a man, where steam is supplied to the dynamo, in the car.

Mr. Park: Neither the fireman nor the engineer has anything to do with that?

Mr. Karn: I could not say positively, but I think not. I think you have a dynamo man—I think I am correct in my statement about that.

Mr. Park: He looks after the dynamo engine, the wiring and the lighting, and all you have to do then is to turn off the steam or turn it on as directed by him?

Mr. Karn: I do not know, sir, about that. Anyhow the steam is supplied from the engine.

Mr. Park: That is all.

Mr. Carter: Since you have entered the railroad service, have you noticed that there has been a general tendency to transfer responsibilities and labors to the engineer and fireman in the engine cab—such as the signal system, the brake system, the lighting system and the heating system? -

Mr. Karn: Yes, there is no question about that.

Mr. Carter: Taking a modern passenger locomotive on a high speed train, particularly in colder countries, including the pulling of that train, the observation of signals, the operation of the brakes, the maintenance of the lighting system and the heating system, a modern locomotive is quite a different proposition from the old style locomotive, is it not?

Mr. Karn: It is much larger, and there is much more mechanism to look after.

Mr. Carter: I believe we have now finished with that part of our questioning. I believe you said that as the result of your investigation you had reached the conclusion that the wages of firemen on oil-burning locomotives should be graduated and based on the weight on drivers in identically the same manner as with relation to firemen on coal-burning engines. Is that true?

Mr. Karn: Yes.

Mr. Carter: Now will you explain in general why you believe that to be true? Much of this you have gone over, but I will ask you to repeat it, because here is where we intended to bring it out. Review what was said in 1900 about weight on drivers.

Mr. Karn: On our line we have rather been educated to it by the company themselves.

Mr. Carter: Explain briefly why you say that.

Mr. Karn: In 1900, our firemen were negotiating a schedule with the officials of the Southern Pacific Company, which really meant recognition. It was the first schedule that we had secured following the 1894 strike, and at that time our firemen asked the company to continue the trip basis that had been in effect prior to that time.

Mr. Park: Mr. Karn, just describe the trip basis briefly.

Mr. Karn: Well, he got so much for going from one point to another.

Mr. Park: Without regard to mileage or hours?

Mr. Karn: Without regard to mileage or hours?

Mr. Park: On the trip basis.

Mr. Karn: Well, I couldn't say as to that.

Mr. Park: He got so much between two points?

Mr. Karn: In 1900 was before my time, and understanding, as you must, that not between 1894 and 1900 having any agreement with the company, that I have had no access to any contract or have I in my files, nor have I ever seen a contract that was in effect prior to—or rather, during the period of 1894 and prior to that time, and the trip basis I have never heard described by anyone, other than to say that they got so much money for going from one point to the other, and I assume that if it was 100 miles and they got \$4 for making 100 miles, if it was 150 miles, they would get \$6.

Mr. Park: Were you a member of the conference at the time they changed from the trip basis to the mileage basis?

Mr. Karn: I think I testified I was not present at the 1900 or 1903 conference.

Mr. Park: So the conference that you are taking up now is what date?

Mr. Karn: 1900.

Mr. Park: But you were not there?

Mr. Karn: No, I was not there, but the minutes of that meeting and the General Chairman who negotiated the schedule with those people—I should have said that the minutes of those meetings—I have seen the minutes of those meetings, and while they are not of any value to anybody, they simply show what they were striving for and what their proposition was, and I have discussed with the General Chairman, Mr. Paul, who was a member of my own lodge, until, possibly, in 1911, when he was elected General Chairman on one of the Canadian lines and represented at the time this proposition that is now before you, was formulated, some road in Canada. I can't recall just what road it was. It was not the Canadian Northern.

Mr. Park: The Southern Pacific, at that time, like many other railroads, was changing from this trip system payment to the mileage system?

Mr. Karn: I will explain that. This General Chairman, being a representative at this 1912 meeting, when this proposi-

tion was formulated, was the very man I wanted to see, because of the personal investigation that I stated Saturday that I had made, following the handing down of the award of 1910, to ascertain about the differential that had been established, and I also wanted to know at that time just exactly what was done in 1900, and that being 1910, there were very few of the members, possibly, who were present at the 1900 conference, and I could get in touch with none of them; so when I heard that Mr. Paul was going to be a candidate, or rather a representative at our meeting in 1912, I brought all my data with me and went over the ground carefully with Mr. Paul, to find out just exactly what had happened in 1900, and what has happened is what I want to tell you about.

Mr. Paul says that their committee met the managers and asked them for a scheduled recognition, and when they finally agreed that they would grant them the recognition, the next matter under way was the negotiation of the schedule, and in the negotiation the firemen's proposition was the trip basis, and Mr. H. J. Small, the Superintendent of Motive Power, Mr. J. A. Fillmore, the Manager of the Pacific System, and Mr. R. Kohler, Manager of the Lines in Oregon, signed this agreement and we must assume that they represented the company. It has been approved by Mr. Kruttschnitt, and those three gentlemen, Mr. Small, Mr. Fillmore and Mr. Kohler, or at least the representatives of the company, told the firemen that they did not like that trip basis; that the only practical way of determining compensation of firemen was upon the tractive power of the locomotive, and the agreement of 1900 was written, providing for certain classifications, and certain rates of pay, which, in itself, was very similar to our present weight on driver basis. It also provides that on 12-wheel and Consolidation locomotives—at that time all such locomotives were very small, but it seems that these 12-wheel locomotives were capable of hauling more tonnage, and a five per cent differential was added.

Mr. Park: Do they state specifically there the tractive power of the locomotives in the schedule?

Mr. Karn: No.

Mr. Park: They did not mention that?

Mr. Karn: No, not yet. They did in 1903, and this schedule was formulated, as I stated, practically upon the lines of the

proposition submitted by us and now under consideration, except that while certain classifications were mentioned, the graduations as we described them—the weight on drivers feature was not brought out, and it was then, in 1903, when the committee again met the management, or at least at a time prior to February 1, 1903, on which the date of the agreement of 1903 became effective, that they requested that there be a greater differential,—more graduations. That there were locomotives in one classification that were capable of producing more for the company than some of those locomotives in that class, and they thought that there should be some line there that would provide greater compensation on that large locomotive; and the best evidence of the companies agreeing with them, because—well, the best evidence of the company agreeing with them is the agreement itself. They began then with a weight on drivers basis, and it was also recognized at that time that despite the fact that they had established a greater number of graduations and because of the fact that the weight on drivers basis, which definitely determined the compensation of a fireman upon the earning capacity of the machine, it was also recognized that there were other locomotives that should carry a rate of pay, different even from those classifications; and section 4, on page 5 of the 1903 agreement, reads.

“Firemen on road engines of from 110,000 pounds to and including 140,000 pounds on drivers shall, in all cases, be paid 5 per cent increase over standard rates of pay. This is understood to include standard gauge Consolidated 8-wheel connected engines of less than 110,000 pounds on drivers and Atlantic type locomotives. Firemen on road engines over 140,000 pounds on drivers shall, in all cases, be paid 10 per cent increase over standard rates of pay, except as noted in section 5.”

Section 5 provides for arbitrary rates on the Oakland, Berkeley, Alameda and Oswego locals, like your suburban service here, where a flat rate applies.

Mr. Carter: Mr. Karn, I understood you to say in reply to my question that the officials of the Southern Pacific Railroad, beginning with 1900, advocated a graduated wage for locomotive firemen, by a weight on drivers basis, which gradually developed as you have just described.

Mr. Karn: Yes, sir.

Mr. Carter: Were there any oil burners in service during that period?

Mr. Karn: About the latter part of 1900 and early in 1903.

Mr. Carter: Let us get that right. What year was that? That is very important—about what year?

Mr. Karn: Well, the oil was introduced on the Southern Pacific about the latter part of 1902 or early in 1903.

Mr. Carter: And, as the oil was introduced, did they pay a differential between oil-burning engines and the coal-burning engines, under that schedule you have there?

Mr. Karn: No, sir.

Mr. Carter: At any time subsequent to the introduction of oil-bruning engines, and before the total elimination of coal-burning engines on the Southern Pacific, was there any differential established, between coal and oil, by the officials of that company?

Mr. Karn: No, sir; and I want to explain that. At the time this 1903 agreement was negotiated, the company suggested to our committee that there be a differential between coal and oil; that the work of the oil-burning fireman was in no ways near as hard as the work of the coal-burning fireman, and for that reason they felt that the firemen on oil-burning locomotives should fire these locomotives for less money. Our committee said to them, "You have insisted throughout our entire negotiations, since 1900, that the only proper way of determining compensation for firemen, was upon the tractive effort of the locomotive, and if that is true, then you have no grounds on which to base an argument for a differential in pay, as the fireman on the oil-burning locomotive performs the same service, and earns just as much, if not more money for the company, than does the fireman on the coal-burning locomotive.

Mr. Carter: What was the result of that discussion in 1903?

Mr. Karn: There was no differential made. They did not press their point at all. In 1909, a further increase for men on the desert, between Sparks, Nevada, and Ogden, Utah, was granted of five per cent, and at that time, Mr. Bancroft, who was the General Manager of the Oregon Short Line and had

jurisdiction over that portion of the track between Sparks and Ogden, and who granted this 5 per cent increase—at the time he wrote his letter, he said, “This to apply on coal burning locomotives only;” and I had the records of all these proceedings with me, and I said to Mr. Bancroft, “In years gone by, the Southern Pacific Company has recognized this feature, and we cannot accept your proposition at all.” He said, “If that is all that stands between us and a settlement we will make the settlement now. We will strike out the 5 per cent, and I don’t believe myself there should be any differential.”

Mr. Carter: Mr. Bancroft said that personally, in your presence?

Mr. Karn: In the presence of our committee.

Mr. Carter: The next big wage movement was the Concerted Wage Movement of 1910, of the firemen and hostlers in the western section of the country?

Mr. Karn: Yes.

Mr. Carter: Were you a member of that committee?

Mr. Karn: Yes, sir.

Mr. Carter: During all the negotiations that led up to the arbitration, was there any effort on the part of any member of the Managers’ Committee, to establish a differential between coal and oil?

Mr. Karn: No, sir; never was mentioned.

Mr. Carter: Never was mentioned?

Mr. Karn: No, sir.

Mr. Carter: It did not seem to have been suggested to the Managers’ Committee that there should have been a difference?

Mr. Karn: No, sir.

Mr. Carter: In 1907, there was a Western wage movement, was there not?

Mr. Karn: Yes, sir.

Mr. Carter: In which your road participated?

Mr. Karn: Yes, sir.

Mr. Carter: At that time, was there any suggestion that the rate should not apply to the oil burning engines?

Mr. Karn: No, sir.

Mr. Carter: It was not even thought of, perhaps, by the Managers’ Committee. If it was, it was not proposed?

Mr. Karn: Never was mentioned.

Mr. Carter: And in 1910, it was not mentioned, during negotiations?

Mr. Karn: No, sir.

Mr. Carter: But in the Arbitration, the Award was something like this: Fifteen cents on all locomotives, and 15 cents additional for coal burning freight locomotives?

Mr. Karn: The award, I think, was 15 cents on all locomotives, because of the increased cost of living, was it not?

Mr. Carter: No; that was in a letter. It was 15 cents on all locomotives. Then 15 cents additional for coal burning freight locomotives, and in addition to that there were rates established on locomotives—on compound locomotives weighing 215,000 pounds and over on drivers, and on simple locomotives having cylinders 24 inches in diameter and over of \$3.75.

Mr. Karn: Yes, sir.

Mr. Carter: And they made no distinction between oil and coal for that special rate on the big locomotives?

Mr. Karn: No, sir.

Mr. Carter: They established another rate of \$4 on all Mallet type engines, did they not?

Mr. Karn: Yes, sir.

Mr. Carter: They made no differential on the Mallet engine, whether it was oil or coal?

Mr. Karn: No, sir.

Mr. Carter: I believe you said in the beginning you thought that that differential was very unfair. Now, during the negotiations, after the Award was made, was there any suggestion on the part of the Managers' Committee, at subsequent conferences, that the cylinder basis of fixing firemen's pay, was wrong, and the only proper basis was the tractive power of a locomotive, and the only and best method of determining tractive power was weight on drivers?

Mr. Karn: Well, yes; but I think that should be more fully explained.

Mr. Carter: Go ahead and explain the attitude of the Managers' Committee in demanding that the basis of the firemen's pay be by weight on drivers of locomotives.

Mr. Karn: After the Award was handed down—almost immediately after the Award was handed down, the Managers' Committee discovered that on this 24 inch cylinder locomotive,

that because a large number of locomotives that they had in service on many of the roads, were equipped with a superheater, with perhaps a larger size of cylinder, and in many instances they had locomotives weighing—so Mr. Nixon, the Chairman of that committee, stated—130,000 pounds on drivers, not capable of hauling, perhaps, one-third of the tonnage of the locomotive for which he felt the rate had been made, but still had a large cylinder and came within the provisions of the award, that the companies would be compelled to pay this \$3.75 on those locomotives, notwithstanding the fact that they could pull but one-third of the tonnage.

He asked our organization to meet the Managers' Committee and strive to iron out some of these inconsistencies. On the 16th day of January, 1911, we met Mr. Nixon and the Committee of Managers representing the Western Railroads, at that time, over here in the Western Union Building. Mr. Nixon's statement was that the cylinder dimension, as a basis of computing the compensation of firemen, was absolutely ridiculous and most unfair to the railroads; that there was only one fair and equitable method of determining compensation, and that was the tractive power of the locomotive, and that there was only one way of determining tractive power equitably to all concerned, and that was by the weight on drivers.

Mr. Nagel: It is your opinion, then, that there should be no differential between the firemen who fire coal engines and the firemen who fire oil engines?

Mr. Karn: Absolutely none. They accomplish the same purpose.

Mr. Nagel: The sole basis is the development of tractive power?

Mr. Karn: The only true basis of determining compensation is the tractive power, the ability of the locomotive to earn for its owners.

Mr. Nagel: In other words, in your opinion, the labor and exposure which the fireman undergoes, greater on one engine than on another, is no element in the case?

Mr. Karn: It is no element in the case, no, sir, for this reason, that the fireman is put on this locomotive for a certain purpose. He is given a machine with which to work. He is given fuel with which to work. He is started out to accom-

plish the specific purpose of generating steam for the use of the engineer to move the train; and notwithstanding the fact that some locomotive fireman may earn his money more easily than another, he is still accomplishing the same identical purpose, for which both the oil burning and the coal burning firemen are employed; and that is recognized in all lines of service. It is recognized in steamships, it is recognized everywhere else where these labor saving devices have been put into effect.

Mr. Nagel: Then, do you think the Board ought to disregard all the testimony to which we have listened, describing the hardships of the fireman on the coal engines?

Mr. Karn: I do not think so. I think possibly the testimony that has been offered here concerning the hardships which they undergo, has as much to do with the putting of two firemen on these engines as it has to do with determining compensation.

Mr. Nagel: Do you think then that it should be considered only with reference to the question as to whether two firemen are required?

Mr. Karn: Unfortunately, I have been away, and I do not know much about the testimony concerning the coal firemen, nor any of the testimony that has been offered, in fact.

Mr. Nagel: But you are clearly of the opinion then, that it makes no difference with the compensation of firemen on the oil engine that his work is lighter than the work of the firemen on the coal engines? The sole basis is the tractive power of the locomotive?

Mr. Karn: The ability of the machine to earn money for the owner.

Mr. Carter: Mr. Karn, I believe you explained that the reason you had reached that conclusion is because in no other industry have wages been reduced, or a differential established because of the introduction of labor saving machinery.

Mr. Karn: My testimony all through has led to this, that the fireman on the locomotive is the only man for whom a differential has been made when it comes to the introduction of labor saving devices. The men who work in all other industries, in performing service under the most adverse conditions, receive no more pay than the men who perform similar service without the expenditure of probably one-tenth of the physical effort.

Mr. Nagel: In other words, you contend for the principle in one direction, and you admit it in the other?

Mr. Karn: I don't know just what you mean by that.

Mr. Nagel: When new devices are employed to relieve him you say that the tractive power is the test?

Mr. Karn: That is the test.

Mr. Nagel: As burdens are imposed upon him, greater in one instance than in another, you say it makes no difference, but that the tractive power is still the test.

Mr. Karn: Understand me, Mr. Nagel, that, if we take the testimony that has been submitted by the companies, the only physical effort that is required of a fireman is in the generation of steam, or the prime factor of the fireman's duties is the generation of steam. It is the thing for which he is employed, and for which he is put on the locomotive, and the other duties and the other responsibilities, the equivalent of the engineer's, are possibly—I do not know it to be true—are possibly the added duties of the fireman; but, nevertheless, his primary duty is to generate steam; and regardless of the fact that there is more physical energy expended by the coal burning fireman than by the oil burning fireman, if we are to believe the statements of the railroad companies, they consider that there is only one proper method of determining compensation for the firemen, and that is upon the tractive effort of the locomotive; and the tractive effort of the locomotive is most equitably defined by its weight on drivers.

Mr. Nagel: Is this one point with respect to which you agree with the railroads?

Mr. Karn: We have been educated to that. We have always had it since my service on the railroad, and naturally we have been raised up to it. We do not know any different.

Mr. Nagel: Do you want to know any different?

Mr. Karn: I don't know. I have suggested the tonnage basis, as being most equitable to all concerned—compensation by the ton—but I never have been able to have the managers agree to that.

Mr. Nagel: Whatever the standard be, whether it be cylinders, or weight on drivers, or by the ton, do you believe that the result accomplished by the fireman is the test, and not the labor which he performs to bring about the result?

Mr. Karn: That is it, yes.

Mr. Carter: Mr. Karn, will you explain to Mr. Nagel, briefly, that you made a special investigation immediately after the Award of 1910, and found that the locomotive firemen were the only people whom you could find anywhere, as to whom a differential had been established, because of a reduction of physical effort by the introduction of labor saving devices?

Mr. Karn: Yes.

Mr. Carter: Refer briefly, now, to the marine firemen, and the stationary firemen, where oil was substituted for coal.

Mr. Karn: Of course, I live in San Francisco, and this situation that I investigated can only be applied there, because that is the only place where I investigated at that time.

Mr. Nagel: Is this covered by the testimony on Saturday?

Mr. Karn: Yes.

Mr. Carter: Now, we will pass back to the attitude of the Managers' Committee from 1900 up to 1910, with regard to weight on drivers; and without reviewing what you have said, I believe you stated that you have failed to find any place where the managers of any railroads, or Managers' Committee, either in the 1907 or 1910 wage movements, insisted or recommended that a differential should be established between oil and coal burning locomotives.

Mr. Karn: Why, notwithstanding the fact, Mr. Carter, that a differential of 15 cents was established in 1910, the Managers' Committee with whom we conducted negotiations at that time—Mr. Nixon speaking for the railroads, and those were the very words he used “speaking for the railroads,”—notwithstanding that a 15 cent differential had been established, Mr. Nixon stated most positively that the only equitable method of determining compensation for firemen was on the tractive power of the locomotive.

Mr. Carter: Did he speak of oil burning locomotives or coal burning locomotives?

Mr. Karn: He did not differentiate, or say both oil and coal, but he said that the only equitable method of determining compensation was tractive effort, and that the only true way of determining tractive effort was the weight on drivers.

Mr. Byram: Was this after the Award of 1907 was made?

Mr. Karn: Yes, this was on the 16th of January, 1911.

Mr. Byram: Mr. Nixon was then speaking in the light of that Award, was he not?

Mr. Karn: Mr. Nixon was then speaking, as I understand it, as the representative of all railroads in the Western country, he and his committee.

Mr. Byram: Yes, and at that time there was a differential?

Mr. Karn: A differential had been established, of 15 cents.

Mr. Byram: And he was then applying, or must have been applying his views to the situation as it then existed, with the differential established?

Mr. Karn: Mr. Nixon was evidently speaking for the express purpose of convincing the firemen that because of this one particular cylinder dimension, which was a portion of this Award of 1910, being unfair to the railroads, that we should agree to take the money and spread it over certain classes of locomotives; and Mr. Nixon made the statement that I reported, then, at that time.

Mr. Byram: And at that time, at the time he was speaking, there was in effect a differential of 15 cents, as against the oil burning engines.

Mr. Karn: Yes, sir.

Mr. Byram: Then—

Mr. Karn: Just a minute. I will tell you why. I will answer the question, if you don't mind.

Mr. Byram: All right.

Mr. Karn: He made a statement at that time, and his reason for doing so, notwithstanding the fact that the 15 cent differential was in effect—the most remarkable feature of the whole proceeding is this, that Mr. Nixon stated for the railroads at that time, that the most equitable way, the only equitable way of determining it, was the tractive power of the locomotive, and he stated that, notwithstanding this 15 cent differential.

Mr. Byram: But there was in effect at the time he was speaking, a 15 cent differential—

Mr. Karn: And, evidently, from Mr. Nixon's statement, the railroads themselves did not believe it was fair.

Mr. Byram: Did he say so?

Mr. Karn: No, but evidently from his statement he did not believe it was fair, or he would not have said that.

Mr. Byram: Was there not a graduation of rates of pay on oil burning engines just the same as on coal burning engines, at that time?

Mr. Karn: On what?

Mr. Byram: On the oil burning engines, did they not have several different rates of pay?

Mr. Karn: On the Southern Pacific they did, yes, have several graduated rates—

Mr. Byram: So there was nothing inconsistent in Mr. Nixon's statement that tractive power was the proper manner of determining the rates of pay, because at that time there were graduations, both as to the oil burning and coal burning engines, were they not?

Mr. Karn: The graduations were absolutely identical, and the rates were absolutely identical.

Mr. Byram: There was 15 cents difference.

Mr. Karn: No, not yet.

Mr. Byram: There had been an Award, had there not?

Mr. Karn: There had been an Award.

Mr. Byram: When did it take effect?

Mr. Karn: May 16, 1910, and this was 1911. Mr. Nixon wanted this change.

Mr. Byram: The 15 cent differential was in effect, was it not?

Mr. Karn: Yes; I stated that.

Mr. Byram: I thought you changed your statement about that.

Mr. Karn: No, sir.

Mr. Byram: That is all.

Mr. Park: Mr. Karn, when this differential was established, Judge Chambers was Chairman of the Arbitration Board, was he not?

Mr. Karn: I think so, yes.

Mr. Park: Who represented the railroads?

Mr. Karn: W. R. Scott, for one.

Mr. Park: Who was the third arbitrator?

Mr. Karn: Mr. Shea, I think—Did we have only three?

Mr. Park: I think so.

Mr. Karn: Yes.

Mr. Park: Mr. Scott was a locomotive engineer?

Mr. Karn: Yes, and fireman and all.

Mr. Park: And had come up in that service?

Mr. Karn: Yes.

Mr. Park: And Mr. Scott and Judge Chambers were the ones who established the differential?

Mr. Karn: I do not know anything about how it was established, or who agreed to it, or who dissented. I have no recollection of that—never saw—

Mr. Park: Was there any disagreement on the part of the Arbitrators?

Mr. Karn: I do not know whether there was or not.

Mr. Park: It was established in that arbitration, in all probability, through the convincing arguments of Mr. Scott.

Mr. Karn: I think he was the chief factor, yes.

Mr. Park: Is it not a fact that all of this which transpired, was to iron out the very radical and abnormal conditions that obtain, relative to these small engines you spoke of, weighing only 130,000 pounds on drivers, and having cylinders over 24 inches? Was not that the object of the conference between you and the Managers' Committee, of which Mr. Nixon was chairman at that time?

Mr. Karn: Yes, but I want to explain that—

Mr. Park: That was the only object.

Mr. Karn: I do not know how strong you were for it, as the manager of one of the railroads, but Mr. W. R. Scott has been criticized from A to Z for taking care of his oil burning locomotives and paying no attention to anything else. The statement was made by Mr. Nixon at the time we met, on the 16th day of January, 1911, after this Board had been reconvened for the purpose of determining what locomotives this \$3.75 rate should apply to—in order that the neutral gentlemen on this Board may be clear about this, I think I had best explain that.

Immediately following the Award, the railroads took exception to the \$3.75 rate applying in passenger service, or on certain locomotives, and they asked that the Board be reconvened for the purpose of determining the question, and the Board was reconvened, and their award, I believe, was unanimous that it applied on all locomotives, in both passenger and freight service; and Mr. Nixon called us together for the ex-

press purpose of ironing out some of these alleged inconsistencies; and at that time Mr. Nixon said to our committee, if I may use his language, and I suppose I may,—his language was, “If we had known that the interpretation was going to be worse than the Award, we would not have had any interpretation.” That is the statement Mr. Nixon made to our committee.

Mr. Shea: Mr. Park, inasmuch as you have raised the question as to the 1910 award with regard to the establishment of a differential between coal and oil, I will say that Mr. Shea, who was Arbitrator for the firemen, dissented.

Mr. Park: Well, I rather suspected it.

Mr. Burgess: Mr. Karn, did I understand you to say that Mr. Scott, Arbitrator for the Railroads, was a locomotive engineer?

Mr. Karn: Yes, sir.

Mr. Burgess: And when he was acting as an arbitrator in this case he was General Manager, wasn't he?

Mr. Karn: I believe at that time he was Assistant General Manager.

Mr. Burgess: Well, have we not had many concrete illustrations that when an engineer becomes general manager he changes his mind as to what is the proper compensation for engineers and firemen?

Mr. Karn: Yes, but I will tell you, I think that when a general manager of a railroad comes up from the ranks and, as Mr. Scott did, serves as representative of the engineers from time to time, and later went to the railroad, that Mr. Scott, or any other fair man, if he has any manhood about him, will give to the man that employs him the same consideration that he gave to us when we employed him.

Mr. Burgess: Yes, but the point I was trying to make, Mr. Karn, was, without any reflection as to his fairness, that when he became General Manager he viewed the situation from a different standpoint. Did you agree with that?

Mr. Karn: Yes, I think we all would do that, view it from a different standpoint, if we were loyal to our employers.

Mr. Burgess: So it would make no difference, if he were a fair man, whether he came up from the ranks as an engineer or from the telegraph department, or a conductor, or any other situation.

Mr. Park: Well, Mr. Scott was intimately acquainted with the respective duties of a coal fireman and an oil fireman, wasn't he, and had experience as locomotive engineer and traveling engineer, probably, and master mechanic.

Mr. Karn: Undoubtedly.

Mr. Park: On your own western roads. I think he was with the Santa Fe for many years, and then the Southern Pacific. And then this question of the oil burning locomotive was more of a Western question or extremely Western question than those roads in this immediate vicinity.

Mr. Karn: I think that is the reason Mr. Scott was so criticised for some of the matters in which he concurred, because of the fact that a differential of 15 cents was established for the oil burning firemen, which fuel was practically in use on the entire system. At that time we had some few coal burners.

Mr. Park: I think probably that was Mr. Nixon's opinion, and he is a man very strong in his convictions, and speaks out when he thinks a certain thing, but I was a member of that committee—

Mr. Karn: Pardon me, Mr. Park, so I may be clear. What was Mr. Nixon's opinion?

Mr. Park: Why, you quote him as saying that he did not—the inference at least is that he did not think the differential was proper.

Mr. Karn: Well, I would hate to have these records contain anything by inference that could not be clearly explained and I feel positive that Mr. Nixon said just as I said he did, that “for the railroads we consider”—“speaking for the railroads,” was the language he used—“we consider that the cylinder dimensions is most unfair.” Then he cited why. And again he said, speaking for the railroads, “We consider that there is but one honest, proper method of determining compensation for firemen, and that is the tractive effort, and the only true way to determine tractive effort is the weight on drivers.”

Mr. Park: And the cylinders?

Mr. Karn: No, sir, he didn't say anything about cylinders.

Mr. Park: I cannot see how Mr. Nixon would arrive at tractive power of the locomotive without taking into consideration the size of the cylinder, as well as weight on drivers.

Mr. Karn: Were you a member of that committee?

Mr. Park: Yes.

Mr. Karn: Do you remember the conversation?

Mr. Park: I remember no conversation in which Mr. Nixon attempted to show that a standard should be created that did not take into consideration the three factors, because they are absolutely one dependent on the other. There is no way of determining the tractive power of locomotives, unless you take into consideration the weight on drivers and the size of cylinders. One is just as essential as the other. And also the steam pressure, which is a factor. So that the four things go to make up a certain standard, and you may take any one of the three, or three of them, and get practically the same standardization, except where you have abnormal conditions develop in this, in which railroads attempted to over-cylinder their engines, and have since departed from that practice and gone back to a different basis. I don't think you will find that roads now are using these abnormally large cylinders on superheated engines.

Mr. Karn: They are within a quarter of an inch of the large size that are not.

Mr. Park: The engines on the Santa Fe that have been referred to in this investigation, as I understand, weighed 130,000 or 140,000 pounds on drivers, and they had a 24-inch cylinder, which was the cylinder which was in use on engines weighing 185,000 to 215,000 pounds, and it jumped the rate from \$2.65 for firemen to \$3.75.

Mr. Karn: Well, you know, Mr. Park, that immediately following that Arbitration, on some roads in this country, where those cylinders were 24 inches dimensions, that the railroads immediately bushed them to make them 23¾.

Mr. Park: I think very likely. I think it was a business proposition.

Mr. Karn: Yes, I think so. It saved them a lot of money in wages to the firemen.

Mr. Park: It is an everyday occurrence that cylinders on locomotives are bushed when they become worn below a standard size.

Mr. Karn: These had not been in service long enough to become well oiled. On the Great Northern, they had not been in service very long until they bushed them so they would not have to pay the \$3.75 rate.

Mr. Park: That is all I care to ask.

Mr. Carter: Mr. Karn, I think the last question I asked you was something like this—

The Chairman: I would like to ask a question. I don't understand about bushing cylinders. Suppose the cylinder of an engine were bushed, would that reduce the tractive power of the engine while at the same time it reduced the amount that was paid to the fireman? Does it correspondingly reduce the tractive power, or the ability of the engine to pull a load.

Mr. Karn: Well, Mr. Park says it would, but in order that you may understand the bushing of a cylinder, the larger a cylinder, of course, the more steam you have got in it. No question about that. But you can also get so much steam that the weight of the locomotive on the drivers by the introduction of large cylinders will just—the wheels will just simply turn around, because there is so much pressure on the cylinder head that you cannot start your train.

Now the locomotives that they bushed were 24 inch cylinder locomotives, and designed especially for locomotives of that kind, and a 24 inch cylinder was none too large for them, but the \$3.75 rate would have to be paid, and rather than pay that they bushed them to 23½ inches, in some instances new locomotives, not worn out. Bushing the cylinders on an old worn out locomotive is not for the purpose of reducing the size of a cylinder as a rule, but to bring it down to a working basis.

The Chairman: When they bushed these cylinders, what effect did it have on the driving or pulling capacity of the engine?

Mr. Karn: Well, if the locomotive was equalized at 24 inches, it is possible that it could not start as much as it could with 24 inches, considering that 24 inches—that steam pressure on a 24 inch cylinder was just enough to permit your drivers to hold the rail. And I believe those locomotives were built along that line.

Mr. Park: Then, Mr. Karn, if in bushing the cylinders they brought about an improper mechanical balance, or the railroads suffered through the lack of efficiency, of the locomotive in not pulling as great tonnage as it did before.

Mr. Karn: As a rule, when you are going to start a train, Mr. Park, it might pay to spend a couple of minutes or three

starting your load that you could move with that quarter inch less cylinder dimension out on the road after you once got it started, it might pay the company. Just how much a company would suffer by the bushing of that cylinder I cannot say, because I am not prepared to figure that out. I am not enough of a mechanic to figure that out.

Mr. Park: But you are a good enough engineer to know it does not pay to slip and strain an engine continuously in starting a train. The wear and tear on the machinery, the abnormal stresses.

Mr. Karn: There must be a lot of locomotives in this country today that are being terribly abused, if that is a fact.

Mr. Park: But it was good practice always, was it not, to avoid slipping a locomotive if possible. You never were encouraged to slip your engine.

Mr. Karn: Why, Mr. Park, the present day locomotive, equipped with a superheater, with its large cylinder, and its necessary force, is it not true that that locomotive has much trouble in starting a train, and none after you are once started? Take your locomotive that has not all its weight on the drivers, what is the object in putting that trailer on there? That does not help move it.

Mr. Park: The object of the trailer, as I take it, is to distribute the weight.

Mr. Karn: It does not give you any more tractive effort, does it?

Mr. Park: Only the weight that is on the drivers gives you a tractive effort.

Mr. Karn: That is all.

Mr. Park: When your engine becomes larger, it is necessary to distribute the axle weight, and the entire axle weight probably should not go over 60,000 pounds, on account of your bridges and weight of the rails, and it is necessary for the mechanical engineers and civil engineers to keep the individual weight on the axle under 60,000 pounds. In that way, you may distribute it more on drivers.

Mr. Carter: I think, Mr. Chairman, that I will assume the privilege that the counsel for the railroads has sometimes assumed, when he had witnesses on the stand and explained something that the witness had not explained.

In estimating or calculating the tractive power of a locomotive, there are three factors: the size of the cylinders, the main effective pressure of steam on the cylinders, and the diameter of the drivers.

You asked the question if the bushing of a cylinder would not reduce the tractive power. In reply, I would say yes, unless you increased the steam pressure, which is the rule.

When the cylinders were reduced, the steam pressure was increased, and, therefore, the dimension of one factor, being the cylinder, was offset, and more than offset in some instances, by increasing the steam pressure, which was another of the three factors; and, therefore, you could reduce cylinders a half an inch, and increase the steam pressure a few pounds, and maintain the same tractive power.

The weight on drivers is not a factor in estimating or determining the tractive power, but it has been ascertained that, whenever the tractive power exceeds the coefficient of adhesion, the drivers slip, and, therefore, designers of locomotives have designed locomotives with such weight on drivers that they will develop the entire tractive power without slipping.

In reaching this coefficient of adhesion, they have established a rigid rule, that there is no better method of determining the tractive power of a locomotive than by its weight on drivers, for even though the cylinders or steam pressure may be high and could develop additional tractive power, the coefficient of adhesion would be low, and the engine would just stand and slip, and therefore the power would be wasted.

I have compared it to the blowing out of a fuse in an electric current. Whenever the current gets too heavy, in order to protect other parts of the circuit; they cut the fuse and the fuse blows up.

Now, the drivers slip just whenever the power is too great for the coefficient of adhesion.

Mr. Burgess: Now, Mr. Carter, won't you tell us what the firemen's wages were after they bushed these cylinders which you are speaking about?

Mr. Carter: Well, I understand that where the wages were based upon cylinder dimensions, that whenever they reduced the cylinders to less than 24 inches—even but a half inch—they

reduced the wages to the scale of wages as fixed by the Award for an engine of that lesser dimension.

Mr. Burgess: Yes, but in a general way now, we would like to find out if we can what the wages were after the cylinders were bushed. That is, they were \$3.75 before they were bushed, per 100 miles.

Mr. Carter: In answer to that question, so long as the engine had a cylinder 24 inches or over in diameter, the wages of the fireman were based upon cylinder dimensions; but, in bushing the cylinder to less than 24 inches, then, the wages of the fireman were based on weight on drivers, and whatever the weight on drivers of that locomotive was after it was bushed below 24 inches, that weight applies.

Mr. Burgess: Mr. Carter, you don't catch the point. His wages were \$3.75. Now, was it \$3 after they bushed the cylinder?

Mr. Carter: It depends entirely on the weight of the locomotive.

Mr. Burgess: In a general way, what was the rate?

Mr. Carter: If you will give me the weight of that locomotive on which they bushed the cylinders, I will give you the rate.

Mr. Burgess: I cannot do that. I wanted the information.

Mr. Carter: Nor can I. I think, Mr. Burgess, you don't understand the peculiar problem. If that engine with a cylinder 24 inches, weighed, we will say, 150,000 pounds on drivers before they bushed the cylinders, it took the \$3.75 rate; after they bushed the cylinders, it took the rate for engines weighing 150,000 pounds on drivers.

Mr. Burgess: Yes, I understand that thoroughly, but what I was trying to get was the difference in money, knowing there was a difference in schedules, but in a general way.

Mr. Carter: Now, if it were a \$3 engine by weight on drivers, when they bushed the cylinders, the rate changed from \$3.75 to \$3. If it was a \$3.10 engine by weight on drivers, when they bushed the cylinder, the rate changed from \$3.75 to \$3.10. If it was a \$3.25 engine by weight on drivers, when they bushed the cylinder, the rate changed from \$3.75 to \$3.25.

Mr. Burgess: Yes, I understand that, Mr. Carter, but I

was trying to bring out in a general way how much money the firemen lose per 100 miles by bushing the cylinders?

Mr. Carter: On a comparatively light engine he would lose 75 cents a hundred miles.

Mr. Burgess: That is all I wanted.

Mr. Carter: I understand that, but the railroads dropped that rate on freight engines from \$3.75 to \$3.55. Well, I don't know anything about it. They are trying to tell me, and I don't know. We can bring witnesses here to testify.

The Chairman: Well, see if we can make some progress.

Mr. Carter: Shall I proceed?

The Chairman: Yes.

Mr. Carter: Now, Mr. Karn, I believe I have asked you a question something like this: All of this time, 1900, 1903, 1907 and 1910, there have been no differentials established between the wages of firemen on coal and those on oil burning locomotives?

Mr. Karn: No, sir, neither in the wages nor the graduations.

Mr. Carter: Now, after a differential was established by the Arbitration of 1910, we then again met the Managers' Committee, didn't we?

Mr. Karn: Yes, sir.

Mr. Carter: Was Mr. Nixon alone in these negotiations?

Mr. Karn: No, sir. The entire committee, I believe, was present.

Mr. Carter: I don't know about the entire committee, but many members of his committee were present. We met over here in the Western Union Building, didn't we?

Mr. Karn: Yes, sir.

Mr. Carter: And were other members of the Managers Committee present when these discussions took place?

Mr. Karn: Yes, sir.

Mr. Carter: And, when the letter to Mr. Nixon was written, was it signed as chairman of the Conference Committee of Managers, or language similar to that.

Mr. Karn: What letter?

Mr. Carter: The letter that was addressed to me wherein he made the proposition to change from cylinder basis to weight on drivers. You never saw the letter?

Mr. Karn: I don't know whether that was covered in correspondence or not. The only correspondence I have any recollection of was his request for a conference wherein we might iron out some of these inconsistencies.

Mr. Carter: You do remember that his letter was read to our committee, and we discussed with our legal adviser as to whether we could do so, under the Erdman act, and he advised we dare not change from the award.

Mr. Karn: Well, I have a recollection of that, a very clear recollection.

Mr. Carter: Well, that letter has been introduced, or extracts from that letter have been introduced in one of the exhibits.

The Chairman: Well, the letter will speak for itself.

Mr. Carter: Now, Mr. Karn, after this differential was established—

Mr. Karn: Mr. Carter, pardon me. I don't believe that the letter which you say has been introduced in evidence here contains the assertion that Mr. Nixon made, to go from the cylinders to the weight on drivers basis. If it was, all right. I don't think it did.

Mr. Carter: He absolutely confirms the testimony that you have submitted.

Mr. Karn: Very well.

Mr. Carter: Now I will go again. Now, Mr. Karn, after this differential had been established by the Arbitration of 1910, I understood you to say that we met Mr. Nixon and his Committee over here in the Western Union Building?

Mr. Karn: Yes.

Mr. Carter: And, during that discussion, and in the letter signed by Mr. Nixon, he insisted that the wages of firemen should be in accordance with the weight on drivers.

Mr. Karn: To my certain knowledge, during the discussion. I don't know anything about the letter.

Mr. Carter: Was there at that time any intimation, directly or indirectly, any intimation that that theory should not apply to oil burning locomotives?

Mr. Karn: No, sir.

Mr. Carter: Now, we will proceed. I believe you said yes—

terday that the men believed that it was unfair that this differential had been established?

Mr. Karn: Yes, sir.

Mr. Carter: You made a special investigation, which was reviewed Saturday at length. What else did you discover in this investigation, with regard to the recognized principle that employes in other industries should be paid in proportion to the volume of business handled, or, rather, in proportion to their productive efficiency? Did you, in this investigation, and subsequent investigations here in the city, get wage schedules of masters, mates, engineers and assistant engineers of certain vessels?

Mr. Karn: Yes, sir.

Mr. Carter: Now will you read from those schedules showing how vessels are classified by tonnages, and how their wages are graduated in the same manner?

Mr. Karn: Why, I read into the record this matter of masters and mates, and we read corrections on that this morning. Do you want that done again?

The Chairman: Didn't he go over that Saturday, Mr. Carter?

Mr. Carter: Pardon the word, but we have been making an heroic struggle since Saturday to introduce certain evidence, along a certain line of procedure. Our purposes, as I said Saturday, have all been prevented. That is, I said we ordered ham and eggs, and we now have an omelette, and while an omelette may be made of ham and eggs, it is not like we wanted to present our testimony, and I asked Saturday that we be allowed to proceed with our testimony along the lines we originally planned.

We want to show now why graduated rates of pay on weight on drivers should apply to all steam and coal burning locomotives.

The Chairman: All right. I thought that was in the record already.

Mr. Carter: Well, it is, but not in any instructive manner. As I say, it is omelette, nothing else, or scrambled eggs. And they have been scrambled well, and I think that the testimony of this witness is so important to our side that even though

it takes a year we should be permitted to introduce it in the manner we would like to introduce it.

Mr. Park: Is the witness competent to testify that the firemen on lake steamers are paid on the earning power of the vessel?

Mr. Carter: If we are permitted, we will show why graduated pay based on weight on drivers is the proper basis for all locomotive firemen, both oil and coal, and we will show that employers in any other industry except the railroad industry, and steamships perhaps, where they have Chinese firemen, graduate the rate of wages in accordance with the importance of the work, and not in accordance with the labor performed; and we are introducing that to show that it is productive efficiency in addition to the labor, that is considered in other industries as the basis of wages.

Now, it was our purpose Saturday to have gone through with it, and it is yet our purpose, if we can accomplish that purpose.

Mr. Park: How do you account for the firemen on first class steamers being paid less than on second class?

Mr. Carter: Will you let us bring that out?

Mr. Park: Yes, Mr. Carter.

Mr. Carter: Thank you sir.

Mr. Park: If you have got it authentically here.

Mr. Carter: We cannot, we started and it was changed for us. We started on Saturday.

The Chairman: All right, instead of telling me about it, just start then, if you can do it.

Mr. Carter: You made an investigation, and you showed that the wages of employes in other industries are graduated not only on their labor but on the importance of the work they perform?

Mr. Karn: Yes, sir.

Mr. Carter: Now will you show how lake vessels are graduated according to tonnage.

Mr. Karn: For masters and mates, as shown in statistics compiled by Capt. Wm. A. Westcott, President of Masters, Mates & Pilots of the Pacific, and as I said Saturday, in order to get closer in touch with interests represented here, we would

cite what is quoted, being the Southern Pacific Company's Morgan Line, New Orleans service.

Mr. Carter: Now, briefly, Mr. Karn, are the rates of compensation for masters and mates and so forth apparently graduated according to the size of the vessel?

Mr. Karn: Yes, sir.

Mr. Carter: It would indicate that even the Southern Pacific, when it goes into the marine business, recognizes that, as the size of the vessel increases, there should be a graduated increase in the pay of masters and mates.

Mr. Karn: As the tonnage of the vessel increased its ability to earn money for them, yes.

Mr. Carter: Have you knowledge, or do you know by general information, that a mate on a vessel of, we will say, 3,000 tons works twice as hard and spends twice the physical effort as a mate would on a vessel of 1,500 tons?

Mr. Karn: Oh, I don't know.

Mr. Carter: Is not the actual physical effort very similar, regardless of the size of the vessel?

Mr. Karn: Yes, aside from the responsibility and authority.

Mr. Carter: Now have you any information concerning other ships?

Mr. Karn: The Marine Engineers' Schedule, in effect February 1911, shows the graduations for engineers in accordance with the class of the vessel.

Chief Engineer on a first class vessel receives \$175 per month.

Chief Engineer on a second class vessel, \$175 per month.

Chief Engineer on a third class vessel \$150 per month.

Chief Engineer on a fourth class vessel \$125 per month.

The rates quoted are on steel bulk freight steamships.

Mr. Byram: What are the rates for firemen?

Mr. Karn: The first assistant engineer—

Mr. Carter: Go ahead, Mr. Karn.

Mr. Karn: On a first class vessel—

Mr. Carter: I don't want to be impolite to the Board, but I am going to insist that Mr. Karn be given an opportunity to answer the questions consecutively without interruption.

Mr. Park: I think that is a perfectly proper question of Mr. Byram's.

Mr. Carter: If there is any purpose in doing this, so as to bring in sur-rebuttal, Mr. Stone and I will agree that you may have all the time you want for your 50 clerks to prepare your sur-rebuttal.

Mr. Byram: Now, Mr. Carter, that is an unnecessary objection. I asked that question, but I will ask it whenever he is ready to answer. Now, whenever the witness gets to a place where it is convenient for him to answer that question, I would like him to do it.

Mr. Carter: We are going to show that ourselves. We have got it in the program now.

Mr. Byram: Well, I have asked it already.

Mr. Karn: The first assistant engineer on a first class vessel receives \$115 a month.

The first assistant engineer on a second class vessel receives \$115 per month.

Mr. Carter: Now, answer Mr. Byram's question, please.

Mr. Karn: Just a moment. The first assistant engineer on third class vessels receives \$100;—the first assistant engineer on a fourth class vessel \$90.

Second assistant engineer on a first class vessel \$80.

Second assistant engineer (where required) on a second class vessel, \$75.

Second assistant engineer (where required) on a third class vessel \$75.

And there is no rate specified on steel bulk freight steamers for a second assistant engineer on fourth class vessels when required.

The first class vessels for which the rates just quoted are paid are: First class steamers, 5,500 tons; second class steamers, over 4,000 tons and less than 5,500 tons; third class steamers, over 2,100 tons and less than 4,000 tons.

Fourth class, all steamers of 500 tons and less than 2,100 tons.

For steel package freight steamers they have two classes, first and second. The chief engineer on a first class steamer received \$150 per month; on a second, \$150 per month; the

first assistant engineer, \$100; and the second assistant, \$75, where required.

Mr. Carter: Did you find any rate schedule anywhere for firemen on these same vessels?

Mr. Karn: No, sir.

Mr. Carter: Do you understand that there are no unions of firemen on these lakes?

Mr. Karn: No what?

Mr. Carter: No firemen's unions on these lakes, and that after a lockout of four years ago, there is no wage scale?

Mr. Karn: For firemen, you mean?

Mr. Carter: Yes, sir. You didn't learn that, did you?

Mr. Karn: No, I don't know about that.

Mr. Carter: And have you anywhere any information as to the rate of wages paid the firemen, excepting as shown in the railroad exhibit?

Mr. Karn: Paid firemen on steamers?

Mr. Carter: Yes.

Mr. Karn: I don't know anything about their exhibit. I don't know anything about exhibits introduced by them showing rate of pay for firemen on steamers except as quoted by Mr. Park yesterday.

Mr. Carter: I think they have firemen.

The Chairman: Mr. Byram desires to ask a question.

Mr. Byram: You do not know, then, whether or not the wages of firemen on these vessels are graduated, in accordance with the size of the vessel?

Mr. Karn: No, sir; and in explanation of that I will say that in seeking the information concerning firemen on these vessels, we only sought to ascertain whether or not a differential had been established, between the wages in effect at the time the vessels were in coal, and the wages that were put in effect after the vessels had been changed to oil.

Mr. Byram: And you did not know of such differential?

Mr. Karn: No, sir.

Mr. Byram: You do not know what the rate of pay is?

Mr. Karn: No; we did not seek for that.

Mr. Byram: That is all.

Mr. Karn: The only rates of pay we have sought were to establish graduations.

Mr. Byram: You just said there were no graduations.

Mr. Karn: Graduations, yes, sir, of these vessels, and as far as firemen are concerned, as explained Saturday, we were not looking for a differential for firemen, but there is a vast difference between the amount of money expended by a company operating a large steamer and a small steamer, and it was not necessary—in fact we did not seek it, but it has developed since that time, if you were operating a vessel of the size described here as first class, carrying 5,500 tons, I believe, you would have a good many firemen on that vessel; but when you get down to one carrying about 500 tons, you might only have two firemen; so, in the aggregate, the company pays to the fireman on the large vessel, in the same proportion that they pay to anybody else, only more so. They pay twenty firemen, perhaps, on the large vessel, I believe Mr. Park said \$52.00 a month; \$50.00 a month would be \$1,000 on a large vessel, where, on a small vessel, it will only cost \$100. It would be ten times the amount, and what the graduation would be, I will leave you to judge.

Mr. Park: As to the individual fireman's rate of pay, there is no difference whether a fireman on a big steamer or a small steamer?

Mr. Karn: I could not say positively.

Mr. Park: You were not interested in his pay, but only to find out whether he got more or less on an oil burner than on a coal burner?

Mr. Karn: Not at all. I said in my testimony Saturday that at the time I investigated this, it was subsequent to the Award—possibly September or October, 1910, and I was seeking information to use at the time the matter was being discussed with our management—to use later, for that matter, and I was told at that time what the rates of firemen were on those vessels. I was told also that there had been no differential established, and the only impression that was left on my mind was that, because that was the point I was seeking, and since that time, until you had asked the question yourself, there has been no reason in my mind why the dollars and cents paid the firemen on a steamer, per month, should have been investigated by us.

Mr. Nagel: Mr. Karn, how is the tonnage of the ship determined?

Mr. Karn: Why, they say by government measurement, in their contract.

Mr. Nagel: I mean, if it is a question of capacity or displacement of the ship.

Mr. Karn: It says 5,500 tons. I presume that is the capacity, yes.

Mr. Nagel: That is what it can carry?

Mr. Karn: Possibly.

Mr. Nagel: So the wages are based upon the capacity and not upon what is actually done?

Mr. Karn: Upon the capacity, yes, sir. I should judge so, from their schedule.

Mr. Nagel: Now, have you in mind freighters or passengers?

Mr. Karn: In each individual, they define—steel bulk freight steamers; steel package freight steamers; wooden freight steamers; passenger steamers.

Mr. Nagel: And you mean to say that the wages of engineers, etc., are determined solely by the power required to navigate that ship, regardless of whether it carries passengers or freight? Does the responsibility of the service not enter into the case?

Mr. Karn: I would like to have a better understanding of what you mean. Now, do you mean that because of the graduation shown in tons, that you assume that greater motive power is used in the vessel, and that the wages of the engineer are graduated upon that greater motive power?

Mr. Nagel: I want to know whether, if two vessels requiring the same power, one of them carrying freight and the other passengers, and assuming there is more responsibility in carrying passengers than in carrying freight—whether the engineers in one case get more than they do in the other?

Mr. Karn: I think, Mr. Nagel, I can put you quite clear on that, because in the steel bulk freight steamer service—because of their description of a first class vessel, which says: "All steamers of 1,200 tons or over."

Mr. Nagel: What we want to get at is whether the sole test of compensation to the men is the power of the ship, or whether the responsibility and character of the work involved in producing that power, has anything to do with wages?

Mr. Karn: Apparently, the only factor that enters into this, from their schedule, is the carrying ability of the vessel to earn for the owner.

Mr. Nagel: So, the same test is applied to the passenger carrier and to the freight carrier?

Mr. Karn: Yes, sir; they have the same graduations in passenger service. I would have given you those passenger rates, but for the question.

Mr. Park: Mr. Karn, which earns most to the owner, a large ship carrying freight, or the same sized ship carrying passengers?

Mr. Karn: I could not answer that question, Mr. Park. I don't know. I don't know whether a passenger steamer earns more money than a freight steamer, or not—one or the other. I understand that you are connected with the Harriman Lines, and in view of the fact that they introduced twenty-three named vessels here, giving their tonnage, you might answer that question yourself.

Mr. Park: I think the freight steamer is the one that earns the most money.

Mr. Karn: I should think so, because they pay the engineer more on the freight steamer than they do on a passenger. There is \$25.00 difference in the pay on first class steamers. The passenger engineer gets \$25.00 less than the engineer on a freight steamer.

Mr. Park: The captain gets more on a freight steamer?

Mr. Karn: I said engineer. What the captain gets on a passenger steamer, because of Mr. Carter's illustration, his ability to be a good fellow and mix with the passengers, seems to be a factor in the case, as I know the Southern Pacific Company pay the Masters of their vessels on this Morgan Line, wages from \$275.00 per month down, and I don't know whether those are passenger or freight steamers—don't know anything about them.

Mr. Carter: Mr. Karn, I don't remember the question I asked, but I think it was something like this: In this investigation you found that the compensation or salary, per month, was graduated largely upon the ability of the vessel to earn revenue for the owners of the vessel.

Mr. Karn: Yes, sir.

Mr. Carter: Do you understand from inquiry that the salary named in the schedule is only a part of the compensation?

Mr. Karn: No, sir; it says here: "Work on steamers when not in commission. If it be the desire of employers to engage members of the M. E. B. A. —"

Mr. Carter: What is M. E. B. A.?

Mr. Karn: Well, I don't know.

Mr. Carter: Marine Engineers Beneficial Association?

Mr. Karn: That is it, yes.

Mr. Park: Are these lake rates?

Mr. Karn: These are lake steamers. "For such work as boiler room, after the boilers have been properly laid up, boring cylinders, or putting in crank pins, after the engine has been laid up, piping, after decks have been raised or repairs have been made thereto, or during and after the resetting of boilers, and such members are either the regular engineers or others it shall be considered proper for members of the M. E. B. A. to engage themselves, if they so wish, at a compensation mutually agreed upon between themselves and their employers. Under no circumstances, shall there be any discrimination against an engineer, should he refuse such employment. It is understood that all other work in the engineers' department shall be considered, either fitting up or laying up, and the full complement of engineers shall be employed at regular wages; also board furnished, or regular compensation allowed. It is also understood that all work that can be prepared for the shop, shall be so prepared during the period of laying up, and that all such work, after being returned from the shop, shall be assembled and placed so as to perform the duties and functions of a steam engine, or its auxiliaries by the regularly appointed complement of engineers during the period of fitting up."

"Transportation. The following conditions shall obtain in regard to transportation: All engineers shall be furnished first class transportation, including berth and meals, from the lake ports nearest their homes, to the steamers on which they are to be employed, when going to fit out; and after the steamer goes out of commission, first class transportation, including berth and meals, shall be furnished to the lake port nearest the home of the engineer."

"Board and Maintenance. After January 1, 1911, and until

such time as the boat goes into commission, engineers who engage in laying up or fitting out a steamer in a port where said engineers reside, board or compensation for same shall not be required, but in all other cases board shall be furnished, or regular compensation for same allowed, up to January 1, 1912, irrespective of what port the boat is moored in.

“Engineers shall not be required to sleep on board a steamer, while fitting out or laying up, until rooms are properly fitted out and steam heated.

“On all ships where three or more engineers are employed, a four hour watch is hereby recommended.

“Engineers shall not handle hoisting engines or cargo on vessels of the Great Lakes, unless a master engineer is employed.”

Mr. Carter: Then I understand from that, Mr. Karn, that they not only increase the compensation of the marine engineer in accordance with the earning capacity of the vessel, but they furnish him additional engineers to assist in the work?

Mr. Karn: Yes.

Mr. Carter: If the engineers' schedules on these western railroads provided for continuous compensation when business fell off so that the crew was pulled off, would it not be a great addition to their average compensation? For instance, an engineer has been working during the busy season, and they lay up his engine, and being a hired engineer he is laid off. If the engineers' schedules had some provisions for pay when they were laid off, provisions for board and so forth, as indicated here, would it not be a great addition to their average earnings per year?

Mr. Karn: Yes; but I do not believe you made that point quite clear, Mr. Carter. I assume that when the vessel is in port being loaded, the engineers have few if any duties to perform; and the difference between the engineer on a steamship lying in port, and the engineer on the road lying at an outside terminal, is so marked that it seems that it should be understood by everyone; but the engineer on a vessel laid up for four or five days loading cargo, or waiting for passengers or orders, receives full compensation and his board, while the engineer at the outside point on the railroad receives absolutely nothing.

Mr. Carter: That is what I was leading up to, Mr. Karn. Is it not a fact that the marine engineer's salary goes on, when he is away from the home terminal?

Mr. Karn: Yes.

Mr. Carter: Is it not a fact that, in addition to the monetary remuneration, marine engineers receive board and room?

Mr. Karn: Yes.

Mr. Carter: If locomotive engineers were paid a continuous salary from the time they reached their terminal away from home, including the time they were resting, and had their expenses paid, their board and room, do you not think that would be a great increase in the wages of locomotive engineers?

Mr. Karn: Yes, and they would simply be equal to what they pay these other fellows on the boats.

Mr. Carter: Then your observation leads you to believe that these engineers, assistant engineers, captains, masters and mates, actually receive a great deal higher compensation than is shown in the pay check?

Mr. Karn: Oh, yes, they receive a great deal higher compensation; and I neglected to mention that in the case of masters, in Mr. Westcott's report here, it is shown that masters receive certain bonuses for making good trips, and for not having any accidents, and all that sort of thing.

Mr. Carter: Do I understand that if they get over the road—if we can call water a road—in less than the expected time, they get a bonus?

Mr. Karn: Yes.

Mr. Carter: In railroad practice, where we have 100 miles or less, or 10 hours or less, and the engineer and fireman get over the road in less than 10 hours, are they paid a bonus, in that they get as much wages for the smaller number of hours, as though it had taken the full ten hours to get over the road?

Mr. Karn: I suppose it could be so considered, yes.

Mr. Carter: And is not the real theory of a day of 10 hours or less, or 100 miles or less, upon the principle that if the engineer and fireman do get over the road in less than the 10 hours, they will still get the full day's pay?

Mr. Karn: Yes.

Mr. Carter: And you say that the owners of vessels have recognized this principle?

Mr. Karn: Yes, Mr. Westcott so reports.

Mr. Carter: Now, let us get back to the firemen. I did not hear you read anything about the firemen.

Mr. Karn: About their graduations?

Mr. Carter: About their wages, at all.

Mr. Karn: No, sir. I have tried to explain that about fifteen times. I thought you understood it.

The Chairman: Mr. Carter, as I understand Mr. Karn, he says he made no investigation whatever as to the wages of marine firemen.

Mr. Carter: I want him to explain why he did not.

The Chairman: Having sole reference to the question whether there was a differential between coal burners and oil burners.

Mr. Carter: I want to show that he did not purposely conceal this fact. It seems, from the questions asked him, as though they think it is very strange that he did not get that information.

The Chairman: He made it very clear to me, at least, as one member of the Board, why he did not make the investigation,

Mr. Karn: I will say further, that if I had thought about that, I would surely have brought that out, because the biggest factor of the whole question, with respect to graduation, is that they have so many more firemen on a large vessel than on a small one, so I had no object to conceal it.

Mr. Carter: I want to bring out the fact that he could not get a wage schedule for the firemen.

The Chairman: You may ask him whether he could get a wage schedule for the firemen.

Mr. Karn: You mean that it would be impossible to get one because there was none in existence?

Mr. Carter: Yes.

Mr. Karn: The statement that I could not get one might lead to the inference that I sought one, which I did not do.

Mr. Park: They do exist on the Pacific, do they not?

Mr. Karn: Oh, yes.

Mr. Carter: I will explain that when he made his investigation on the Pacific Coast, it was some years ago, and his only purpose was to ascertain if a differential existed. The investigations he has made here in Chicago carried with them this

graduation of wages, according to the earning power of the employe.

The Chairman: I so understand.

Mr. Carter: Mr. Karn, we will take up now the wages of the drivers of automobile trucks in the city of Chicago. Did you make any investigation of that?

Mr. Karn: Yes.

Mr. Carter: Did you find that the wages of the men who drive these heavy trucks are graduated upon the amount of tons they can haul?

Mr. Karn: Yes. The automobile trucks are graduated as follows:

One ton gasoline truck, \$17.00 a week.

Two ton gasoline truck, \$18.00 a week.

Three ton gasoline truck, \$19.00 a week.

Four ton gasoline truck \$21.00 a week.

Five ton gasoline truck, \$23.00 a week.

Those are the wages of the drivers.

Mr. Carter: In this investigation did you ride on any of these trucks?

Mr. Karn: Yes, in the last two months, I have ridden on every sized truck described, from one to five times, in this city.

Mr. Carter: Did you find that it was any greater physical effort for a man to drive a two ton truck than a one ton truck?

Mr. Karn: No, I do not think it is. I think possibly the greatest physical effort, taking into consideration the skidding of the machine, devolves upon the operator of the smaller truck.

Mr. Carter: Higher speeds are usually maintained with the smaller machines, are they not?

Mr. Karn: Yes.

Mr. Carter: You have found, then, that in the city of Chicago, the wages of truck drivers are graduated upon their productive efficiency, or rather upon the earning capacity of the truck which they drive for their employers?

Mr. Karn: As explained by Mr. T. F. Neary, who was the secretary or business agent, the contracts are made by them with the employer with the distinct understanding that it is upon the ability of the truck to earn more money for the employer.

Mr. Carter: And, upon that theory, you believe that engineers and firemen should be treated in like manner?

Mr. Karn: Yes.

Mr. Carter: Have you ever investigated the wages of men who drive animals?

Mr. Karn: Yes.

Mr. Carter: Horses and mules?

Mr. Karn: Yes.

Mr. Carter: Did you ever drive a team?

Mr. Karn: Yes.

Mr. Carter: In California or the West?

Mr. Karn: In California, yes.

Mr. Carter: Did you ever drive a big team?

Mr. Karn: Twelve horses, frequently, on a farm. I was a farmer, and I used twelve horses always.

Mr. Carter: Did you ever drive a small team?

Mr. Karn: Yes, from one horse up.

Mr. Carter: Were your wages when driving a larger team and pulling a bigger load, higher than when you were driving a small team?

Mr. Karn: I was working for myself, but the wages in the West are based upon the number of horses that the man uses, in other words, upon his ability to earn for his employer.

Mr. Carter: When you were driving for yourself, did you earn more for yourself with these big teams than with the little team?

Mr. Karn: If I had not, I would not have had them.

Mr. Carter: Was it very much greater physical effort to drive the big team than the little team?

Mr. Karn: No, because, with the big team, you have only one line, and with the small team you may have anywhere from two to four.

Mr. Carter: Will you describe how you drive twelve horses?

Mr. Karn: You drive with what is commonly called a jerk line. You have your leaders trained. You can train one in a week. A steady pull on the line turns him in one direction and a jerk turns him in the other. The leaders take up your chain weight and the singletrees, and that is about all they can do.

Mr. Carter: And the other horses follow the leaders?

Mr. Karn: Yes, they cannot do otherwise.

Mr. Carter: You have found that there was a graduated compensation according to the earning capacity of the team for the employer?

Mr. Karn: Understand, Mr. Carter, that at that time I was farming, and all farmers pay their teamsters upon that basis, because of the fact that they have to take care of their team. They have more horses to take care of, and they get greater wages, running from \$140.00 to \$165.00 a month.

Mr. Carter: Do you believe an engineer whose horse, like a big Mallet, weighs say 300,000 or 350,000 pounds on drivers, has more to do than on a little engine?

Mr. Karn: I did not get that.

Mr. Carter: Do you believe a locomotive engineer whose horse is the size of a Mallet weighing maybe over 300,000 pounds on drivers, has more to do than on a little engine?

Mr. Karn: I wish the stenographer would read that question. I did not get it.

(The stenographer read the question as above recorded.)

Mr. Karn: Yes, he has a great deal more responsibility, also.

Mr. Carter: And this big Mallet horse, weighing 350,000 pounds on drivers, earns a great deal more for its owner, does it not?

Mr. Karn: Yes. Now, with respect to these teams here in the city of Chicago, the rate per week for a wagon to which they attach one horse, is \$13.50.

If they have a double team on this single wagon, it is \$15.50.

A team attached to a double wagon is \$16.50.

If it is a three horse wagon it is \$18.50.

For four horses, \$19.50.

For six horses, \$21.50.

Now, notwithstanding the fact that these teamsters have to take care of these teams, and that their working hours are from 6 A. M. to 6 P. M.—they have certain street hours, making eleven hours a day, an hour allowed for meals—notwithstanding the fact that they take care of all these teams, and have the responsibility of the team and that additional work, an automobile truck driver, who has none of that responsibility, is paid more money for a similar service; in other words, he is paid more money for transporting for his employer a similar amount

of freight. That is based upon the fact that the machine which he operates can earn more, because of its ability to get around over the country, and to continue its drag. That is, a five ton truck is made to haul five tons under more than normal conditions, heavier grades, for instance; and with a team that is given its capacity on a regular grade, we all know that it would be impossible for that team to go over a hill with that tonnage.

Mr. Carter: I understand you to say, Mr. Karn, that your investigation leads you to believe that the man who drives a team, although he has more physical work to perform than the man who drives an automobile truck, receives less pay for doing it; that is, that the man who drives the automobile truck receives a higher compensation than the man who drives the team.

Mr. Karn: Yes, for instance, the driver of an automobile truck with a tonnage of five tons, as compared with the wages of the driver of a six horse team; and it is a mighty poor six horses that will not pull five tons; but that would be about their maximum capacity over ordinary grades—the driver of the five ton automobile truck gets \$1.50 more than the driver of the six horse team.

Mr. Carter: Then, it indicates that when they introduced a labor saving device, they did not establish a differential against the driver of the automobile truck?

Mr. Karn: No, sir.

Mr. Carter: But, on the contrary, paid him more money, in fact?

Mr. Karn: Paid him more money, in fact.

Mr. Carter: And your understanding of the reason for that is because the truck driver can earn more money for the employer?

Mr. Karn: Yes.

Mr. Carter: Now, Mr. Karn, whether you have answered this or not before, I will take it up again: In your observations of the substitution of oil for coal on locomotives, is a fireman capable of earning more for his employer with an oil burning engine than with a coal burning engine of the same weight on drivers?

Mr. Karn: The oil burning locomotive can unquestionably continue to haul more tonnage than the coal burning locomotive, because of the oil, in the first place, generating heat to

a greater degree over the same area than coal can possibly generate, and because of the fact that the fireman on a coal burning locomotive of today is not constituted so that he can stand up under the hard work that he is called upon to perform, unless he is one in ten thousand individuals, whose stomach can assimilate food to build up the strength necessary to attend to those duties. I make that statement, because I understand from reports that I have read from authorities in mechanical matters, upon the firing of these locomotives, which I have no reason to doubt, that occasionally they find a man of that kind, who can stand up to it; but they go on to affirm that that kind of a man is not the kind of a man who lives to make an engineer. He cannot stand up to it long. They recommend mechanical stokers as a relief.

Mr. Carter: Then, it is your understanding that a fireman on larger engines, is not physically capable of maintaining a locomotive at 100 per cent of efficiency?

Mr. Karn: Yes. I want to go back to that last question. I want to state for the benefit of the Board. I want to get down in close touch with the situation. On the Salt Lake Division of the Southern Pacific Railroad—I don't like to say what year, because time flies so fast that I might be wrong, but I don't think it was over a year and a half or two years ago; at Cosgrove, Nevada, there was a boiler explosion there on a Consolidation type of locomotive, twenty-seven hundred and something—I don't just recall the number, and it developed that the intense heat of that oil had evaporated the water so fast, more, possibly, because of an improper diffusion of heat in the fire box, at a certain point on the side sheet, that there was an explosion resulted, and if my memory serves me right, that boiler was blown something like three hundred feet from the frame of the locomotive, and, of course, the engineer and fireman, and I believe one brakeman, were killed.

An investigation of that by the company and officials, and the Government, disclosed the fact, as I stated, that there was not a proper diffusion of heat in that firebox, and all other locomotives in the roundhouse at Sparks, Nevada, were ordered taken out of service and repairs made on the side sheet, and efforts made by the company to overcome this. I don't want it understood that I am reciting this improper diffusion of heat

for the purpose of calling attention to the fact that railroad companies overlook those things, because they don't. They are very careful to do everything they can to overcome them, and in this instance they did everything, and very cheerfully conformed to the plan of the inspectors, and put these engines out of service, and did make these repairs and all that. But, nevertheless, just to show that it is possible, with oil, to have your fire concentrate on one point, to such an extent that it will cause an explosion. Now, a locomotive, you understand, has a considerable space—not very wide—the full length of the box, that they call the leg of the boiler, and inside of the fire box they have brick work, all around, probably fourteen or sixteen inches high, and this burning of the side sheet was above this brick work, of course, and some people might want to bring out the point that there was mud in this leg of the boiler. That is where all of the sediment settles, around the leg. That is where they wash it out. Now, in this instance, this boiler being blown a great distance, and the tank remaining, and cars and the rest of the train, it must be reasonable to assume that when that boiler gave away, and that side sheet stripped and dropped—I saw the side sheet afterwards, at the Sacramento shop, and it was torn across and dropped down and out from the side, and there was absolutely no sign of mud anywhere. There was absolutely no sign, so the report of the company—possibly not the company, but the Interstate Commerce Commission, Mr.—it don't make any difference—one of their inspectors—absolutely no sign on the tank or anywhere. So that serves to bear out, beyond any point of contradiction, the fact that there was too much heat; that it is possible, with an oil burning locomotive, to have your heat at a certain point on your fire box—on your side sheet, so great as to evaporate the water so fast as to drive it away from the side sheet thereby causing an explosion.

This is not made to show the danger of oil, but to show the possibilities of the greater heat unit contained in the oil than in the coal, and to substantiate that the generation of steam on an oil burning locomotive, because of this factor, and because of the lesser labor of the fireman, makes of the oil burning locomotive, practically 100 per cent all the time, capable of pulling the limit of tonnage.

Mr. Carter: To go back to the question, it is the result of

your information and knowledge of the subject, that a fireman on an oil burning locomotive can earn more for his employer, than on a coal burning locomotive, because of this ability to keep steam at 100 point efficiency?

Mr. Karn: He can earn more money, yes, sir.

Mr. Carter: And if that be the basis of graduated pay and earnings for employes in other industries, you then contend that it should apply equally to the oil burning locomotive firemen?

Mr. Karn: Yes, sir.

Mr. Carter: But at no time in your testimony have you contended that the oil burning fireman works as hard as the coal burning fireman?

Mr. Karn: No, sir.

Mr. Carter: That is all.

Mr. Nagel: Notwithstanding the fact that he does not work as hard, you think he ought to be paid more, because he produces more?

Mr. Karn: No, sir, not more.

Mr. Nagel: If he produces more, he ought to be paid more?

Mr. Karn: No, I don't think so, Judge. The same argument would be in effect then, just because it was possible for the fireman, because of the decrease in expenditure of physical energy, to keep an engine hotter, and thereby pull more tonnage, is not an argument in favor of paying the coal burning fireman less money. I consider that the man is put on a certain class of locomotive. They are supposed to be standard, and those two locomotives, one in coal and one in oil, the ability of that locomotive to earn, is based upon possibly their average ability to earn money for the company.

Mr. Nagel: I think we ought to be able to dispose of your answer. You have said that the tractive power is the test, have you not?

Mr. Karn: I have said that I have believed that the tractive power was the only true way to determine compensation.

Mr. Nagel: Don't you say now that the fireman on the oil burning engine can produce more tractive effect?

Mr. Karn: On the same class of engine.

Mr. Nagel: If that is so, ought he not to be paid more than the fireman on the coal engine, who, in spite of greater effort and greater exposure, produces less?

Mr. Karn: My statement, if you will pardon me—I don't want you to think I want to try to evade your question, because I don't.

Mr. Nagel: I don't understand you to.

Mr. Karn: My belief was based merely on the fact that two men, sent out on a certain class of locomotive, of a certain weight on drivers, to perform a certain service, and they both had that to do and did it to the best of their ability, with the fuel and machine on which they worked, and I believe their compensation should be identical.

RE-CROSS EXAMINATION.

Mr. Sheean: Mr. Karn, I got the impression from your testimony that compensation of a fireman on the Southern Pacific is based entirely upon weight on drivers. The schedule seems to base the rates in passenger service on the size of cylinder.

Mr. Karn: On certain engines. That has come about, as has been explained here, by certain arbitration proceedings.

Mr. Sheean: Well, is it not a fact that still in passenger service, in valley, the compensation of firemen is based solely on cylinder dimensions in passenger service?

Mr. Karn: In 1907, Mr. Sheean, the settlement with the railroad company was based upon cylinder dimension, and in 1910, a further cylinder dimension rate, in one instance, was handed down.

Mr. Sheean: And, then, at no time has there been compensation based on weights on drivers, in passenger service?

Mr. Karn: On the Southern Pacific?

Mr. Sheean: Yes.

Mr. Karn: Yes.

Mr. Sheean: When?

Mr. Karn: Beginning with 1903. In the schedule of 1903: "In passenger service on locomotives having less than 75,000 pounds on drivers, 100 miles or less," etc.

In freight service; again in passenger service; all the way through in the 1903 schedule; and in 1907, as stated to you, we met a committee representing the railroads, and a settlement was made at that time, based on cylinder dimensions, in passenger service.

Mr. Sheean: Well, then, since 1907, down to the present

time, the rate of pay in passenger service is based on cylinders?

Mr. Karn: Because of the fact, Mr. Sheean, that the committees on the individual lines, having made an agreement with the Managers' Committee, it became general all over the territory, the Western territory, that is, the territory covered by the Managers' Committee, and each individual schedule would naturally carry that. In other words, it would become a part of our present proposed standardization.

Mr. Sheean: Since 1907, down to the present time, the basis of compensation in passenger service on the Southern Pacific, has been and is now based on cylinder dimensions.

Mr. Karn: Yes, and I think on all the other roads, and for the reasons defined by me.

Mr. Sheean: In freight service, it is put upon a basis of weights on drivers.

Mr. Karn: With the exception of that large locomotive, that the cylinder dimensions were handed down in 1910.

Mr. Sheean: And that was simply putting that into your schedule.

Mr. Karn: Just along the same lines. It was an arbitrating proceeding, from which we had no right to deviate.

Mr. Sheean: Except as put in your schedule, you had eliminated the passenger as interpreted. The award of the large cylinders was made applicable in both freight and passenger, was it not, although the Managers contended it was never intended to cover passenger service, and when you came to rewrite your schedule, following that, you made those large cylinder dimensions applicable only in freight service, did you not?

Mr. Karn: Yes, sir.

Mr. Sheean: Now, in arriving at the question of a graduated rate of pay in lake service, or elsewhere, I think you said that the aggregate payment to all the firemen was the only proper way of determining whether there was that graduation.

Mr. Karn: No, I did not say that.

Mr. Sheean: Just what is your position with reference to the aggregate paid to firemen on steamships?

Mr. Karn: I said that if a large vessel, on which it was necessary to use twenty firemen, and a small vessel, where it was only necessary to use two, that the graduations would be just as apparent in the aggregate for the firemen; meaning that,

because of the fact that it was necessary to employ a larger number of firemen in a large vessel, that you actually graduated the rate of pay of firemen, by paying a number of men more money, at the same rate of pay, while with the firemen on a locomotive—one of the large locomotives that pulled ten times as much as the small locomotive that could be mentioned, the firemen on the small locomotive received what might be termed a standard rate of pay, while the firemen on the large engines, doing ten times the amount of work, and possibly pulling the small locomotive with them, received a proportionate increase, possibly 40 per cent in the aggregate more than the men received on the small locomotive.

Mr. Sheean: Well, is it your position that there may be a graduation in the pay of the firemen in lake service, even though each individual fireman gets the same rate per month?

Mr. Karn: Graduation?

Mr. Sheean: Yes.

Mr. Karn: Yes; if, as stated, on a large vessel as compared with a small one. The graduations would be more apparent on these steamers than they would be on the railroads, because if they pay, as Mr. Park says they do, the same rate to each of these firemen, in dollars and cents, per month, and other emoluments, the ten men will receive ten times the amount of money that the—the twenty men will receive ten times the amount of money that the two men on the small steamer will receive. Hence, that surely would establish a graduation. It would at least, in my opinion.

Mr. Sheean: So that if this proposal be granted here, whereby the pay of firemen, whether on coal or oil, be just the same, the practical effect would be that on a coal burning engine weighing 185,000 pounds or more on drivers, the company would pay just twice the wages to the firemen on a coal burner that it would to firemen on an oil burner? Is that correct?

Mr. Karn: Will you read the question?

(Question read as above reported.)

Mr. Sheean: With the same weights on drivers?

Mr. Karn: You mean by that, that if that proportion of the proposal having to do with the placing on these engines of two firemen?

Mr. Sheean: Yes.

Mr. Karn: Yes, sir, to this extent: If you put a locomotive in service, like the large steamship, that required twice as many firemen to generate the steam on that locomotive, that it did—rather, required twice the number of men to generate steam on that large locomotive, that required two firemen, because of the inability of one man to fire in coal, then, the oil burning fireman who fires it alone earns the same amount of money for the company, pulls perhaps greater tonnage for the company, and does it for the same compensation that one of these men fired the large locomotive for, and the graduations, in my opinion, would be on the same relative basis there as on the large and the small steamer. It is absolutely necessary, on the large steamer, to have more men, in order to perform the service, and it is not absolutely necessary on the small steamer.

Neither is it necessary on two large steamers of the same capacity, same tonnage, to have a large number of firemen, such as it is on the coal burning vessels, and the introduction of oil has operated to reduce the number of men on these oil burning steamers, but has not operated to establish a differential.

The Chairman: Mr. Sheean, will you defer any further questions until after recess?

(Whereupon, at 12:30 o'clock P. M., a recess was taken until 2:30 o'clock P. M.)

AFTER RECESS.

O. W. KARN was recalled for further examination, and having been previously sworn, testified as follows:

Mr. Sheean: Mr. Karn, you had stated this morning in substance that in your judgment there was no reason why the railroad companies which burned oil should pay less to a fireman on an engine than a company which burned coal in its engines. Is there, in your judgment and from your viewpoint, any reason why the companies who burn coal should pay more to their firemen than is paid to the firemen on the oil burner?

Mr. Karn: I think that the wages of firemen on an oil burning locomotive and a coal burning locomotive of the same size, should be absolutely identical, up to a point where it is impossible, on account of the physical condition of the indi-

vidual, to successfully fire the coal burning locomotive, when I think one or more additional firemen should be put on, if necessary, and that each of those firemen should receive the same identical pay as though but one man were on there. Each man receive the same amount of pay?

Mr. Sheean: Then, at a certain point, it would no longer be based upon the earnings for the company?

Mr. Karn: I don't think that follows, Mr. Sheean. At a certain point, when it becomes impossible to handle a machine with one man, and the company must move that machine, and the tonnage it is capable of pulling, then it becomes necessary to adopt some labor saving device, or put more men on there, more laborers on there, and in my opinion—well, I guess that answers your question.

Mr. Sheean: Well, then, in the case—take a road which competes with an oil burner, let us take the Western Pacific, on the part that burns coal. Do you think there is any good reason why, whether paid to one fireman, or two firemen, or three firemen, the aggregate payment for generating steam on an engine of 185,000 pounds, should be more on the Western Pacific than it is for generating steam on a locomotive on the Southern Pacific.

Mr. Karn: That is a pretty long question.

Mr. Sheean: Read it, please.

(Question read as above recorded.)

Mr. Karn: I don't get the drift of the question, but I will answer it as I understand it. To answer that, you want me to state whether or not if the Southern Pacific, over a certain territory where they burn oil, has a competitor in another railroad, the Western Pacific, and they burn coal—now, from there, I don't understand what you want.

Mr. Sheean: I want to know whether or not, in your judgment, there is any reason why the Western Pacific should pay more for generating steam in their coal burning engines, than is paid by the Southern Pacific for generating steam on its oil burning engines.

Mr. Karn: Well, I don't know just how to answer that question, but I will give you an illustration which I believe will fit the case.

I understand that this submission that the Board is to pass

upon is for the purpose of standardizing all these rates of pay, regardless of the fact that oil may be used as fuel on one road and coal on the other.

Mr. Sheean: Where is the point at which they start out on the Western Pacific—Ogden?

Mr. Karn: Salt Lake, I believe.

Mr. Sheean: Salt Lake. An engine on the Western Pacific, weighing 185,000 pounds on drivers, and a coal burner, starts out from Salt Lake; and an engine weighing 185,000 pounds on drivers and burning oil starts out on the Southern Pacific. Is there, in your judgment, any good reason why the Western Pacific should pay for generating the steam necessary to move their engine, more than the Southern Pacific have to pay—

Mr. Karn: For moving their engine?

Mr. Sheean: Two engines, each weighing 185,000 pounds on drivers, one burning oil and the other burning coal.

Mr. Karn: Why, no, that is the reason of this standardization that I explained. Each fireman, having a similar locomotive, and moving over a similar territory, where equal tonnage could be pulled, should be paid the same rate of pay regardless of the fuel used.

Mr. Sheean: But on this proposition there would be two firemen on the Western Pacific, each drawing the same amount of money as the one fireman draws on the Southern Pacific.

Mr. Karn: Provided that the award was rendered in accordance with our request—

Mr. Sheean: Yes.

Mr. Karn: I assume that whatever weight on driver basis the Board decides on—in other words, we will put it this way, that whatever graduation based on the weight on drivers this Board decides is a point where one man cannot successfully fire a coal burning locomotive, then they will say that that is the point where we will begin using two firemen on these locomotives.

Mr. Sheean: If it is based on the theory of the earnings of the company or the possible earnings of the company, why should not the question of two firemen or three firemen or four firemen be determined by the firemen who divide the earnings?

Mr. Karn: I think I can best answer that by another illus-

tration. Let us take two steamers plying between San Francisco and Portland. They both use coal as fuel today. On each of these steamers there are 20 firemen employed. Tomorrow, one of these steamers is put into oil, and begins burning oil as fuel. Immediately that company takes off ten of those firemen. In other words, the force is reduced one-half, and 20 firemen on the coal burning ship receive \$50 a month each, or a total of \$1,000 a month, while the firemen on the oil burning boat receive \$50 a month each, ten of them or \$500 a month. Thus it costs the operators of the coal burning steamer \$1,000 a month, and it costs the operators of the oil burning steamer \$500 a month, and that is necessary because it is beyond the physical endurance of ten men to do the firing on the first steamer, for the reason that coal is used as fuel.

Hence, there is no positive chance for the fireman to choose. He takes, as I said before, the machine and fuel and generates the steam for which he is paid, and the fireman on the coal burning boat receives, each individual, the same amount as the fireman on the oil burning, notwithstanding the fact that only five men are used, and no claim, as I understand it, has ever been made that because five firemen only were necessary on that boat, they should receive twice the pay of the men in coal.

Mr. Sheean: Has there ever been made, in any of these wage movements, a claim to reduce the pay, or has the differential now established been simply used defensibly against a suggested increase?

Mr. Karn: No, I cannot give you the date, because I don't know when these boats began using oil as fuel, but on the Pacific Coast, Mr. Furuseth is the President of the Seamen's Union, and Mr. Furuseth advises that when oil was introduced as fuel, that the companies immediately strove to have the firemen, not alone reduce the number by about 50 per cent, but to strive to have them work longer hours as well, and that long hour question was the biggest fight, I think. There was no differential, however, established; and Mr. Flynn, who is the secretary of the Marine Firemen, Oilers & Water Tenders' Union of the Pacific, advises that since the introduction of oil on these steamers, in all instances, a 5 per cent increase, similar to the same increase that the coal men received, has been granted for the

oil burning men, and in some instances—a few, he says, 20 per cent increase for oil burning firemen.

Mr. Sheean: I meant more particularly in railroad service. You had spoken here this morning, in answer to certain questions, of whether there was any reduction in the wages of brakemen, when they put in safety appliances, and reductions in other lines. Has there ever been any effort to reduce wages, because of oil burners being established on any road?

Mr. Karn: By whom—by the railroads?

Mr. Sheean: By the railroads.

Mr. Karn: Well, I described the effort that was made in 1903, on our railroad.

Mr. Sheean: Was that in response to a request for an increase in wages?

Mr. Karn: No, I think, Mr. Sheean,—I could not say about this—I think you will find that I said I was not present at the conferences, and all of my statements were based upon reports rendered by representatives of our lodges, and my files, which contain the minutes of these meetings.

Mr. Sheean: Well, were those—

Mr. Karn: I did not answer your question yet.

Mr. Sheean: No. Were those conferences that were being held at that time, in response to a suggested reduction by the railroad companies, or were they being held in pursuance of a request for increased pay by the men?

Mr. Karn: At the time this request on the part of the company was made, on the Southern Pacific Railroad, that they might pay a lesser rate of pay on oil burning locomotives, the request was made—I don't think simultaneously with the request of the firemen for an increase in wages, and better conditions, or anything of that kind, but I think it was made subsequent to that time. You know that in 1903—I am sorry to have to go to this length and burden the record, but I want to make it clear. In 1903, we had a much smaller class of locomotives than we have today, on that particular railroad, and the ability of the firemen to get over the road with a small engine, because of the lighter trains they carried at that time—even with respect to the ability of the locomotive to haul more tonnage, convinced the operating officials that the contention of the firemen that they should go from an eight to a ten hour day, was

just, and they granted that request, and since that time we have had an eight hour day on that railroad. Now, I believe that the request of the company came after they had granted the eight hour day. That is my recollection.

Mr. Sheean: Just where in your schedule does it show an eight hour day? Just read the clause which says eight hours?

Mr. Karn: All the way through, since 1903.

Mr. Sheean: Just read the one.

Mr. Karn: Well, I will have to take the new schedule.

Mr. Sheean: I mean the present one.

Mr. Karn: But it begins with 1903.

Mr. Sheean: Take the present one, in which it says an eight hour day.

Mr. Karn: This is Section 33, which covers everything which has to do with overtime, on page 25.

Mr. Sheean: Now, then, point out in Section 33 where the words "eight hour day" are used.

Mr. Karn: Well, our schedule provides in the beginning that a man will receive so much money for 100 miles or less.

Mr. Sheean: I just want the three words we have been talking about—the three words "eight hour day."

Mr. Karn: Well, I know exactly what you want, and I am going to give it to you just as it is. The schedule provides—

Mr. Sheean: I just want the one place in your schedule where those three words "eight hour day" are made use of.

Mr. Karn: Well, Mr. Sheean, I want to say that if you believe that we are not capable of showing that without its appearing "eight hour day" in our schedules, we will answer the question as it is. I said, to begin with, that our schedule provided for 100 miles or less for a certain rate of pay; and on overtime, it says:

"When the time consumed in any freight trip averages less than ten miles per hour in a mountain district (that is ten hour minimum) or less than $12\frac{1}{2}$ miles per hour in valley districts, 10 and $12\frac{1}{2}$ miles per hour respectively shall be the basis for computing overtime."

That means, if you started out on a trip in the mountain district of 100 miles, that you are guaranteed overtime after ten hours. If you start out on a trip in a valley district, you are

guaranteed overtime after eight hours, because, according to my calculation, dividing 100 by $12\frac{1}{2}$ is 8.

Mr. Sheean: Well, perhaps we can agree, Mr. Karn.

Mr. Karn: Now, just a minute, I will give you the rest.

Mr. Sheean: Let me get the one thing, perhaps we can ask right. Are the three words about which I have been inquiring, "eight hour day," made use of in the Southern Pacific schedule?

Mr. Karn: Possibly not. I don't know just that it is.

Mr. Sheean: Can you answer without any qualification as to whether they are or not?

Mr. Karn: Here are the rules, and they speak best for themselves.

Mr. Sheean: Well—

Mr. Karn: "In mountain service, 100 miles or less trip or trips beginning on the same date, the basis for computing overtime will be 5 hours." That is passenger service. Now freight service, "In freight service 100 miles or less trip or trips beginning on the same date, the basis for computing overtime shall be 8 hours."

Eight or 10 or 12 in a day, or any other length of day, simply means the length of basis, after having labored that many hours, you will be allowed overtime.

Now, whether or not our agreement says we are working on an eight hour day on the Southern Pacific, I don't believe it does. I don't believe there is anything about that in there, but that is the way it applies, and the way it reads, and a man with any intelligence will so agree.

Mr. Sheean: Well, I am not prepared to put myself in the last class, but taking one who has not the ordinary intelligence, and attempting to ascertain whether or not the words "eight hour day" are made use of in your schedule, can you answer the question that I asked some time ago, as to whether or not there is provided in the Southern Pacific schedule the three words used consecutively "eight hour day?"

Mr. Karn: (Addressing the stenographer): Will you read what I told him a while ago, please—not all of it, just where I could not say that it was in there, and I don't say it is, because I don't know whether it is or not, in those actual words.

Mr. Sheean: And all that you have been quoting from, Mr.

Karn, is put under the heading in the Southern Pacific schedule "Basis for Overtime, and When Paid."

Mr. Karn: That is the caption, yes, sir.

Mr. Sheean: And all the reference that you have made to what a man of ordinary intelligence would understand as to the length of day is to be found in that schedule, under the heading of "Basis for Overtime" is it?

Mr. Karn: For a given trip, yes, sir.

Mr. Shea: Mr. Karn, let me see if I understand that right. In the valley districts of the Southern Pacific Railway, in a run of 100 miles—

Mr. Karn: In what service?

Mr. Shea: In freight service. Does overtime accrue after eight hours?

Mr. Karn: Yes, sir. On a minute basis, immediately following. No limitations whatever. If the schedule of the train from A to B, a distance of 100 miles, is 8 hours (and it could not be less than that under this article D, section 33, just read), and the firemen was on the road 11 hours, he would get 137½ miles for that trip.

Mr. Shea: In other words, he would get the equivalent of 100 miles?

Mr. Karn: And 3 hours overtime.

Mr. Shea: And three hours overtime?

Mr. Karn: Yes.

Mr. Shea: Now, do we understand that if it was in a mountain territory overtime would accrue after the expiration of 10 hours?

Mr. Karn: It would accrue after the expiration of 10 hours, if the trip exceeded 100 miles. If it was just 100 miles he would be on an 8 hour basis as well, the same as in the valley.

Mr. Shea: And, on that principle, it is termed the 8 hour day, and so understood by the employes and the officials of the Southern Pacific Railroad?

Mr. Karn: And so applied.

Mr. Sheean: And in that same connection is it the fact, and so understood and applied by both the men and the officials of the railroad company, that, if the man in 10 hours of continuous work ran a distance of 125 miles, there would be no 8 hour day

and no overtime whatever paid, although he was on duty for 10 consecutive hours.

Mr. Karn: A distance of 125 miles?

Mr. Sheean: Yes.

Mr. Karn: Yes, sir. If a man in the valley district ran 125 miles in 10 hours, he would receive precisely 125 miles, because that is the equivalent of $12\frac{1}{2}$ miles per hour.

Mr. Sheean: So that the entire reference as to so many hours per day and so forth comes properly under the heading where it is put here, "the basis for overtime," and has no reference whatever to whether a man does work 8 hours, 10 hours, or even 12 hours before overtime begins.

Mr. Karn: The article cited, section 33, provides a basis for overtime. Those are not the only rules in the schedule that apply upon any given trip. The fact of the matter is that any rule almost might apply on that particular trip. But in the early portion of the agreement, under the caption of Valley District, Rates of Pay, Lines East of Sparks; rates of pay and Mountain District, Rates of Pay; there is a defined rate of pay for 100 miles or less. This portion of it defining the 10 or the 8 hour day, as we call it, has only a bearing upon overtime, and any day, as I said before, of 10, 12, 16 or what not, the hours merely are mentioned to define the time when overtime shall begin.

Mr. Sheean: So that in actual practice the one that I have given you here, working continuously ten hours, if the man made 125 miles, there would be no overtime.

Mr. Karn: On a valley division, no.

Mr. Sheean: On a valley division, and if he ran 150 miles and was on duty for 12 consecutive hours—

Mr. Karn. There would be no overtime.

Mr. Sheean: No overtime, so-called.

Mr. Karn: No, but if he was on the road 12 hours and one minute, he would get overtime.

Mr. Sheean: And if he ran 155 miles, would there be any overtime if he was there 12 hours and one minute?

Mr. Karn: There would be no overtime if he ran 155 miles in twelve hours.

Mr. Sheean: Now, returning to this weight on drivers basis, the only time that the Southern Pacific was on a weight

on drivers basis in both freight and passenger service, was the period from 1903 to 1907.

Mr. Karn: Strictly defined in the schedule as weight on drivers basis, classified as so many pounds on drivers, yes. Prior to 1903, from 1900 to 1903, they were on a classified basis, which was practically the same thing. You said in the passenger service?

Mr. Sheean: Yes, all classes of service.

Mr. Karn: That only applied in passenger service.

Mr. Sheean: Since 1907, to the present time, the rates of pay have been based on cylinder dimensions in passenger service?

Mr. Karn: Yes, since 1907.

Mr. Sheean: Since 1907, and the weight on drivers still obtains in freight service, with the exception of this one 24-inch cylinder?

Mr. Karn: The 24-inch cylinder engine.

Mr. Sheean: In your judgment, is there any good reason why the contribution of a fireman, or the second man, the helper, on an electric locomotive should be placed on any higher or different basis than the contribution made by the fireman on a steam locomotive of equal tractive effort?

Mr. Karn: Will you read that question?

(The question was read as above recorded.)

Mr. Sheean: In the way of pay.

Mr. Karn: I do not know that I follow that. I want to be sure that I understand what you mean. Do you mean by that that if we had electric locomotives on our road, and that helpers, as you call them, were placed on these electric locomotives—is there any reason, in my opinion why they should receive a different distribution?

Mr. Sheean: A higher rate of pay than a fireman would receive on a steam locomotive of equal tractive effort.

Mr. Karn: Why they should receive a higher rate?

Mr. Sheean: Why they should receive a higher rate, yes.

Mr. Karn: I think, Mr. Sheean, that the rates of pay on all motive power, regardless of the fuel or the power used, should be determined by the ability of the machine, whatever it might be, to earn for the company.

I understand that an electric locomotive is able to move a

heavier tonnage of cars than a steam locomotive. I do not know why it is, but I have been told by Mr. Hopkins, who represents the firemen on the New York Central Lines, that electric locomotives of much less weight than the locomotives on the train take both the train and the locomotive through those tunnels. Now, if that is true, then the weight on drivers as between an electric machine and a steam machine, must be different for some reason or other. They must have more power for some reason or other, and all of my deductions are based on the ability of the machine to earn for the employer.

Mr. Sheean: I will put it strictly on the tractive effort basis. You figure that 80,000 pounds on drivers are equivalent to about 20,000 pounds tractive effort, do you not?

Mr. Karn: I do not know anything about that. I do not figure that.

Mr. Sheean: You know nothing about tractive effort?

Mr. Karn: No, I have explained that two or three times.

Mr. Sheean: You are familiar with the proposal made here, are you not?

Mr. Karn: Yes. I did not have anything to do with the proposal, was not present when it was formulated, at all.

Mr. Sheean: But 80,000 pounds on drivers in steam service is treated as equivalent to 20,000 pounds tractive effort in electric service, is it not?

Mr. Karn: I don't know. I will tell you how we did it. We just had a settlement of that proposition on our line, in August and September, I believe, 1913, through mediation, and our rule reads that the same rates and conditions shall apply in electric service as apply in steam service, rates to be interchangeable.

Mr. Sheean: You do know, do you not, that in this proposal there is a graduated rate of pay proposed for the motormen on electric locomotives, while the rate of pay of the helper is stationary throughout and does not change with tractive effort?

Mr. Karn: I know that that is true, and, as I said before, I was not present when that was made. I assure you that if I had been present at the time that was made, that I should have striven in every way possible to bring about the same condition for the men on the electric locomotive, as applies for the men on the steam.

Mr. Sheean: You do know, also, do you not, that on a locomotive on which the engineers rate is \$5.00, in freight service, the fireman's proposed rate is \$3.75?

Mr. Karn: I assume that is the rate. I did not read it recently.

Mr. Sheean: Where, in electric service, when the motor-man's pay is fixed at \$5.00, the helper's is fixed at \$3.75.

Mr. Karn: As I said, I don't know why that was done. I think it was absolutely wrong to base the rates of pay for a fireman on an electric locomotive, with respect to the graduations, to make a flat rate, or anything of that kind—just as wrong as it could be. Now, I said further than an electric locomotive, lighter on the drivers, we will call them, than the locomotive is on its drivers, is capable, for some reason unknown to me, of pulling vastly more tonnage than the steam locomotive.

Mr. Sheean: Let us disregard the matter of the weight on drivers, and let us take them of equal tractive effort, perhaps, and without discussing the figures we can get a statement on principle. Take an electric locomotive which has an equal tractive effort of a steam locomotive, is it your judgment that the pay of the helper on the electric locomotive should be the same as the pay of the firemen on the steam locomotive, of equal tractive effort?

Mr. Karn: Yes, sir.

Mr. Sheean: Then, if this proposal fixes the rate of pay of the helper on the electric locomotive at a higher rate than it fixes the pay for the fireman on an engine of equal tractive effort, do you think the proposal is wrong?

Mr. Karn: I have been told, Mr. Sheean, by those who framed that, that they had very little data to work on, in the first place, and in the second place, they were informed that at points where these electric locomotives are used, that they were frequently called upon to use two and sometimes three of those electric locomotives on a train, to move it over a particular grade, and because they were called upon to do that, they fixed a flat rate. I am not familiar with it. I was not present when it was formulated.

Mr. Sheean: But, in your judgment, there is no more reason for making any differential in the matter of motive power,

whether it be electricity, or oil, or coal—there is no reason for making any distinction between any of those?

Mr. Karn: No, sir; I should think that would be very inconsistent, if I were to say that a fireman on an electric locomotive, of the same tractive effort, capable of earning the same kind of money for the owner as the steam locomotive, that there should be any more money paid to one than to the other, regardless of whether it was an oil or coal burning locomotive.

Mr. Sheean: I thought you said this morning that the principal duty of the fireman was the generation of the steam, and whether he did that by means of coal or oil, in your judgment, made no difference?

Mr. Karn: That is what I said.

Mr. Sheean: Now, if the fireman or second man upon an electric locomotive, has nothing to do with the generation of the power, is there any distinction to be based upon that fact?

Mr. Karn: That might be the reason, Mr. Sheean, why the rates were fixed as they are. As I said before, I was not present and don't know why, and the only answer that I could give you would be one based upon personal opinion, and perhaps that would not be given any very great consideration—would not carry much weight.

Mr. Sheean: But no matter how the steam is generated, or the physical efforts used in generating it, you feel that for an equal amount of motive power developed, through steam, the pay of the person generating that should be the same?

Mr. Karn: Yes, sir; for the reason that he accomplishes the same result, and because other industries recognize that as being the proper manner of handling affairs of that kind. I consider oil nothing more nor less than a labor saving device, and introduced by the railroad companies, possibly, because it was cheaper, in one instance, and in the other, because they wanted to use power that one man could fire.

Mr. Sheean: And the firemen on coal burning engines have the same duties and responsibilities as those who burn oil—firemen on oil burning engines?

Mr. Karn: Except, as I stated, that firemen are held closer to account. Our experience is, since the introduction of oil on our system, that firemen have been held closer to account, for failure to observe signals, orders, and so forth.

Mr. Sheean: That is, in determining whether or not, in case where something has gone wrong on oil burning engines, those who conduct the investigation may hold to stricter accountability than the ones on coal burning?

Mr. Karn: Those who conduct the investigation would, naturally, and I feel that they should hold a fireman on an oil-burning locomotive much more closely to the observance of these things than a fireman on a coal burning locomotive, because, as you understand, the fireman on the coal burning locomotive is, notwithstanding the testimony you have introduced here, very busy supplying his fire box with coal, and after night, he is compelled to look into the furnace, and that heat, in a measure, blinds him, and he could not observe these signals closely, like the oil burning man could. He is in position where he can always see them.

Mr. Sheean: There is no difference in the rules or obligations, or responsibilities of the firemen, whether on coal or oil, as laid down in the Book of Rules?

Mr. Karn: No; not as laid down in the Book of Rules.

Mr. Sheean: And operating officials recognize the fact, and accept as an excuse for not doing some part of the general duties, the fact that at that particular time a fireman was engaged in performing some other duty, both of which he could not perform at the same time.

Mr. Karn: I think that when the fireman can show honestly that he could not and should not really have been held to account for that, because of his attention being required elsewhere,—I think these officials have been very fair and have recognized that from time to time.

Mr. Sheean: And at no time has there been any change in the rules, as to the duties of a fireman, when oil was substituted for coal?

Mr. Karn: You mean by that that the Book of Rules prescribing duties of firemen has not been changed with respect to oil and coal firemen?

Mr. Sheean: Yes.

Mr. Karn: No; I think they are absolutely identical.

Mr. Sheean: So that the fireman on the coal burner has all the duties and responsibilities which the fireman on the oil burner has?

Mr. Karn: Yes, sir.

Mr. Sheean: In addition to that, he has to supply the coal to the fire box?

Mr. Karn: He has the duty of supplying the coal to the fire box, for the purpose of doing what the fireman on the oil burner does, generating steam.

Mr. Sheean: And also taking on of coal, en route?

Mr. Karn: Yes; if he were short of coal, he would have to take it on. I have done that lots of times.

Mr. Sheean: Shaking grates?

Mr. Karn: Yes.

Mr. Sheean: Cleaning ash pans?

Mr. Karn: Yes.

Mr. Sheean: Sweeping decks?

Mr. Karn: Yes, sir; all of which I understand, from your exhibit, consumes from an hour to two hours, out of fifteen or sixteen hours' work.

Mr. Sheean: And whether it consumes two hours or sixteen hours, in your judgment, it makes no difference in the matter of the fixing of the pay.

Mr. Karn: For whom?

Mr. Sheean: For the fireman who generates the steam on one engine by the use of oil, and on another engine by the use of coal.

Mr. Karn: No, Mr. Sheean, I think it makes no difference. The fireman performs a certain service—generates just as much steam for the company on one as he does on the other, and should be paid the same compensation.

Mr. Sheean: I think that is all.

Mr. Nagel: But, Mr. Karn, when it takes only one engineer on the oil burning engine—or one fireman, and takes two firemen on the coal burning engine, to produce precisely the same tractive effort in both, you say that each one of the three firemen shall have the same compensation?

Mr. Karn: Same identical compensation, yes, sir.

Mr. Nagel: Don't you abandon the theory that the tractive effort shall be the test of compensation?

Mr. Karn: No, sir; only to this extent, and not to any extent for that matter. When a machine is furnished that is so large that it is impossible for one man to successfully and eco-

nomically fire it and produce steam, then it is up to the company who own the machine, to decide how they are going to continue that machine in use, with the greatest economy.

Mr. Nagel: I understand the reason, but is not the effect of it to put the two firemen in the position on the one engine that each furnishes only one-half of the tractive effort?

Mr. Karn: No; I don't think so. I think how the steam is generated, Mr. Nagel, and by whom or how many it takes to generate that steam, is not a factor at all. The factor is that the machine, when properly supplied with steam, regardless of the fact that it takes two or three, or four men to do the work, can only pull so many cars, and it is up to the owner to decide how he is going to handle that economically. If he wants to put a labor saving device on, like oil as fuel, or an automatic stoker, then one man can handle it, and we don't want two men on that.

RE-DIRECT EXAMINATION.

Mr. Carter: I am informed, Mr. Karn, by a gentleman present in the room, that on the International & Great Northern Railroad, when they had both coal and oil burning engines of the same size or tractive power, that the rating on the oil burning engine was 100 tons more than on the coal burning engine. Do you have similar experiences on the Southern Pacific?

Mr. Karn: Why, I made the statement last Saturday that the class of locomotive that I have fired in both coal and oil, that when the oil burning locomotive was introduced, that greater tonnage was added. Now, just as to how many tons, I can't say, but I have copies of all the time cards, showing the rating, and if you would like to have that ascertained, I could get it, I think, overnight.

Mr. Carter: Well, on these modern, heavy cars, it would not take many cars to be 100 tons, would it?

Mr. Karn: No, sir; about two.

Mr. Carter: Well, presuming that this additional hundred tons was hauled on these oil burning locomotives, 100 miles, and the rate was one cent per ton per mile, it would be just \$100, would it not, that the company would receive for this additional 100 tons?

Mr. Carter: Well, if the freight rate on this class of freight was one cent a ton a mile—

Mr. Karn: Yes.

Mr. Carter: And there was 100 tons carried 100 miles, would it not be \$100 additional revenue?

Mr. Karn: That would be 100 tons at a cent a ton mile, which would be \$1.00 a mile, or \$100.00, yes, sir.

Mr. Carter: The fact, if it is a fact, and we are presuming it is, that by the substitution of oil for coal, the same fireman can earn \$100 more for his employer than he did as a coal burning fireman, don't you think that his employer should at least pay him the same wages, instead of asking him to work for 15 cents less?

Mr. Karn: Why, yes.

Mr. Carter: Now, I believe you stated that when oil was substituted for coal on certain steam vessel, that they did not reduce the wage of the firemen, but reduced the number of the firemen?

Mr. Karn: Yes; about 50 per cent in many instances—most instances.

Mr. Carter: Then, if in this proposition, upon the supposition it will be granted—if two firemen are used on a boat burning engine, weighing 185,000 pounds on drivers, and the company sees fit to substitute oil for coal, under our proposition could they not reduce the number of firemen one-half?

Mr. Karn: On the large engines, in coal, yes. I tried to make that clear.

Mr. Carter: Therefore, the railroads would be able to avail themselves of one-half the expense for firemen, by simply changing the fuel from coal to oil, could they not, under our proposition?

Mr. Karn: Yes, sir, or introducing any other labor saving device that would bring about the same result.

Mr. Carter: Such as an automatic stoker, or something of that kind?

Mr. Karn: Yes, sir.

Mr. Carter: Why is the phrase "automatic stoker" generally used? Is it like an automatic door opener, or an automatic ash pan?

Mr. Karn: No, I understand that the automatic stoker supplies the coal itself to the fire box.

Mr. Carter: Do you understand that these stokers don't

require the attention of the engineer to see that they are operating properly?

Mr. Karn: I had reference, Mr. Carter, to the expenditure of energy.

Mr. Carter: Do you know whether the government examining boards before they issue a license to a marine engineer, require him to have served a certain length of time as a water tender, or oiler, or as a marine fireman, or do you know?

Mr. Karn: No, I do not know anything about what the Board requires.

Mr. Carter: Now, with regard to this 8 hour day, is the 8 hour day to railroad men equivalent to a speed basis of $12\frac{1}{2}$ miles an hour?

Mr. Karn: Yes.

Mr. Carter: That is, we can either describe it as an 8 hour day or a speed basis of $12\frac{1}{2}$ miles an hour?

Mr. Karn: Yes.

Mr. Carter: Now, why do we use those two expressions? Twelve and one-half into one hundred miles is eight, is that it, or rather, 8 hours into 100 miles is $12\frac{1}{2}$ miles an hour?

Mr. Karn: That is the commonly accepted term.

Mr. Carter: But when the multiples are 10, that is decimal in character, 100 miles divided by 10 hours produces the result of 10 miles an hour, does it not?

Mr. Karn: Yes.

Mr. Carter: And if it were a 9 hour day it would be an equivalent of 100 divided by 9?

Mr. Karn: Yes.

Mr. Carter: About $11\frac{1}{2}$, or something like that?

Mr. Karn: Eleven and one-ninth.

Mr. Shea: You mean if it was a nine hour day it would be the number of miles divided by 11?

Mr. Carter: Yes, I mean that. I get complicated myself sometimes. Now where you have this $12\frac{1}{2}$ miles speed basis, is it not equivalent on your road to a guaranty of a full day's pay for eight hours or less work?

Mr. Karn: The agreement reads 100 miles or less.

Mr. Carter: Well, about the 8 hours.

Mr. Karn: And the overtime clause reads that you are guaranteed—it says guaranteed—

Mr. Carter: One hundred miles?

Mr. Karn: No, sir. "When the time consumed on any freight trip averages less than 10 miles per hour on mountain district or less than $12\frac{1}{2}$ miles per hour on valley district, 10 and $12\frac{1}{2}$ miles per hour respectively shall be the basis for computing overtime."

Now, I made a statement there that is not correct. I said it guaranteed. That is what we commonly describe as our guaranty. I did not intend to misrepresent the thing at all. We get 12 miles and one half per hour on Valley, and on Mountain, where it is less than 100 miles—that is, where it is not over 100 miles; and where it is over 100 miles we are on a 10 hour basis in mountain territory only. In valley territory it does not make any difference, it is still an 8 hour day.

Mr. Carter: But, regardless of the technical language of the schedule, is it not a fact that if you went 100 miles in 6 hours, under your schedule you would get a full day's pay for it?

Mr. Karn: Yes, if we went 100 miles in two hours or in two minutes, we would get a full day's pay for it.

Mr. Carter: Therefore, it is an 8 hour day to all intents and purposes?

Mr. Karn: Yes.

Mr. Carter: But you must confess that unless we are peculiarly acquainted with the technical language, there might be somebody who would think it was not an 8 hour day.

Mr. Karn: I hate to admit that after the statement I made a little while ago.

Mr. Carter: Somebody might not have heard you make that statement.

Mr. Karn: I said anybody with intelligence who could read that schedule would be convinced that that was true.

Mr. Carter: I think not, Mr. Karn, because though it seems simple to you and perhaps to me, to a layman it would be very complex.

Mr. Karn: I beg the pardon of anybody whom I may have injured or hurt in that statement.

Mr. Shea: Referring to this book, what does that caption mean there?

Mr. Karn: That does not have anything to do with our schedule. That is something compiled for road reference for

the firemen, and is no part of the schedule. We simply compile that for our firemen. It is not a matter subscribed to by the officials of the company at all. That is simply a table for ready reference, to show the rates of pay on locomotives of certain classifications, and the caption has no bearing whatever on the 8 or 10 hour day.

Mr. Carter: Mr. Karn, if we were at a loss for evidence that there should be a standardization of wages and basis of wages, does not this complication that has arisen since you have been a witness on the stand furnish that evidence? If we can get what we are asking for henceforth, it will not be so hard to understand what the rates and conditions are.

Mr. Karn: I think our submission would not alone standardize, but to a very great extent clarify many of the clauses contained in all schedules.

Mr. Carter: Do you believe it is the great diversity of practices and language in schedules that has necessitated so much time being devoted in an attempt to explain and elucidate what the conditions are on these different roads?

Mr. Karn: Well, I think that on every railroad in this country there is something in that individual schedule to cause the complications. I know there are in ours, and the unfortunate feature on most railroads probably is the fact that men are called upon to draft these schedules whose knowledge of the English language is not such that they can clearly express themselves. And, on the other hand, there is always a disposition on the part of the official with whom you make the agreement to have a rule as flexible as possible. In fact, they insist upon that in many instances. They claim your rule is too hard and fast, and permits of no discretionary power on the part of the official without some penalty being applied. And I think that if our proposition as submitted, with possibly one or two exceptions, where it should be classified, were accepted, that we would have a schedule standard in itself, that would be more readily understood because of the fact of it being of general application, and once an interpretation was placed upon it by those having the right to place that interpretation it will go out uniformly and be so applied by both sides.

Mr. Carter: During this arbitration, there have been some very expensive investigations made to ascertain just what

the rules and rights and accruing conditions were on the different roads, and the employees have introduced bulky exhibits to try and show what the facts were. On the other hand, the railroads have introduced very large volumes, for the same purpose. You believe that if we have a standardization here, all of that misunderstanding of future Boards of Arbitration will be eliminated?

Mr. Karn: Entirely eliminated, yes, sir.

Mr. Carter: Now, of course, I take it, you have had considerable experience in schedule making, and are a man of some intelligence. Don't you often find yourself at a loss to really know what your schedules mean, and don't you write to the chairman on other roads to ask them what that means?

Mr. Karn: I have on numerous occasions, yes, sir.

Mr. Sheean: Bearing in mind the fact there is a general correspondence between general chairmen to ascertain what these different schedules do mean?

Mr. Karn: Yes, sir, when we form a new schedule, or rather promulgate one, we send copies to the general chairmen, in the western territory, and frequently to those in the east.

Mr. Carter: Do you believe that would simplify matters, if we had a standard rate of wages for engineers and firemen, based on weights on drivers, as we have asked in this proposition?

Mr. Karn: I certainly do.

Mr. Carter: During the cross-examination, in the early portion of it, I think before noon, you were asked if it were not a fact that in passenger service the wages of firemen were not based upon weights on drivers. Will you turn to page 5 of your present schedule "Mountain District Rates of Pay." Section 3 gives the rates between Bakersfield and Los Angeles, between Sacramento and Sparks, between Red Bluff and Ashland, between Ashland and Roseburg, and between Los Angeles and Indio. Does that make up a considerable proportion of the mileage on the Southern Pacific system?

Mr. Karn: No, that covers the mountain territory, what is commonly termed as mountain territory.

Mr. Carter: Just for a guess, is there 100 miles of this territory?

Mr. Karn: Oh, yes. I will give it to you in just a minute

exactly what it is. Now, I may not be exact, but it will be pretty close. I will say in the neighborhood of 1,050 miles.

Mr. Carter: That is a pretty good road in itself, isn't it, 1,050 miles?

Mr. Karn: A pretty steep one.

Mr. Park: What is the mileage of the Southern Pacific?

Mr. Karn: Approximately 7,000 I think.

Mr. Carter: Well, of this 1,050 miles of mountain district will you read the rates of pay of firemen in mountain service?

Mr. Karn: All of it?

Mr. Carter: Yes, three or four paragraphs.

Mr. Karn: Sec. 2 (a) In passenger service on locomotives having cylinders under 18 inches in diameter, 100 miles or less, \$3, over 100 miles, pro rata per mile.

(b) In passenger service on locomotives having cylinders 18 inches and over in diameter, and weighing over 110,000 pounds, to and including 140,000 pounds on drivers, 100 miles or less \$3.13; over 100 miles pro rata per mile. This also applies to standard gauge Consolidation, eight-wheel connected and Atlantic type locomotives weighing less than 110,000 pounds on drivers.

Mr. Carter: Does that paragraph "b" place most of your passengers on the weight on drivers? Would most of your passenger engines fall under "b"?

Mr. Karn: Yes, in mountain territory practically all of them. But you understand, if you are trying to bring out the point that Mr. Sheean brought out, that passenger service was all based on cylinder dimensions, you will have to go back to the record, to find that we had in valley districts.

Mr. Carter: Then you are only speaking of valley districts?

Mr. Karn: Yes.

Mr. Carter: I gained the impression you meant on the Southern Pacific.

Mr. Karn: No, only on valley districts.

Mr. Carter: In "c."

Mr. Karn: "(c) In passenger service on locomotives weighing over 140,000 pounds on drivers 100 miles or less, \$3.27; over 100 miles, pro rata per mile. Between Roseville and Truckee 3.9 cents per mile.

“(d) In passenger service on ‘Mallet’ type locomotives, 100 miles or less, \$4; over 100 miles, pro rata per mile.”

Mr. Carter: Now, Mr. Karn, I understand you to say that in 1907 settlement this cylinder basis was injected in the Southern Pacific schedule, valley rate. Was that a general wage movement of practically all the western railroads, or a large portion of them?

Mr. Karn: Practically all of them.

Mr. Carter: And after negotiating with all of these roads collectively, did they submit a proposition that was accepted by the representatives of the firemen, that in passenger locomotives having cylinders less than 18 inches a minimum rate would be paid, and over 18 inches a higher rate would be paid?

Mr. Karn: Yes, and in applying that to our schedule of rates on mountain territory, having been based on a rate of pay which was higher than that agreed upon between the Conference Committee of Managers and our committee, it necessitated the putting into effect on that mountain territory of the weight on drivers basis in passenger service.

Mr. Carter: Now then, this change on the valley district was not occasioned by any demand of either the officials or the firemen of the Southern Pacific Railroad?

Mr. Karn: No, sir.

Mr. Carter: This is just standardizing it to 1907, that is, the Conference Committee in the concerted movement standardized it in this way.

Mr. Karn: No. Oh, you mean with respect to the valley rates. That may be so termed possibly. You understand that when the settlement was reached between the Conference Committee of Managers and the firemen there was the usual saving clause that in territory where a higher rate of pay was allowed that this settlement would not operate to reduce that rate of pay. And I think you will find that in many instances there were no increases of pay on some of these locomotives.

Mr. Sheean: Mr. Karn, just for my information, that will be all I think, I want to ask you; on that same page 5, does that section (b), in mountain districts, put your passenger service on both the cylinders and weight?

Mr. Karn: Yes, sir.

Mr. Sheean: That is, it must be both above cylinders of 18 inches and also above a certain weight.

Mr. Karn: Why, (b) you mean?

Mr. Sheean: Yes.

Mr. Karn: In passenger service, on locomotives having cylinders 18 inches and over in diameter and weighing—there seem to be two qualifications to me.

Mr. Sheean: That was the way I read it. I wondered if in fact you had that.

Mr. Karn: Yes, I would so interpret that to read that way, if it was put up to me.

Mr. Sheean: And combines the both, cylinders and weight, to take a certain rate.

Mr. Karn: Yes, because of the 1907 settlement.

Mr. Sheean: That is all.

Mr. Carter: This rate reached in 1907 was simply what is known as the minimum rate, was it not?

Mr. Karn: Yes.

Mr. Carter: A great many roads paid a higher rate than this minimum rate. Some roads, however, had paid a very low rate of wages, and it made considerable increase for them, such as the Illinois Central.

Mr. Karn: The Illinois Central in particular, I remember.

Mr. Carter: It brought the Illinois Central up considerably didn't it?

Mr. Karn: Yes.

Mr. Carter: But it did not affect your engines in the mountain districts?

Mr. Karn: I don't believe it affected our engines in the mountain districts. It affected a good many of our engines in the valley districts, yes.

Mr. Nagel: Mr. Karn, you have said that where two firemen are in charge of one engine, of 185,000 pounds on drivers, each fireman should receive as much as one fireman in charge of an oil burning engine of the same weight?

Mr. Karn: Yes, sir.

Mr. Nagel: Do you also say that each one of two firemen in charge of an engine of 185,000 pounds shall receive more than one fireman in charge of an engine of 170,000 pounds?

Mr. Karn: Did your question bring this out, that I had

said that the combined efforts of two firemen on a locomotive weighing 185,000 pounds should not meet with a compensation only the equivalent of the one man on the oil burner?

Mr. Nagel: No, just the opposite. I said each man should receive as much as the fireman on the oil burning engine.

Mr. Karn: Then I don't understand your next question.

Mr. Nagel: The second question is whether each fireman in charge of an engine of 185,000 pounds weight on drivers shall receive more than 1 fireman in charge of an engine of 170,000 pounds weight on drivers.

Mr. Karn: Maybe I don't understand your question, but I understand you to mean this, that if, because of our request that two firemen be placed on locomotives with 185,000 pounds on drivers, and, conforming to that, the Board granted that request and put two firemen on those locomotives, and the request contained a differential, that is a line of demarcation there that would provide for locomotives weighing 125,000 pounds \$3.50 and for a locomotive weighing 185,000 pounds \$3.75, that you want me to say whether or not I believe that on that locomotive weighing 185,000 pounds that the two men employed should each receive the rate contained in our proposition?

Mr. Nagel: Yes.

Mr. Karn: Yes, sir, I think so.

Mr. Nagel: While the other fireman received lower for 175,000 pounds.

Mr. Karn: Yes.

Mr. Burgess: Mr. Karn, I tried to follow your testimony on cross examination, and I understood you to explain that point that Mr. Sheean brought out, that it was made that way because of the fact they might put two of these electric locomotives together. Is that right?

Mr. Karn: I have been told by some of the members that they did that, and one man gave as his opinion that that was why a flat rate was granted, because that was likely to occur at any time, and they figure where they are required to handle three or four of these locomotives they should not be paid the same as for handling one.

Mr. Carter: That is what I understood. You qualified what you said in answer to Mr. Sheean's interrogation in regard

to that particular point just as you have now. That is, you were told that by somebody?

Mr. Karn: I was not present when that was formulated at all.

Mr. Carter: Mr. Chairman, and gentlemen of the Board, just previous to adjournment at noon I was asked a question that I must confess I was unable to answer. I was asked what was the difference in the pay of firemen when cylinders of engines were bushed. I have made an investigation, and I briefly read into the record the reply:

"On the Great Northern Railroad when engines were 24 inches and over, the rate was \$3.75, and when reduced below 24 inches the rate in passenger service was \$3.05, or 70 cents less per 100 miles."

Mr. Park: How much on freight?

Mr. Carter: None. They continued to pay pro rata on freight service. In fact, they did not bush cylinders in freight service.

Mr. Park: Were those engines used in passenger service?

Mr. Carter: How is that, Mr. Park?

Mr. Park: Is that class of engine used on passenger service?

Mr. Carter: The engines bushed, I understand, were all used in passenger service, but I must confess I don't know the object of that question. They were the passenger type of engine that were bushed. I suppose the railroad could use them in either service if they wanted to.

Mr. Burgess: Now, then, on that particular railroad, the Great Northern, by bushing these cylinders, the company escaped paying 70 cents per 100 miles.

Mr. Karn: In passenger service?

Mr. Burgess: Yes.

Mr. Karn: Now, I have here an official classification of engines issued by the Atchison, Topeka & Santa Fe and referring to the second last page I find this:

"Notice on pending changes. 1270 class. Authority given to reduce cylinder bar from 25 to 23½ inches on coast and western line engines. Original dimensions retained on Gulf line engines."

By reading over here I find that the 1270 class is described

as being the Baldwin Pacific, with cylinder reduced to 23½ x 28 inches. It gives the weight on drivers, etc.

Now, by turning to Employees' Exhibit No. 4, and taking up the Atchison, Topeka & Santa Fe, I find on page 1 that this Pacific engine weighing 100,000 to 140,000 pounds on drivers, is the 1270 class, and the rate on the Santa Fe in passenger service, Chicago & Canon City, Wellington and Pecos, including branches, was reduced to \$2.65, or a loss of \$1.10 per 100 miles to the firemen in passenger service.

Mr. Park: Did the Atchison pay \$3.75 in passenger service on an engine weighing 140,000 pounds on drivers?

Mr. Carter: That was the award. I think it was because of the cylinder basis being that way that the Western railroads were so anxious to get away from the cylinder basis and adopt the weight on drivers.

Mr. Park: But you thought it was so wrong that you called the committee together for another conference?

Mr. Carter: There were twenty-one disputes, if I remember right, and this was only one.

Mr. Shea: Mr. Carter, now right there, let me get that straight in my mind. Upon whose request did you call the Committee?

Mr. Carter: I might say that it was partially mine, and equally the Chairman of the Managers' Committee, Mr. Nixon.

Mr. Shea: Did Mr. Nixon, as Chairman of the Managers' Committee, make a request upon you to call your committee?

Mr. Carter: No, I think not. I think that Mr. Nixon and I had discussed by correspondence so many disputes that when I was at Houston, Texas, I wired him asking him if he would agree with me to refer all disputes back to the Board of Arbitration, and Mr. Nixon answered, I think by letter, that he would, and we joined in a letter to Judge Chambers and the other two members of the Board, requesting that they reconvene in the city of Chicago and determine the disputes between us.

Mr. Shea: Now, as far as that is concerned, after the Board of Arbitration placed an interpretation on the award, and the interpretation was made known to the railroad managers, what action did Mr. Nixon then take?

Mr. Carter: He joined with me in a written request to the Board of Arbitrators—

Mr. Shea: No, I mean after the Board of Arbitrators had convened and interpreted the award. That, I understood, was before the Western Committee convened here in Chicago.

Mr. Carter: Oh! Then Mr. Nixon addressed a communication to me, saying that the Managers' Committee desired a conference with our committee to discuss the award and interpret it. I do not remember the exact language of the letter, but it meant that.

Mr. Shea: And upon Mr. Nixon's request you convened the Western Committee?

Mr. Carter: Yes, and the principal proposal was that we abandon the cylinder basis and adopt the weight on drivers basis.

Mr. Shea: Then the convening of the Committee was not upon your initiative?

Mr. Carter: No, sir.

Now, by turning to page 2, we find under the same weight on drivers, Pacific type engine 1270 in passenger service, between Pueblo and Denver, drawing only \$2.85, which is a loss of 90 cents per day to the fireman.

Turning to page 3, La Junta and Raton, Las Vegas and Albuquerque, Rio Grande Division and Clovis and Belen, we find that the Pacific type 1270 there, is drawing \$2.85, or a loss of 90 cents a day.

Turning to the next page, we find that that same engine between Raton and Las Vegas, is drawing \$2.80, a loss of 95 cents per day.

That is all in passenger service. Now, we will take up freight service.

I find that Chicago to Canon City and Wellington to Waynoka, engine 1270 is drawing \$3.25 by having its cylinders reduced, by a loss of 50 cents a day.

Turning to the next page, page 6, we find that the same engine between Waynoka and Pecos, is drawing \$3.25, or a loss of 50 cents a day by bushing the cylinders.

Taking the Pacific type 1,270, the same engine, Clovis to Belen and Rio Grande Division east of Deming, that engine is drawing \$3.55, or a loss of 20 cents a day.

Turning to page 8, between Pueblo and Denver, that same engine is drawing \$3.65, or a loss of 10 cents a day.

Between La Junta and Raton, Las Vegas and Albuquerque

and west of Deming, that engine is drawing \$3.65, a loss of 10 cents a day.

On page 10, between Raton and Las Vegas, that same engine is drawing \$3.55 or a loss of 20 cents a day.

Mr. Park: Those prevailing rates were fixed mutually, were they not, between the firemen on the Santa Fe and the managers, and agreed to?

Mr. Carter: Do you mean this differential?

Mr. Park: This schedule as you read it now.

Mr. Carter: I think so. The award of 1910 only gave a flat increase, based upon whatever the rate was.

Mr. Park: And this loss you speak of, below the abnormal rate, was wiped out by another conference in which the men and the managers agreed to the present rates, which are permanent, and now prevail.

Mr. Carter: I presume that any wage agreement is an agreement, whether it is satisfactory to either side or not?

Mr. Park: Always.

Mr. Carter: Now, turning to page 11, in through freight service, Starkville, Blossburg, Hebron and Waldo districts, this same engine is paying \$3.15 a day, or a loss of 60 cents a day, by bushing the cylinder.

Turning to page 12, in through freight service, in the Santa Fe district, the rate there for this same engine is \$2.95, or a loss of 80 cents a day.

I think, Mr. Chairman, after having read this, you will see why I could not answer without a particular investigation.

Mr. Sheean: How many engines are there, all told, that are affected by this?

Mr. Carter: I could not tell.

Mr. Sheean: This blueprint shows, does it not?

Mr. Carter: If you will like, I will make an investigation.

Mr. Sheean: Upon the page you called attention to, does it not show that there are just twelve of them?

Mr. Carter: What page is that?

Mr. Sheean: Page 14. I think you read from that.

Mr. Stone: If they had had any more, they would have bushed the cylinders just the same, would they not? It would have had the same effect?

Mr. Sheean: I do not know.

Mr. Carter: On page 12 it shows the number of locomotives, twelve Baldwin Pacifics. Is that right?

Mr. Sheean: Yes.

Mr. Carter: I do not know whether they have got any more or not. I notice, since you call attention to it, that there were twelve.

Mr. Burgess: Whether it was twelve or twelve hundred, the railroad companies saw fit to go to the expense of bushing the cylinders, to get rid of paying the \$3.75 a day.

Mr. Carter: Apparently so. I do not know whether twelve is the number or not. It may be that they have introduced many more engines of that same class since then.

Mr. Sheean: Do you think it is their obligation to build engines with cylinders which would provide the highest rates of pay to firemen?

Mr. Carter: How is that?

Mr. Sheean: I understood you to say that they may have gotten a lot more engines since that time, and I wondered if your idea was that in ordering new engines they were under any obligations to order them, with cylinders that would take an especially high rate?

Mr. Carter: I do not know. I have heard that some roads claim that they bushed the cylinders because it made a better engine. Now, if it made a better engine, it would seem to me that the railroads could better afford to pay the \$3.75 rate to firemen, instead of reducing the wages; but when they changed the size of the cylinders, either of the engines that they did have, or of those that were ordered, they got away from the \$3.75 rate.

Now, I read to you that the exception was made in this blueprint here, of the Gulf, Colorado & Santa Fe Line. I have this information. Certain locomotives on the Gulf, Colorado & Santa Fe having cylinders 24 inches or over, paid the firemen \$3.75 a day. The cylinders were bushed to less than 24 inches, and the rates of wages of firemen on these engines were reduced to \$2.65 in passenger service, a loss of \$1.10 per day in passenger service, and the rate was reduced to \$3.20 a day in freight service, or a loss of 55 cents a day in freight service.

Mr. Carter: I am sorry I was not able to give that information before noon, but I cannot keep track of all these things.

The Chairman: Call your next witness.

Mr. Carter: Mr. DeGuire.

G. N. DE GUIRE was called as a witness in rebuttal, and having been previously sworn, testified as follows:

DIRECT EXAMINATION

Mr. Carter: Mr. Chairman, I think Mr. DeGuire is qualified as a witness. Mr. DeGuire, did you examine Exhibit No. 23, presented by the railroads?

Mr. DeGuire: Yes, sir.

Mr. Carter: What does that purport to show?

Mr. DeGuire: It purports to show that the wages of machinists, employed in the Chicago, Milwaukee & St. Paul Railway locomotive shops, is exceedingly low.

Mr. Carter: That is, on its face it would appear that the wages of the Milwaukee machinists are low. Is that true?

Mr. DeGuire: That is true.

Mr. Carter: As compared with the wages of engineers and firemen?

Mr. DeGuire: Yes, sir.

Mr. Carter: Did you know that there was read into the proceedings by Mr. Keefe, the annual earnings of certain machinists? Did you read that?

Mr. DeGuire: Why, I do not believe that it was the annual earnings. I believe he estimated what they could earn.

Mr. Carter: I think the annual earnings, or something of that kind were shown. Now, did you make an investigation of the wages and working conditions of machinists on the Milwaukee Road, as compared with machinists who work for other people than railroads?

Mr. DeGuire: Yes, sir.

Mr. Carter: I desire to introduce this as Exhibit No. 83, Mr. Chairman.

(The document so offered and identified was received in evidence and thereupon marked "Employees' Exhibit No. 83, March 15, 1915.")

Mr. Carter: What are the different subjects covered in this exhibit, Mr. DeGuire?

Mr. DeGuire: On page 2.

Mr. Carter: Now just read the contents. Turn to the contents.

Mr. DeGuire: Turn to contents, page 2:

“Wages and Working Conditions of Machinists—Railroad Wage Agreement Compared with Other Industry.”

Mr. Carter: Second.

Mr. DeGuire: “Earnings of Engineers, Firemen and Machinists Employed by the Chicago, Milwaukee & St. Paul Railroad (Eastern Lines.)”

Mr. Carter: Next?

Mr. DeGuire: “Comparison of Earnings of Engineers in Switching Service and Earnings of Machinists, on Chicago, Milwaukee & St. Paul Railway (Eastern Lines.)”

Mr. Carter: Now, Mr. DeGuire, will you turn to the first table that begins on page 2? Do I understand that this table is continuous, right across the two pages?

Mr. DeGuire: Yes, sir.

Mr. Carter: And goes across all pages?

Mr. DeGuire: Yes, sir.

Mr. Carter: To and including page 15?

Mr. DeGuire: To and including page 12.

Mr. Carter: Now, what does the first column show?

Mr. DeGuire: Shows the subject.

Mr. Carter: What does the second column show?

Mr. DeGuire: The schedule of rules and rates for the machinists and apprentices of the Chicago, Milwaukee & St. Paul Railway Company.

Mr. Carter: What does the third column show?

Mr. DeGuire: The third is the form of wage agreement between the machinists and Anheuser-Busch Brewery Association and William J. Lemp Brewing Company of St. Louis.

Mr. Carter: Did you arrange the middle column, or the Milwaukee Machinists' schedule, in its exact order, as it appears in the printed book?

Mr. DeGuire: Yes, sir.

Mr. Carter: And the left column gives the titles, showing what matters are covered, or rather, the subject heads, showing what subjects are covered?

Mr. DeGuire: That is true.

Mr. Carter: But in the arranging of the Anheuser-Busch

and Wm. J. Lemp Brewing Company's machinists schedules, you arranged them in numerical order, by rules.

Mr. DeGuire: No, they are arranged to compare with the railroad rules?

Mr. Carter: So that by glancing across, you could see the same rule on the same subject?

Mr. DeGuire: That is true.

Mr. Carter: Was it not a fact that in some instances the subjects were combined so that it was impossible to carry out in its entirety, and you have to refer backwards and forwards?

Mr. DeGuire: That is true.

Mr. Carter: Now, without taking time to read these schedules, do you believe that these machinists in St. Louis, under this schedule, are paid a much higher rate and are given much more favorable working conditions than the machinists on the Chicago, Milwaukee & St. Paul Railway?

Mr. DeGuire: In making a comparison of the two schedules, they would indicate that such is the case.

Mr. Carter: Now, what are the marked features of the difference?

Mr. DeGuire: Why, the marked features are the difference in the rates of pay.

Mr. Carter: Where do you find that—Rule 8, page 4?

Mr. DeGuire: Rule 8, page 4. I will read the rule. You made a mistake, Mr. Carter. I want to correct you. It is Rule 3 and Rule 27, on page 10.

Mr. Carter: Rule 3, on page 10.

Mr. DeGuire: Rule 3 and Rule 27, page 10.

Mr. Carter: Now, read first the Milwaukee rule, and then the St. Louis machinists' rule.

Mr. DeGuire: "The minimum rate of pay for machinists in the employ of the C., M. & St. P. Ry. shall be: At Minneapolis and St. Paul and points on the H. & D. Div., between Minneapolis and Mobridge, also at Farmington and Sioux City, forty-two (42) cents per hour; at all other points on the system the rate will be forty-one (41) cents per hour. This rule effective October 28, 1912."

"(Decision of 1904. Machinists being hired by this company shall be started at the standard rate of pay.)"

Mr. Carter: Now, do you understand that this old decision of 1904 applied to the wage schedule of October 28, 1912?

Mr. DeGuire: That is my understanding.

Mr. Carter: What are the wages of these St. Louis machinists?

Mr. DeGuire: The minimum scale of wages for the St. Louis machinists shall be 52½ cents per hour.

Mr. Carter: What is the difference between the wages of the machinists in St. Louis working for these two brewing companies, and the wages of machinists working for the Chicago, Milwaukee & St. Paul Railway (Eastern Lines)?

Mr. DeGuire: Approximately 25 per cent.

Mr. Carter: About 25 per cent higher?

Mr. DeGuire: About.

Mr. Carter: In both of these rules, the words "minimum rate" or "minimum scale" appear. Do you understand that in both instances it is possible that higher rates are paid?

Mr. DeGuire: It is my understanding of the use of those words.

Mr. Carter: In standardizing, it is the minimum scale that is standardized, with the understanding that a higher rate may be paid. Is that true?

Mr. DeGuire: That is true.

Mr. Carter: That would be, in effect, a saving clause, would it not?

Mr. DeGuire: We would consider it as such.

Mr. Carter: For instance, the printers wage scales in nearly every city provide for a minimum scale; yet the fact remains that many printers, if not a majority of printers, draw more than the scale. Would that mean that they had a standardization of the minimum wage, with the understanding that an employer could pay a higher wage?

Mr. DeGuire: Yes, sir; that is true.

Mr. Carter: What other difference do you find between the St. Louis machinists' rule and the rule on the Milwaukee Road?

Mr. DeGuire: Overtime is much more favorable.

Mr. Carter: Describe the difference. On what page does that appear?

Mr. DeGuire: On page 7, at the bottom of the page, under the subject of overtime.

Rule 16, on the Chicago, Milwaukee & St. Paul Railway Company (Eastern Lines) reads as follows:

“Machinists called to work overtime, and such work shall be three hours and twenty minutes or less, shall receive five hours’ pay. If more than three hours and twenty minutes, then time and one-half will be paid.”

Mr. Carter: Now, what would be the rule of the St. Louis machinists?

Mr. DeGuire: It reads as follows:

“All overtime and work performed outside of schedule hours shall be paid for at the rate of time and one-half; except work that continues after midnight and on holidays, when double time shall be paid.”

Mr. Carter: Would that indicate that under certain conditions, the St. Louis machinist would get double time for overtime, instead of time and one-half?

Mr. DeGuire: That is true.

Mr. Carter: But, according to this rule, the Milwaukee Road does pay time and a half for overtime to its machinists, does it not?

Mr. DeGuire: Yes.

Mr. Carter: Does it pay that to any of its engineers and firemen?

Mr. DeGuire: Not that I know of.

Mr. Carter: Do they guarantee the machinists on the Milwaukee Road that they shall be paid five hours’ pay, if they worked three hours and twenty minutes, or less?

Mr. DeGuire: Yes; that is a guarantee that they have on that railroad. I have been informed that on one occasion there was a machinist called eight different times, in a period of twenty-four hours, and received forty hours’ pay.

Mr. Carter: There was a guaranty to the machinist then?

Mr. DeGuire: Yes, sir.

Mr. Carter: The guaranty is that he is going to get five hours’ pay, no matter how little he works, provided he does not work more than three hours and twenty minutes?

Mr. DeGuire: If he comes to the shop and reports for work, and goes home very shortly after that, he is guaranteed five hours.

Mr. Carter: Five hours is not a whole day’s pay, is it?

Mr. DeGuire: No; it is about five-eighths of a day's pay.

Mr. Carter: And if he works over that time what is his rate?

Mr. DeGuire: His rate would be 61½ cents an hour, on the Milwaukee.

Mr. Carter: Time and one-half?

Mr. DeGuire: Time and a half.

Mr. Carter: That is in favor of the St. Louis employers. Now, do you find something where the Milwaukee people are more liberal than the St. Louis employers to their machinists, such as the payment of expenses when they are away from home?

Mr. DeGuire: Yes, sir, they have got an expense rule on the Milwaukee that they do not have in the St. Louis schedule.

Mr. Carter: What is that rule, and where do we find it?

Mr. DeGuire: Turning to rule 8, on page 4.

Mr. Carter: Read the rule on the Milwaukee.

Mr. DeGuire: "Machinists sent out on the road shall receive pay from the time from which they are called until they return, as follows: Overtime rates for all overtime hours, whether waiting, traveling or working, and straight time for what are straight time hours at home station, whether waiting, traveling or working. (This rule does not conflict with rule 13.) If during the time on the road there be an opportunity to go to bed for five hours or more, such time shall not be paid for. One dollar (\$1) per day of twenty-four hours will be allowed for meals and lodgings."

A decision on the rule reads as follows:

"(Decision of August 4, 1909. At points where the one dollar (\$1) per day will not cover actual expenses, special consideration will be given each case.)"

Mr. Carter: Now, let us take that rule and analyze it. What do they mean by "straight time hours?" That is, they receive straight time for straight time hours, and overtime rate for other than straight time hours, and they refer you to Rule 13. Explain what are straight time hours.

Mr. DeGuire: The straight time hours for the machinists employed in the repair shops at Chicago, on the Chicago Milwaukee & St. Paul Railway, run in eight hour shifts, starting at 8 o'clock in the morning and continuing on throughout the day.

They work seven hours and 40 minutes of the eight hours, and are given twenty minutes for lunch, with pay.

Mr. Carter: That is, they work eight hours, from eight o'clock in the morning until 4 o'clock in the evening, except twenty minutes for lunch, and for which they receive eight hours' pay.

Mr. DeGuire: That is true.

Mr. Carter: Now, if that was the day crew or shift, any man assigned to that shift would receive straight time for any work he did between 8 o'clock in the morning and 4 o'clock in the afternoon. Is that your understanding?

Mr. DeGuire: That is my understanding.

Mr. Carter: But if he did any character of work outside of those hours, he would receive time and one-half?

Mr. DeGuire: Time and one-half, providing it was continuous time, but I understand, if he went home and was called again, such call would give him five hours' pay.

Mr. Sheehan: I don't follow your Rule 15 on that same page.

Mr. DeGuire: Rule 15 on the same page?

Mr. Sheehan: Rule 15 on page 7, "Nine hours shall constitute a day's work." I did not follow you on this discussion of the eight-hour day there.

Mr. DeGuire: What do you wish to know about that?

Mr. Sheehan: Why, you have been talking about two shifts.

Mr. DeGuire: Three eight-hour shifts.

Mr. Sheehan: And eight hours constituting a day, and going on overtime, as I followed you, after eight hours.

Mr. DeGuire: Yes, sir.

Mr. Sheehan: How do you reconcile that with Rule 15?

Mr. DeGuire: Rule 15, Mr. Sheehan, has not been in force out there for some time. They had eight-hour shifts, and I believe that you will find, if you will turn to your Exhibit 23, that will also bear that out. It says "Number of working hours per day, 8," in Exhibit 23, presented by Mr. Keefe.

Mr. Sheehan: Well, now, about this guaranty of five hours. I do not follow you on that either. This rule 16 that the machinists called to work, overtime, when such work shall be three hours and twenty minutes. Is there another provision than that Rule 16?

Mr. DeGuire: No, sir.

Mr. Sheean: This is only in the case they are called to work overtime, is it not?

Mr. DeGuire: Sure. That is what Mr. Carter asked me. If they were called after performing eight hours' service, what would their guarantee be?

Mr. Sheean: Supposing there has not been any eight hours' service, or any other hour's service. They come down to the shop today to go to work, and they work three hours; what do they get?

Mr. DeGuire: It is my understanding they would get five hours' pay.

Mr. Carter: If they were relieved?

Mr. DeGuire: If they were relieved.

Mr. Sheean: Under what provision?

Mr. DeGuire: Under this rule.

Mr. Sheean: This is where they are called to work overtime.

Mr. DeGuire: Yes; but they would not be called in that manner and come under the overtime rule. In my investigation that I made of the matter, the machinists advised me that they never were called for any short period of time that can be avoided, unless it is overtime. A machinist don't come to work in the morning, and go to work a few hours, and then go home, if that is his regular shift. As a rule, the overtime rule applies after he has done his day's work. He has worked eight hours; then something turns up in the shop that detains him after that period of time.

Mr. Sheean: I am perfectly clear on being called for overtime under this rule, but I am trying to get where the man has any guaranty of a minimum day, or a minimum guaranty of five hours.

Mr. DeGuire: Why, the minimum guaranty of five hours is here.

Mr. Sheean: That is a minimum guaranty of five hours' overtime.

Mr. DeGuire: Yes, sir.

Mr. Sheean: Outside of the guaranty of a five hour overtime, if he is called to work overtime, what provision is there

for a guaranty of any minimum pay, except in the case of overtime work?

Mr. DeGuire: There has never been any necessity.

Mr. Sheean: I did not want that, but where is there—or is there any provision anywhere for a minimum day, except this minimum guaranty of minimum overtime?

Mr. DeGuire: I know of none, Mr. Sheean, outside of the explanation given to me by the men whom I consulted when I was preparing this exhibit, and they tell me they are never called for a period short of eight hours, and they would not stand to be called short of that. There is an old saying that: "Never was a law made unless there was a necessity for it"; and I presume, from what he told me, that there was never a necessity for placing a rule of that kind in their schedule.

Mr. Nagel: You say there never was a law made, unless there was a necessity for it?

Mr. DeGuire: I have heard that said. However, I don't say I agree with that.

Mr. Carter: Mr. DeGuire, read Rule 8, so we can get our string again.

Mr. DeGuire: All right. The rule reads as follows:

The Chairman: Just one moment, please. In response to Mr. Sheean, you did not say as to whether they were required to work an eight or nine hour day. That is, suppose there is no overtime, and a machinist goes to work, what length of time is he required to work?

Mr. DeGuire: In the shops out here, eight hours.

Mr. Sheean: And the schedule says nine.

The Chairman: That is what I am trying to find out.

Mr. DeGuire: That is true.

The Chairman: How do you reconcile that?

Mr. DeGuire: The only thing I can say is, they have reduced the number of hours and made it three shifts at eight hours. If you will note in Exhibit No. 23, presented by the railroads, it says: "Number of working hours per day, 8; schedule of working hours, 9." So that only confirms what we have in this exhibit.

Mr. Sheean: Well, that is not uncommon in the shops at all, is it?

Mr. DeGuire: I don't think so.

Mr. Sheean: And if they want to go on there—if business picks up, there is nothing that you find in the schedule that will prevent them from working the men nine hours, without paying overtime?

Mr. DeGuire: No, but where they have an eight hour shift, the overtime would start after eight hours.

Mr. Sheean: Well, the provision of the schedule is that nine hours shall constitute a day. At the present time, they are running on eight hour shifts up there.

Mr. DeGuire: You cannot construe that rule, without taking this one into consideration. Let me read Rule 18:

“The bulletin hour of all shops and round-houses of the Chicago, Milwaukee & St. Paul Railway Company shall be posted in all said shops and round-houses, and the beginning and quitting time in said shops and round-houses shall not be changed without twenty-four hours’ notice. All time before and after the bulletin hours, Sundays and holidays as follows: New Years, Lincoln’s birthday, Washington’s birthday, Decoration Day, July 4th, Labor Day, Thanksgiving Day and Christmas shall be paid for at overtime rates.”

Mr. Sheean: What I mean, Mr. DeGuire—I think that will straighten it out—there is nothing in the schedule that will prevent the Milwaukee Road from bulletining a nine hour day.

Mr. DeGuire: No, there is none whatever, but at the present time they have an eight hour shift, three shifts in twenty-four hours.

Mr. Carter: Mr. DeGuire, this Rule 13, in the case of inability to secure machinists, and a great amount of work, it would give the railroads an opportunity to bulletin a fourteen hours day, would it not, if they paid overtime?

Mr. DeGuire: Yes, sir.

Mr. Sheean: My last question meant that they could, at Milwaukee, bulletin a nine hour day, without paying overtime?

Mr. DeGuire: Up to the ninth hour.

Mr. Carter: What is the practice?

Mr. DeGuire: The practice is they have got three shifts, working at eight hours, and there is twenty minutes taken out of that, for lunch, with pay.

Mr. Carter: And they get a full day’s pay for eight hours?

Mr. DeGuire: That is my understanding.

Mr. Carter: And if they work nine hours, they will get the overtime rate for it?

Mr. DeGuire: They would get 61½ cents per hour.

Mr. Carter: Is there anything else you want—

Mr. DeGuire: We had not finished Rule 8.

Mr. Carter: That is right. Get started on Rule 8. We got sidetracked. Just start back and start again on Rule 8. Read the rule again, so we can carry out our thought in sequence.

Mr. DeGuire: "Machinists sent out on the road shall receive pay from the time from which they are called until they return, as follows: Overtime rates for all overtime hours whether waiting, traveling or working, and straight time for what are straight time hours, at home station, whether waiting, traveling or working. (This rule does not conflict with rule 13.) If during the time on the road there be an opportunity to go to bed for five hours or more, such time shall not be paid for. One dollar (\$1) per day of twenty-four hours will be allowed for meals and lodgings.

"(Decision of August 4, 1909. At points where the one dollar (\$1) per day will not cover actual expenses, special consideration will be given each case.)"

Mr. Carter: Now, let us start again. Do you understand that the overtime rates will prevail where the overtime hours are in effect? For instance, if a man had been assigned to work from eight o'clock in the morning until four or five o'clock in the evening, and he were called for any purpose, outside of those hours, overtime rates would allow.

Mr. DeGuire: That is true.

Mr. Carter: Whether he was working, waiting or traveling?

Mr. DeGuire: That is my understanding of the rule.

Mr. Carter: Do you understand that time and a half rate would apply continuously, unless he had five hours or more in bed?

Mr. DeGuire: That is, the reading of the rule would make me understand it to be such.

Mr. Carter: It says "in bed" does it not?

Mr. DeGuire: Yes, sir.

Mr. Carter: Now, if he were out at a wreck, and there wasn't a bed handy, do you understand they could say to the

machinist, "Now, you are relieved for thirty minutes, or relieved for five hours?"

Mr. DeGuire: No, he must have a place to go to bed, according to the rule.

Mr. Carter: Now, about this expense. He is allowed, you say, \$1.00 a day. You understand that means 25 cents for a bed and 25 cents each for meals?

Mr. DeGuire: That would be my understanding of that portion of the rule.

Mr. Carter: And you understand the decision is that if he cannot purchase meals for 25 cents, or beds for 25 cents, special consideration will be given in each case?

Mr. DeGuire: That is my understanding.

Mr. Carter: Do you understand he would have to furnish a special expense account?

Mr. DeGuire: Why, no; I don't think so.

Mr. Carter: How could they give special consideration?

Mr. DeGuire: Why, the machinists that I consulted in getting up this exhibit advised me that when they go away from home and their expense account is higher than that, they explain why it was, and that is all the explanation that is required.

Mr. Carter: That is what I meant.

Mr. DeGuire: Yes.

Mr. Carter: Now, if it did not cost them but 15 cents for a bed, or 5 cents for a meal, arbitrarily they would be allowed 25 cents?

Mr. DeGuire: They would receive 25 cents.

Mr. Carter: But if it costs more than 25 cents, I understand from that rule that they would receive special consideration?

Mr. DeGuire: Yes; but I cannot conceive where they could get a meal or a bed for much less than a quarter.

Mr. Carter: I was just imagining that, in order to show the elasticity of the rule.

Now, have you anything further to say on those rules—This comparison of rules—about the machinists' rules?

Mr. DeGuire: No; that is the only comparison we have made.

Mr. Burgess: Well, Mr. Carter, just a moment. On page 6, the last paragraph of Rule 13, without, I hope, burdening the

record with superfluous reading, I just wanted to ask one question there. Where a machinist has been called upon to work at night, following his day's work, and then requested to work the next day, does he receive time and a half for all the time after the regular day's work?

Mr. DeGuire: In reply to that question, Mr. Burgess, I beg to advise that if he came back and worked of his own accord, the following day, he would receive straight time rates. If he was required to work by the company, he would receive overtime rates.

Mr. Burgess: Well, it clearly sets forth about his coming back of his own accord, but I was in doubt as to whether the continuity of time and a half would be from the first nine hour period, until he was finally relieved from work.

Mr. DeGuire: From the first eight hour period, at this point, until he was relieved from work.

Mr. Burgess: That is all.

Mr. Carter: The last paragraph of Rule 13, which appears on page 7:

“(Decision of October 11, 1915. When men are required to work during the regular period allowed the men for meals, said time shall be paid for at one and one-half time rates.)”

Do you understand that if they are given twenty minutes to eat their lunch, and on account of a rush of work, they are not given that twenty minutes, they would receive the pay for the twenty minutes, plus half pay for penalty?

Mr. DeGuire: That is my understanding of the rule.

Mr. Carter: Now, about this expense money. Does the railroad—the Milwaukee Railroad allow expenses of engineers and firemen, when they are away from home, performing service for the railroads?

Mr. DeGuire: I understand that they do not.

Mr. Carter: Do not.

Mr. DeGuire: No, sir.

Mr. Carter: Do they allow traveling engineers, road foremen of engines, and such as that, expenses when they are away from home?

Mr. DeGuire: I understand that they do.

Mr. Carter: You understand that engineers and firemen are not allowed any expenses?

Mr. DeGuire: No, sir.

Mr. Carter: What do you consider would be a usual expense of an engineer or fireman, for one round trip?

Mr. DeGuire: Well, it would average about \$1.75.

Mr. Carter: How is that?

Mr. DeGuire: It would average about \$1.25.

Mr. Carter: How do you reach that conclusion?

Mr. DeGuire: In order to qualify that, I wish to say that I have considered a man that was on a run, going away from his home one day, laying over night at an outlying point, and returning the following day. I believe that is customary on many railroads, to have runs that do that. Now, he would get up in the morning for his breakfast at home. He would then go out onto the road and have his dinner en route; would have his supper on his arrival at the home terminal. He would then retire, which would necessitate the buying of a bed. The next morning, he would have to buy his breakfast. He would have his dinner en route home. That would be four meals and a bed, making five, all told, and multiplying that by 35 cents, would mean an expenditure of \$1.75.

Mr. Carter: Why do you say 35 cents instead of 25 cents?

Mr. DeGuire: Because there is no place that a man can get a meal today, that I know of, that is fit to eat for 25 cents.

Mr. Carter: On your division, where you are working, do you generally pay 35 cents for a meal?

Mr. DeGuire: Up to about a year and a half ago, or two years ago, we had elegant meals for 25 cents—just as nice a meal as you would want to eat, but since that time, all the railway eating houses and other hotels have raised to 35 cents.

Mr. Carter: Meals no better?

Mr. DeGuire: Meals no better, if as good.

Mr. Carter: How about beds? Can't you get a bed now for 25 cents?

Mr. DeGuire: No, the beds have been raised from 25 cents to 35 and 50 cents.

Mr. Carter: According to—

Mr. DeGuire: According to different terminals.

Mr. Carter: Then, you estimate that for one round trip, an engineer or fireman would incur an expense of \$1.75?

Mr. DeGuire: That would be a minimum expense, I believe.

Mr. Carter: How many trips do you think it would be fair to say a man should make a month, even though he lays off once in a while? Do you think for twenty-six working days, thirteen round trips would be all right?

Mr. DeGuire: That would be fair. A man would be working every day with the exception of Sunday, practically speaking.

Mr. Carter: That would give a man the right to lay off Sunday, and he would work week days.

Mr. DeGuire: That is true.

Mr. Carter: That would be 13 round trips.

Mr. DeGuire: Thirteen round trips in a month of 30 days.

Mr. Carter: At \$1.75 a round trip, what would it cost him for his meals and bed away from home? What is your estimate?

Mr. DeGuire: Approximately \$22.50.

Mr. Carter: For 12 months in the year that would be how much?

Mr. DeGuire: About \$273.

Mr. Carter: If the Milwaukee road would just extend this one rule, that they have in their machinists' schedule, to the schedule of engineers and firemen, do you estimate that it would be an increase of approximately \$273 a year?

Mr. DeGuire: I would so estimate it.

Mr. Carter: Do you think in your judgment that would amount to more than we are asking for all told?

Mr. DeGuire: Yes, I do.

Mr. Carter: Now, if these men lay away from home longer than you have stated here, say 12 hours, would their expenses be proportionately greater?

Mr. DeGuire: Oh, certainly.

Mr. Carter: Suppose they were held away from home more than 15 hours, then it would probably add another meal?

Mr. DeGuire: It would add another meal, because the men would be getting hungry.

Mr. Carter: But your estimate has been on the supposition that they lay at the other terminal about 12 hours, or over night.

Mr. DeGuire: Over night.

Mr. Carter: That would be for a regular man. Did you find that an extra man, or a man not in regular service, would not probably have as much expense away from home? He would not make 13 trips, would he?

Mr. DeGuire: An irregular man, as I found it in my experience, has a very hard matter to figure his expense account away from home, for this reason: They might call a man to go to an outlying point, and they might have a coal rush at that point, and run him half way over the division and back again for a week or two before he would get home, and he might remain away from home 10 days before he would get back home; but I should say an extra man's expenses, or an irregular crew's expenses would considerably exceed those of a regular man.

Mr. Carter: Have you any other comments to make on that first comparison? Do you not think this comparison indicates that so far as the St. Louis machinists are concerned they get a much higher rate than the machinists on the Milwaukee Railroad?

Mr. DeGuire: Oh, yes, it indicates that, because they get 52½ cents an hour.

Mr. Carter: Did you make some comparisons to see what machinists would earn if they worked the same number of hours that engineers and firemen work.

Mr. DeGuire: Yes.

Mr. Carter: Page 14?

Mr. DeGuire: Yes.

Mr. Carter: Describe briefly what this comparison is and all about it.

Mr. DeGuire: It shows earnings under present wage agreement of machinists compared with earnings under present wage agreements of engineers and firemen, for 7 hours and 30 minutes of service.

Mr. Carter: This is a hypothetical case, and gives what you think would ordinarily occur on a short trip.

Mr. DeGuire: It would occur for a light wreck.

Mr. Carter: And a not very distant one?

Mr. DeGuire: A not very distant wreck.

Mr. Carter: You think this would be a trip of short duration?

Mr. DeGuire: That is true.

Mr. Carter: Read the details of this service, so that the Board can understand how you arrived at it?

Mr. DeGuire: 1. Engineer, Fireman and Machinist, ordered to report for duty at 2 P. M.

2. Leave A at 2:15 P. M. and run 20 miles to B, arriving there at 3:30 P. M.

3. Work at wreck until 8 P. M.

4. Leave B at 8 P. M., run to A, arriving there at 9:15 P. M.

5. Relieved from duty at 9:30 P. M.

Total time on duty—7 hours and 30 minutes.

Total miles run, A to B and return to A—40 miles.

Mr. Carter: For engineers, you have taken how many classes of engines.

Mr. DeGuire: Three classes of engines.

Mr. Carter: Three of the heaviest engines used in service?

Mr. DeGuire: I have eliminated all engines below 100,000 pounds on drivers.

Mr. Carter: What would this engineer receive for this 7 hours and 30 minute trip on an engine weighing less than 140,000 pounds, and weighing 100,000 pounds?

Mr. DeGuire: \$5.20.

Mr. Carter: What would he receive on a large engine?

Mr. DeGuire: \$5.30.

Mr. Carter: What would he receive on the largest engine?

Mr. DeGuire: \$5.50.

Mr. Carter: What would the fireman receive on those engines?

Mr. DeGuire: \$3.45, \$3.45 and \$3.75 respectively.

Mr. Carter: What would the machinist receive?

Mr. DeGuire: He would receive 2 hours straight time at 41 cents, or 82 cents; 5 hours and 30 minutes at 61½ cents, or \$3.38; the expense allowed away from home at \$1 per day, one meal 25 cents; total compensation for the trip \$4.45.

Mr. Carter: Do these notes on this page here show the effect of the machinists' schedule, as to what would happen under certain conditions?

Mr. DeGuire: Yes.

Mr. Carter: Upon the supposition that that trip lasted two hours and thirty minutes longer, would the engineer and fireman receive any additional compensation?

Mr. DeGuire: No, they would not.

Mr. Carter: Would the machinist have received additional compensation?

Mr. DeGuire: Yes, he would have been paid $61\frac{1}{2}$ cents an hour for the two and one half additional hours.

Mr. Carter: What else do you find there that would affect the men differently?

Mr. DeGuire: Turning to the foot notes in this table, there are many things that would affect the work of these men.

Mr. Carter: If it had been on Sunday, the machinist's rate would have been overtime all the way through, would it not?

Mr. DeGuire: It would have been time and a half for the entire trip.

Mr. Carter: And if he had had to pay 35 cents instead of 25 cents for a meal, that would have increased his compensation ten cents?

Mr. DeGuire: Yes.

Mr. Carter: And if all this time had been outside of the regular working time or bulletin time, he would have received time and a half for the entire trip, would he not?

Mr. DeGuire: For the entire trip, yes, sir. That is my understanding of the schedule.

Mr. Carter: Suppose this wreck had occurred on a Sunday or a holiday, he would then have received time and one-half for the entire trip?

Mr. DeGuire. For the entire trip.

Mr. Carter: Suppose he had only been away an hour, what would he have received?

Mr. DeGuire: My understanding is that he would have received 5 hours, if it was in the overtime period.

Mr. Carter: Suppose he was called out of the shop, as in this instance, and another machinist was called to take his place, would both machinists receive time and a half?

Mr. DeGuire: The machinist that went out on the road would receive time and one-half for all overtime hours.

Mr. Carter: He would receive straight time until the close of straight time hours.

Mr. DeGuire: Straight time until the close of straight time hours, and then overtime for the overtime hours.

Mr. Carter: What would the machinist receive who was called to take his place?

Mr. DeGuire: He would receive time and a half.

Mr. Carter: If this machinist did not return to A until

6 A. M., and was ordered to work in the shop at 7 A. M., he would be paid time and one-half continuously?

Mr. DeGuire: Yes.

Mr. Carter: Could the railroad require the engineer and fireman to perform 2 hours and 30 minutes additional service without additional compensation?

Mr. DeGuire: Provided they performed that service prior to midnight on that day.

Mr. Carter: They could not require the machinist to work additional time, could they?

Mr. DeGuire: No, sir.

Mr. Sheean: Let me ask you one question. This is the Milwaukee schedule on wreck service, is it, that you are comparing here?

Mr. DeGuire: Yes, the Milwaukee Railroad.

Mr. Sheean: Showing the Milwaukee Railroad wrecking service?

Mr. DeGuire: Yes.

Mr. Carter: You learned much of this information by making a special investigation, and consulting with these machinists, did you not?

Mr. DeGuire: Yes, with the machinists and with others that had charge of the making of the engineers and firemen's schedule.

Mr. Carter: How much would these St. Louis machinists have received if they had made this trip?

Mr. DeGuire: Well, a St. Louis machinist would receive no expenses away from home, but he would have received $7\frac{1}{2}$ hours at \$1.04, which would amount to \$7.80.

Mr. Carter: He would have received \$7.80 if he had been a St. Louis machinist instead of a Milwaukee machinist?

Mr. DeGuire: Yes.

Mr. Carter: On this short trip, I understand that the machinist would not receive as much as the engineer, but he would receive more than the fireman?

Mr. DeGuire: That is true.

Mr. Carter: Now turn to page 16—

Mr. Stone: Before you leave page 14, I think there is a typographical error in the last rate shown for the engineer.

You show a rate of 55 cents there. It is $55\frac{1}{2}$ cents, or a total of \$5.55.

Mr. Carter: The half cent is omitted.

Mr. Stone: That Mikađo rate is \$5.55. That is the highest rate they have.

Mr. Carter: Instead of being \$5.50 it should be \$5.55.

Mr. DeGuire: I have corrected the exhibit accordingly.

Mr. Carter: Half a cent more per hour.

Mr. DeGuire: Half a cent more per hour, or \$5.55.

Mr. Carter: Turning to page 16, here is a similar trip. Describe that trip briefly. I think you made the same mistake all the way through, allowing only 55 cents an hour for the engineer instead of $55\frac{1}{2}$.

Mr. DeGuire: I understood the rate was 55 cents an hour.

Mr. Stone: It is $55\frac{1}{2}$ cents an hour, and for 10 hours that would be \$5.55.

Mr. Carter: You beat him out of 5 cents.

Mr. Stone: I wanted to get it correct.

Mr. Carter: Turn to page 16. What kind of a trip did he make there? Give the details of the service first.

Mr. DeGuire: 1. Engineer, fireman and machinist ordered to report for duty at 2 P. M.

2. Leave A at 2:15 P. M., and run 40 miles to B, arriving there at 4:15 P. M.

3. Work at wreck until 8:45 P. M.

4. Leave B at 9 P. M., and run to A, arriving there at 10:45 P. M.

5. Relieved from duty at 11 P. M.

Total time on duty, 9 hours.

Total miles run, A to B and return to A, 80 miles.

Mr. Carter: Without describing these 3 larger engines, and ignoring the smaller engines, what would be the three rates for the engineer?

Mr. DeGuire: \$5.20, 5.30 and \$5.55.

Mr. Carter: What would be the earnings of the machinist?

Mr. DeGuire: He would receive 2 hours straight time at 41 cents, 82 cents; 7 hours overtime at $61\frac{1}{2}$ cents and get \$4.31; expense allowed away from home at \$1 per day, 25 cents. Total compensation for the trip \$5.38.

Mr. Carter: Then he would receive more than an engi-

neer would on the largest engine—he would receive 12 cents less?

Mr. DeGuire: That is true.

Mr. Carter: He would receive a great deal more than the fireman?

Mr. DeGuire: Seventeen cents less.

Mr. Carter: These are \$5.55.

Mr. DeGuire: Five dollars and fifty-five cents.

Mr. Carter: Now turn to a trip like railroad men generally make, fourteen hours.

Mr. DeGuire: That will be found on pages 18 and 19.

1. Engineer, Fireman and Machinist, ordered to report for duty at 12 M.

2. Leave A at 12:15 P. M. and run 60 miles to B, arriving there at 3 P. M.

3. Work at wreck until 11 P. M.

4. Leave B at 11 P. M. and return to A, arriving there at 1:45 A. M.

5. Relieved from duty at 2 A. M.

Total time on duty—14 hours.

Total miles run, A to B and return to A—120 miles.

Mr. Carter: Now, in this instance, being 14 hours on the road, the engineer and fireman both received pay for overtime, did they not?

Mr. DeGuire: Yes, sir.

Mr. Carter: Was it two hours to both engineer and fireman on each of these engines?

Mr. DeGuire: Four hours overtime.

Mr. Carter: Four hours I mean.

Mr. DeGuire: Yes, sir.

Mr. Carter: And at the pro rata rate?

Mr. DeGuire: Yes, sir.

Mr. Carter: Now, what would have been the total compensation for each of these engineers, collecting the \$5.50 rate, and giving them—

Mr. DeGuire: \$7.20 on the 140,000 pound engine. \$7.42 on the 140,000 to 170,000 pound engine, and \$7.70 on an engine weighing 200,000 or 224,999 pounds on drivers.

Mr. Carter: What would the machinist have received on this trip?

Mr. DeGuire: Four hours' straight time at 41 cents, \$1.64; ten hours' overtime at 61½ cents, \$6.15. Expense allowed away from home at \$1 per day (two meals) 50 cents. Total compensation for the trip \$8.29.

Mr. Carter: He would receive then more than the engineer?

Mr. DeGuire: That is true.

Mr. Carter: Even at the lower rate per hour?

Mr. DeGuire: Yes, sir.

Mr. Carter: While an engineer on the biggest engine would receive 55 cents an hour, the machinist receiving for straight time only 41 cents an hour, yet for the 14 hour trip the earnings of the machinist would be considerably more.

Mr. DeGuire: That is true.

Mr. Carter: Now why did you select a wrecking trip for this comparison with the machinist.

Mr. DeGuire: Well, in trying to figure out some class of work where we could use the three men, the engineer, the fireman and the machinist, I figured that the wrecking trip would be about the only class trip where their services would be required.

Mr. Carter: They don't generally carry machinists in through freight service or passenger service?

Mr. DeGuire: No, sir.

Mr. Carter: And the reason you selected wrecking service is because these trips are liable to take place wherever there is a wreck?

Mr. DeGuire: That is true.

Mr. Burgess: Mr. Carter, will you pardon me a moment?

Mr. Carter: Yes, sir.

Mr. Burgess: I would like to get clear on this particular point, in view of the fact that it has a bearing on the dead time. Does the machinist get the same pay riding out on the wrecking train that he does while he is working at the wreck?

Mr. DeGuire: Yes, sir, that is my understanding of the schedule; going and coming; working, waiting, resting or traveling.

Mr. Burgess: So that if it required three hours to get to the point of the wreck, and it required three hours to return to the terminal, there would be six hours deadheading there by the

machinist. And if I understand you correctly he would receive the same compensation for those hours that he did receive while working at the wreck?

Mr. DeGuire: Again referring to rule 8, I would think so.

Mr. Burgess: Don't read it.

Mr. DeGuire: No. He would receive it. That is true.

Mr. Burgess: All right. That is all, Mr. Carter.

Mr. Carter: Now, continuing that matter, if an engineer were paid full time for deadheading, the machinist would be paid full time and a half time for deadheading this trip back, would he not?

Mr. DeGuire: Yes, sir, that is true.

Mr. Carter: Now suppose it is possible,—and we recognize the fact that it is not possible, but suppose it were possible that these railroad machinists got what the St. Louis machinists receive, how much would this man have earned on this trip?

Mr. DeGuire: How much money?

Mr. Carter: \$14.46.

Mr. DeGuire: Oh, no. Provided it happened on Sunday or a holiday, it would be \$14.56 as against \$9.11.

Mr. Carter: Oh, that is this same machinist?

Mr. DeGuire: That is this same machinist.

Mr. Carter: And if this same machinist were to work Sunday it would be how much?

Mr. DeGuire: \$9.11 if it was on Sunday or a holiday.

Mr. Carter: I think, Mr. DeGuire, you are mistaken. That is a machinist employed in a brewery. Isn't that right?

Mr. DeGuire: No. If you will turn to foot note 4 on page 19.

Mr. Carter: Well, go ahead. You are talking now about machinists working for the Milwaukee Road.

Mr. DeGuire: Yes.

Mr. Carter: If he had worked on Sunday?

Mr. DeGuire: Yes, sir.

Mr. Carter: How much would he have received if he had worked Sunday?

Mr. DeGuire: \$9.11.

Mr. Carter: Now, if he was working under the St. Louis Machinists' schedule at the same work how much would he have got?

Mr. DeGuire: \$14.56.

Mr. Carter: Now, that is about twice what the engineer would receive on Sunday or a holiday for the same number of hours.

Now, what is the next table you have here?

Mr. DeGuire: The next table will be found on page 20. It is a comparison of earnings of engineers and machinists employed by the Chicago, Milwaukee & St. Paul Railway (eastern lines).

Mr. Carter: Now, on what do you base this comparison?

Mr. DeGuire: On the earnings I found quoted in exhibits Nos. 26 and 27.

The Chairman: What page are you reading from?

Mr. DeGuire: I am reading from page 20. On the earnings I found quoted in Exhibits 26 and 27 presented by the railroad companies.

Mr. Carter: Now, which one will we turn to first?

Mr. DeGuire: Exhibit 26.

Mr. Carter: What page?

Mr. DeGuire: Page 538 I believe it is, and 539.

Mr. Carter: What do you find on page 538?

Mr. DeGuire: The first one will be found on page 539.

Mr. Carter: What do you find there?

Mr. DeGuire: I find that Mr. F. L. Schultz is quoted as earning, entirely in yard or switching service, \$172.90 for the month of October, 1913.

Mr. Carter: Where is that on the page?

Mr. DeGuire: It is about the center of the page.

Mr. Carter: What is the name?

Mr. DeGuire: Schultz. You will find it the third one in the S's. They are in alphabetical order.

Mr. Carter: F. L. Schultz?

Mr. DeGuire: F. L. Schultz.

Mr. Carter: And what did he earn?

Mr. DeGuire: He earned \$172.90.

Mr. Carter: In switching service?

Mr. DeGuire: Yes, you will note——

Mr. Carter: Now let me ask you, why did you select Mr. Schultz?

Mr. DeGuire: Why, we were making a comparison on the Milwaukee road, and therefore we picked out the 5 highest paid engineers on the Milwaukee road working in the Chicago terminal, in Exhibit 26.

Mr. Carter: Now, I understand the reason you picked Mr. Schultz was because he was one of the highest paid men in yard service in the Chicago terminal?

Mr. DeGuire: That is true.

Mr. Carter: Now I understand you picked him out from the Chicago terminal because you were going to compare him with machinists working in the Chicago terminal?

Mr. DeGuire: That is true.

Mr. Carter: You say he earned \$172.90?

Mr. DeGuire: Yes.

Mr. Carter: As shown on Railroads' Exhibit 26, page 539.

Mr. DeGuire: Yes, but there is one correction that we will have to make in this exhibit. We find that the railroad in making up this table has listed Mr. F. L. Schultz as working at Galesburg. That should be Galewood.

Mr. Carter: Now say that over again.

Mr. DeGuire: We wish to quote a—

Mr. Carter: I want him to call attention to an error in the railroads' exhibit without being sidetracked.

Mr. DeGuire: Fred L. Schultz is listed as having earned this money in the yard at Galesburg. It should be Galewood. I made an investigation, and ascertained that was correct.

Mr. Carter: You don't hold that against the railroads for making that mistake, do you?

Mr. DeGuire: No, but I thought I would bring it to your attention.

Mr. Carter: And if you make a mistake the precedent has been established.

Mr. DeGuire: I think I made a mistake, but they established the precedent.

Mr. Carter: Now you say you found all the earnings of Mr. Fred L. Schultz for the month of October amounted to \$172.90?

Mr. DeGuire: Yes.

Mr. Carter: How did you get all the information connected with his work?

Mr. DeGuire: The information was secured or rather the details of the service rendered was taken from the engineer's time slips on file in the timekeepers' office at Milwaukee, Wisconsin.

Mr. Carter: Now take the first day that Mr. Schultz worked for the period for which he got pay for October.

Mr. DeGuire: He worked September 28. He was on engine 7616. He commenced work at 6 P. M., relieved from duty at 7:05 A. M. Total number of hours worked 13.08 rate per hour 45 cents wages for ten hours, \$4.50; overtime rate per hour 45 cents; overtime accrued hours 3.08; pay for overtime \$1.39; total compensation for hours worked \$5.89.

Mr. Carter: Now suppose he had been working under the machinists' schedule or a machinist had made this trip under the machinists' schedule, describe his trip.

Mr. DeGuire: He commenced work at 6 P. M., and worked until 7:05 A. M.; his total number of hours worked would be 13.08.

Mr. Carter: Now, I understand up to that it is an exact copy of Schultz's time?

Mr. DeGuire: Yes. His rate per hour would be 41 cents, 4 cents per hour less than Schultz. His wages for 8 hours would be \$3.28. That is, figuring straight time from the time he started for the first 8 hours. Overtime rate per hour 61½ cents; overtime accrued hours \$5.08; payment for overtime \$3.12. Total compensation for hours worked \$6.40.

Mr. Carter: Now how much does this high powered engineer Schultz get for this time in yard service?

Mr. DeGuire: He gets \$5.29.

Mr. Carter: If this poorly paid machinist had done exactly the same thing, how much would he get under his schedule?

Mr. DeGuire: \$6.40.

Mr. Carter: The machinist would get the most money then?

Mr. DeGuire: Yes. He would get quite a bit more money.

Mr. Carter: Without going into the trip, let us see what that total for the month for Mr. Schultz was.

Mr. DeGuire: He worked 26 days, 372 hours. The number of hours arbitrarily allowed, on account of not taking meal hour, 13. Total earnings for the month \$172.90.

Mr. Carter: Now, what would the machinist have earned for identically the same number of hours?

Mr. DeGuire: If he worked 26 days, 372 hours, no allowance on account of not taking meal hour, his earnings would have amounted to \$191.18.

Mr. Carter: How much more would the machinist have earned under his schedule for this month of October than the engineer earned, although he was one of the highest paid engineers reported?

Mr. DeGuire: He would have earned \$18.28, or approximately 10.5 per cent more.

Mr. Carter: Now what is the next page?

Mr. DeGuire: The next page is a comparison of earnings of Engineer Eugene Moore's earnings for October, 1913.

Mr. Carter: Where shall we find that name of Mr. Moore?

Mr. DeGuire: You will find that on page 538 of railroad exhibit 26. You will find it about three-quarters of the way down the page.

Mr. Carter: E. Moore. How much did he get that month?

Mr. DeGuire: \$164.04.

Mr. Carter: Now, without going into detail, what did he earn for the month?

Mr. DeGuire: He earned \$164.05.

Mr. Carter: How much would a machinist have earned performing exactly the same work and working the same hours under a machinist's schedule?

Mr. DeGuire: \$187.99.

Mr. Carter: How much more would the machinist have earned than the engineer?

Mr. DeGuire: \$23.94, or approximately 14.5 per cent more.

Mr. Carter: Now, next page is headed "Monahan." There is another high priced engineer.

Mr. DeGuire: Yes, he is one of the highest, if my memory serves me correctly. He is quoted correctly.

Mr. Carter: Where do you find him?

Mr. DeGuire: In the M's also.

Mr. Carter: What did he earn, \$182.70?

Mr. DeGuire: \$182.70.

Mr. Carter: Now, what would the machinist have earned for that same number of hours' service under machinists' schedule?

Mr. DeGuire: \$197.82.

The Chairman: The hour for adjournment has arrived. (Whereupon, at 5 o'clock, P. M., March 15, 1915, an adjournment was taken to March 16, 1915, at 10 o'clock A. M.)

IN THE MATTER OF THE
 ARBITRATION
between the
 WESTERN RAILWAYS
and
 BROTHERHOOD OF LOCOMOTIVE
 ENGINEERS
and
 BROTHERHOOD OF LOCOMOTIVE FIRE-
 MEN AND ENGINEMEN
under the Act approved July 15, 1913, by agree-
ment dated August 3, 1914.

Chicago, Illinois, March 16, 1915.

Met pursuant to adjournment at 10:10 o'clock A. M.

Present: Arbitrators and parties as before.

G. N. DE GUIRE was recalled for further examination, and having been previously sworn, testified as follows:

Mr. Carter: Turn to page 26 of Exhibit 83, Mr. DeGuire. Do I understand that the name of Quilter and the name of Joslyn, are two more engineers?

Mr. DeGuire: The names of Joslyn and Quilter, yes, sir.

Mr. Carter: And the difference between the earnings of these engineers in this service and what machinists would have earned, is shown at the foot of each table?

Mr. DeGuire: Yes, sir.

Mr. Carter: Now, Quilter would have earned \$163.62, or did earn that much, page 27?

Mr. DeGuire: That is true.

Mr. Carter: And under the machinists' schedule, he would have earned \$193.18?

Mr. DeGuire: Yes, sir.

Mr. Carter: Now, take up Joslyn.

Mr. DeGuire: Joslyn would have earned \$167.05.

Mr. Carter: He did earn that?

Mr. DeGuire: He did earn that and the machinist would have earned \$178.76.

Mr. Carter: Now, turning to page 30, you commence with the firemen.

Mr. DeGuire: Yes, sir.

Mr. Carter: Now, just read the total amounts and we will pass right through the book.

Mr. DeGuire: The total earnings for the fireman is shown \$116.74. The total earnings for the machinist would have been \$204.79.

Mr. Carter: What is the difference in the earnings of the two?

Mr. DeGuire: \$88.05.

Mr. Carter: What percentage?

Mr. DeGuire: About 75 per cent.

Mr. Carter: Now, turn to the next pages, 32 and 33. This is Fireman Grote. Is he quoted in these exhibits of the railroad?

Mr. DeGuire: You will find him on page 1419 of Exhibit 27.

Mr. Carter: Was he one of the highest paid firemen reported by the railroads?

Mr. DeGuire: Yes, sir.

Mr. Carter: In switching service?

Mr. DeGuire: Yes, sir.

Mr. Carter: What did he earn?

Mr. DeGuire: \$108.87.

Mr. Carter: What would the machinist have earned, working the same number of hours under the machinists' schedule?

Mr. DeGuire: \$189.04.

Mr. Carter: How much more would the machinist have earned than the fireman earned?

Mr. DeGuire: \$80.17.

Mr. Carter: What is the percentage?

Mr. DeGuire: 73.6 per cent.

Mr. Carter: Now, turn to the next two pages, 34 and 35. Fireman Victor Schultz. Was he another fireman found in this exhibit and being exceptionally high paid?

Mr. DeGuire: You will find him on page 1427 of Exhibit 27, one of the highest paid men.

Mr. Carter: What were his earnings?

Mr. DeGuire: \$104.60.

Mr. Carter: \$104.31.

Mr. DeGuire: \$104.31. In reply to that, I will say that

the company's exhibit shows him as \$104.60, but I was advised by the man that made this investigation that the difference \$104.31 and \$104.60, was brought about due to the fact that they carried that over from the month of September.

Mr. Carter: Then his actual earnings for the service shown here were \$104.31?

Mr. DeGuire: Yes.

Mr. Carter: What would have been the machinist's earnings doing that work under the machinist's schedule?

Mr. DeGuire: \$177.94.

Mr. Carter: How much more money would have been earned under the machinist's schedule than under the fireman's?

Mr. DeGuire: \$73.63.

Mr. Carter: Percentage?

Mr. DeGuire: Or, approximately 70 per cent.

Mr. Carter: Next two pages, pages 36 and 37, Fred Hoppke. He is another fireman, is he? A high priced man?

Mr. DeGuire: Yes, sir, page 1419 also.

Mr. Carter: How much did he earn?

Mr. DeGuire: He drew \$115.31.

Mr. Carter: How much would he have earned under the machinists' schedule of rates of pay?

Mr. DeGuire: \$200.28.

Mr. Carter: How much more would he have earned under the machinists' schedule, than under the firemen's schedule?

Mr. DeGuire: \$84.97, or 73.69 per cent.

Mr. Carter: The next two pages, 38 and 39, H. W. Schramm.

Mr. DeGuire: You will find him on page 1421 of Exhibit 27. His earnings were \$105.64.

His earnings as a machinist would have been \$176.87.

The difference is \$71.23, or approximately 67 per cent.

Mr. Carter: Now, I notice that you give us two rates for engineers in switching service, and I think also for firemen. Do you mean to say that the engineers and firemen in switching service work at different rates?

Mr. DeGuire: Yes, sir.

Mr. Carter: Do they have two classes of rates in yard service?

Mr. DeGuire: Yes, sir.

Mr. Carter: Pay a higher rate on large engines than on small engines?

Mr. DeGuire: Yes, sir.

Mr. Carter: That is in keeping with our proposition, is it not?

Mr. DeGuire: Yes, sir.

Mr. Carter: We are asking for a higher rate on big locomotives than on small locomotives.

Mr. DeGuire: That is true. In fact, they have four rates in yard service. They have a \$3.75 and a \$4.00 rate also. But that is on a very large class of engine.

Mr. Carter: Mr. DeGuire, do these high earnings of the machinists arise from the payment of overtime at the rate of one and one-half times?

Mr. DeGuire: Yes, sir.

Mr. Carter: And expenses allowed away from home?

Mr. DeGuire: Yes, sir. We have computed it in making up these tables.

Mr. Carter: But in practice the machinists do not earn this much money, do they?

Mr. DeGuire: No, sir.

Mr. Carter: But in the practice the engineers and firemen do?

Mr. DeGuire: Yes, sir.

Mr. Carter: Do you attribute that to the fact that if they worked a machinist these long hours, they would have to pay him time and one-half, while they can use a switch engineer and fireman all they want to, up to sixteen hours, without paying any extra rate?

Mr. DeGuire: Yes, I believe that is a fact.

Mr. Carter: If this Board allowed men in yard service alone time and a half for overtime, do you believe it would bring to yard men a ten-hour day instead of a fourteen?

Mr. DeGuire: In my own mind, I am positive it would.

Mr. Carter: You do not think railroads would use these men as many hours or as long hours as they do now, in the yards, if they paid time and one-half?

Mr. DeGuire: No, sir.

Mr. Carter: They would probably work a full day's work for a full day's pay, and then be relieved by other people?

Mr. DeGuire: That would be my understanding of how the rule would be applied.

Mr. Carter: Or they would put more switch engines in the yard, so that the work could be done within regular working hours, instead of having to hold a man two or three hours beyond the regular working hours. Is that true?

Mr. DeGuire: That is true.

CROSS-EXAMINATION.

Mr. Sheean: Mr. DeGuire, these inquiries you made were at the repair shops, were they?

Mr. DeGuire: They were at the repair shops at Chicago Avenue and Grant Avenue, the Western Avenue shops.

Mr. Sheean: Exhibit No. 23, introduced by the railroads was the payroll at the main shops, was it not?

Mr. DeGuire: I do not believe it specified.

Mr. Sheean: Yes, the heading shows "Main Shops."

Mr. DeGuire: The main shop hours, I understand, are the same as the hours out there.

Mr. Sheean: You understand that the main shops have a single shift, do you not, at the present time?

Mr. DeGuire: I believe that is true.

Mr. Sheean: And when you spoke of these three eight-hour shifts, they are only in effect in repair shops, are they not?

Mr. DeGuire: They were in effect at the shop where I made the investigation.

Mr. Sheean: That was the repair shop, the roundhouse in fact.

Mr. DeGuire: Well, it was a shop connected with the roundhouse at Western Avenue.

Mr. Park: I understand that is to keep up the running repairs.

Mr. Sheean: The running repairs merely?

Mr. DeGuire: I believe that is true. I do not know that they build any locomotives out there.

Mr. Sheean: It is the light running shop, where the repairs are made, and they have three shifts of eight hours each. The inquiry you made was limited to the roundhouse shops, where the light running repairs were made.

Mr. DeGuire: I did not inquire as to just what work they did out there.

Mr. Sheean: It was the roundhouse shop at which you made the inquiry?

Mr. DeGuire: It was a machine shop in connection with the plant located at Western avenue.

Mr. Park: Do they do general repairing and overhauling of locomotives there?

Mr. DeGuire: As to that I made no investigation. I saw them using lathes there and various other apparatus used by machinists.

Mr. Park: The lathes and other machines are necessary in making running repairs?

Mr. DeGuire: I presume so.

Mr. Park: And the railroad runs night and day, and it is necessary to keep the repairs up continuously, which causes them to run three shifts there, does it not?

Mr. DeGuire: Yes.

Mr. Sheean: The comparison that you made as to what would have happened in going to a wreck was a comparison between a machinist on the machinists' schedule of the Milwaukee, and the Milwaukee schedule concerning wrecking service?

Mr. DeGuire: Yes.

Mr. Sheean: And in some of these cases, at least, for instance the one on page 18, if the engineer and fireman were paid under schedules which made provision for paying the engineer and fireman the mileage to the wreck and the time at the wreck, it would have resulted in the engineer and fireman receiving a higher rate of pay than even the machinist would have received under his time and a half, would it not?

Mr. DeGuire: As to that, I made no investigation. We followed the Milwaukee schedule right straight through, and I did not find any such rule in the Milwaukee schedule.

Mr. Sheean: No, but from the exhibit which was introduced here showing the various provisions as to the engineers' and firemen's schedules, as to how they were paid in wrecking service, you know that some schedules contain a provision for paying the engineer and fireman the mileage to and from the wreck, plus the time at the wreck?

Mr. DeGuire: I understand there is some difference in

practically every schedule; and, therefore, without making an investigation as to just how much that would be, I would dislike to say.

Mr. Sheean: On page 18, where you have one illustration there, a hypothetical case of a hypothetical wreck, you show 8 hours at the wreck, and 120 miles to and from the wreck?

Mr. DeGuire: Yes.

Mr. Sheean: Which would give the engineer and fireman under that kind of a schedule compensation for twenty hours. That is right, isn't it?

Mr. DeGuire: I would not want to say without taking the schedule and figuring it out.

Mr. Sheean: I say a schedule which provided that they should be paid mileage to and from the wreck, and time at the wreck—this hypothetical case, under that schedule, would result in the payment of twenty hours to the engineer and fireman.

Mr. DeGuire: It would result in the mileage to and from the wreck, and the hours at the wreck, if it was that kind of a schedule.

Mr. Sheean: And this particular example at page 18 has 120 miles to and from the wreck, and eight hours at the wreck?

Mr. DeGuire: How many hours did you say it would be?

Mr. Sheean: The example shows 120 miles run to and from the wreck, and eight hours at the wreck.

Mr. DeGuire: That would pay him twenty hours.

Mr. Park: I should like to clear up one question in my mind. Is it alleged that it is a very ordinary thing for machinists to go to wrecks? Is that not a very rare occurrence?

Mr. DeGuire: That is something that I would not be prepared to answer. They have a rule, however, covering that, and unless they used it, I would not see the necessity of placing that rule in the schedule.

Mr. Park: Does it state specifically "work at wrecks"?

Mr. DeGuire: No, it says when on the road.

Mr. Park: But you use this to convey the impression that it is quite an ordinary thing for machinists to be sent to wrecks. You do not know to what extent they are employed in such emergencies, do you?

Mr. DeGuire: From the investigation that I made, I learned that they were used in that class of service.

Mr. Park: To do what?

Mr. DeGuire: To go to wrecks.

Mr. Park: What would they do when they got there?

Mr. DeGuire: I really do not know.

Mr. Park: I do not know.

Mr. DeGuire: But I should think they would use them on the wrecker, in a case of that kind, and possibly to disconnect an engine that had gone down an embankment, or something of that kind, to assist in clearing up the wreck in that manner.

Mr. Sheean: From page 20 on, Mr. DeGuire, as I understand it, these tables are carried out simply to show, taking, for instance, Mr. Schultz, on page 20, that if he had as a machinist worked under this schedule the number of hours that he actually worked as an engineer during that month, he would have received the money which is shown in the column at the right?

Mr. DeGuire: Yes.

Mr. Sheean: Did you make any investigation to ascertain whether or not during the month in which Mr. Schultz received the check for \$172.90, any machinist in the employ of the Milwaukee Road received a check of like proportions?

Mr. DeGuire: I did not, and I do not presume they did.

Mr. Sheean: And so as to all the other comparisons made, at the right of the various pages following twenty, you indulge in the like presumption, that no machinist in the employ of the Milwaukee Road received as much money as the actual amount shown as drawn by the engineer and fireman during that month?

Mr. DeGuire: That is true, because the company would not work a machinist that length of time, due to the heavy overtime rate.

Mr. Sheean: Now, I note also that in the comparisons beginning at page 30 and continued to the end, you show the actual earnings of firemen employed in the switching service, and compare them with the hypothetical earnings of a machinist, had that machinist worked the same number of hours. Did you make any comparison between the fireman's actual earnings in that month and the earnings which would have been paid to a fourth year apprentice, as provided for in page 9 of this schedule?

Mr. DeGuire: No, I did not, for this reason: You could not consider a fireman in line with an apprentice, because a fire-

man is performing not only an apprentice's work, but also a man's work. He is performing an apprenticeship, leading up to the time when he is going to be an engineer, and he is performing labors that are required of a man as a fireman.

Another reason is: The apprentice starts in to work as a boy 16 years old. He is eligible to enter a shop, and by the time he would be eligible as a fireman he would be drawing a machinist's wages.

Mr. Sheean: Well, you did make no comparison then with the earnings of the fourth year apprentice?

Mr. DeGuire: No, no, because I did not think it would be a fair comparison.

Mr. Sheean: Although this schedule makes provision for graduated rates of pay through the first, second, third and fourth years?

Mr. DeGuire: That is true.

Mr. Sheean: And it is a fact, is it not, that an apprentice in his fourth year of service, had he worked during all the hours shown here, and on the basis of the eight hours that you carry out, and with the pay for overtime, etc., that fourth year apprentice, working these hours, would have received less money in each case than the fireman actually drew down?

Mr. DeGuire: Oh, that is without a doubt.

Mr. Sheean: Now, have you made any comparison as to the earnings in any kind of road service, between the earnings of firemen and engineers in road service, with what would have been paid for a like number of hours to a machinist?

Mr. DeGuire: No, we did not make any such comparison, because I could not conceive any point where you could make a fair comparison in that class of work, because a machinist is never on the road all the time.

Mr. Sheean: And your only comparison was with the named men in switching service?

Mr. DeGuire: Yes, for this reason: Out here we have got a shop, and alongside that shop the engines work back and forth, and the men work in the same vicinity, and you have the same expense, the same earfare to and from homes and things of that kind, and, consequently, I figured that would be about the only fair comparison you could make.

Mr. Sheean: And you made the comparison with the en-

gineers and firemen who drew the greatest money in that month?

Mr. DeGuire: Yes; who drew the greatest money, as listed in exhibits 26 and 27.

Mr. Sheean: And this man, thus drawing the greatest money, and being on an hourly basis, is the man, or are the men who worked the longest hours during that month?

Mr. DeGuire: That is true.

Mr. Sheean: That is all.

Mr. Burgess: Mr. DeGuire, I am not quite clear on some of the replies given to the counsel for the railroads. In preparing this exhibit, you employed the schedule of the Chicago, Milwaukee & St. Paul Railway for the machinists, did you not?

Mr. DeGuire: Yes, sir.

Mr. Burgess: So that regardless of what shop you made your personal investigation at, the fact does remain that this schedule covers all machinists employed by the Chicago, Milwaukee & St. Paul Railway, does it not?

Mr. DeGuire: Yes, sir, that is true.

Mr. Burgess: Now, in regard to rule No. 8, if I understand your explanation correctly, the only time that can be deducted from the machinist's pay, while on the road, is the time that he may be in bed, and that must be a period of five hours; is that right?

Mr. DeGuire: That has been the understanding that I have received, after conferences with men who work under this schedule and who assisted in making the schedule.

Mr. Burgess: So in the event the machinist was required to work 10 or 12 hours, and an hour was given for eating his meal, that time would be included in his compensation.

Mr. DeGuire: Under rule 8, that is my understanding.

Mr. Burgess: Now, then, in regard to rule No. 15, relative to the number of hours that shall constitute the day's work. If I recall your testimony correctly, you stated yesterday that this exhibit was prepared, based on the eight hour day, is that right?

Mr. DeGuire: That is true.

Mr. Burgess: And yet the schedule states that 9 hours shall constitute a day's work?

Mr. DeGuire: Yes, sir.

Mr. Burgess: Now, is it a fact that the Chicago, Milwaukee

& St. Paul Railway can change the specified number of hours to work per day, if they give a bulletin notice of 24 hours?

Mr. McGuire: That is my understanding of the schedule.

Mr. Burgess: Then, after posting the number of hours that shall be worked on a given day, if they desire to work the machinists for a longer period than that as stated in the bulletin, for the hours in excess of those named in the bulletin, they do pay time and a half.

Mr. DeGuire: Yes, sir; that is my understanding.

Mr. Burgess: So that by putting a bulletin into effect that a day would be seven hours, and then calling on the machinist to work 10 hours, they would have to pay time and a half for the three hours between seven and ten, is that right?

Mr. DeGuire: I have so been informed.

Mr. Burgess: Now, Mr. DeGuire, you have been asked the question if you compared the actual money that the machinist drew, with that that was paid to the engineer. If I understand the purpose of this exhibit, it was to show what the machinist would have earned, had he worked the same number of hours as worked by the engineer. Is that right?

Mr. DeGuire: Well, your question was not put, I don't believe, as you intended it. You asked me if the money that the machinist earned. Instead of that, we compared with the earnings of the engineer, what the machinist earned.

Mr. Burgess: I understand; had he worked the same number of hours.

Mr. DeGuire: The same number of hours.

Mr. Burgess: And that is the purpose of the exhibit.

Mr. DeGuire: Yes, sir.

Mr. Burgess: Now, in regard to the pay allowed to the fourth year apprentice, if I interpret this schedule properly, at the expiration of four years, the apprentice then will receive journeyman's pay, if retained in the service of the company? Is that right?

Mr. DeGuire: That is the way the schedule reads.

Mr. Burgess: So that there is a guaranty for the apprentice to become a journeyman, at the expiration of four years?

Mr. DeGuire: Yes, sir.

Mr. Burgess: Well, is there any guaranty for a fireman to become an engineer, at the expiration of four years?

Mr. DeGuire: Well—

Mr. Burgess: Is not that controlled largely by the nature of the business, and it is possible for him to fire an engine eight or nine years?

Mr. DeGuire: Yes, that is true, but I do not know whether or not the same conditions would apply to an apprentice who could not find work as a machinist.

Mr. Burgess: That is true, but if he remained in the service of the company he would not be retained at apprentice's wages, would he, at the expiration of four years?

Mr. DeGuire: I don't believe that he would.

Mr. Burgess: Well, does not Rule 26 specifically provide that, having finished their apprenticeship, they shall receive journeyman's pay if retained in the employ of the company?

Mr. DeGuire: Yes, sir.

Mr. Burgess: Now, there is no such rule pertaining to firemen, is there?

Mr. DeGuire: No, sir.

Mr. Burgess: That is all.

Mr. Nagel: Mr. DeGuire, when you selected the machinists of a brewery by way of comparison with the firemen and engineers, were you attracted by the similarity or by the dissimilarity of the two services?

Mr. DeGuire: No, we had the machinists' schedules for the brewery in our files, and it was one of the first schedules we came to, and then we compared it with the Milwaukee, to see what difference there might be, and we found that the machinists in the different trades were, as a rule, paid higher than the machinists on a railroad, and so we made that comparison.

Mr. Nagel: It was not because you could not find a brewery in Chicago?

Mr. DeGuire: Oh, no, no, because if we had been looking for a higher rate brewery we could have found a great many on the Pacific Coast. They pay as much as 60 cents an hour out there.

Mr. Nagel: You did not select the St. Louis concerns because the conditions in their contracts with their machinists are particularly favorable?

Mr. DeGuire: Oh, no, because I could have got ones more favorable than the ones in St. Louis. You take the contracts on

all the Northwest Pacific Coast, Seattle, and all those cities, they pay a machinist 60 cents an hour.

Mr. Park: Did you make an investigation of the standard pay of railroad machinists at St. Louis?

Mr. DeGuire: No, I did not.

Mr. Park: Why did you use the contract machinists' shops, so-called, that is outside of railroad work?

Mr. DeGuire: Why, we were simply making a comparison with the railroad trades and other industries.

Mr. Park: Did you get any figures to show how much machinists in the contract shops get per annum?

Mr. DeGuire: No, we have not those figures in our files.

Mr. Park: So that you don't know what the opportunities present, even at the 52 cent rate?

Mr. DeGuire: No, but I believe in general practice, where you have a higher rate by 25 per cent in the contract shops, or in a brewery, under that, compared with the railroads, it will result in receiving higher wages for the year, or for the month.

Mr. Park: That is simply a guess on your part. You don't know whether, for instance, a brick layer or a hod carrier gets more than \$1,000 a year or not, on the average, although their average may be 65 cents or 75 cents an hour.

Mr. DeGuire: Well, if they don't, they have an awful lot of time off for themselves and their families that they may enjoy the pleasures of life, that we don't have.

Mr. Park: And is not that one of the troubles of the building trades organizations, that they have a great many unemployed men, while comparatively few are employed?

Mr. DeGuire: Well, I would hesitate to say, without making an investigation.

Mr. Park: And you don't know that there are estimated to be 150,000 unemployed skilled building trades laborers in the city of Chicago, idle now?

Mr. DeGuire: Why, I have not seen that estimate, but I know we have thousands of firemen that are out of employment, also, and that draw less money, by far, per hour, than the building trades men.

Mr. Park: You are not acquainted with the duties of a machinist? You never worked in a shop as a machinist?

Mr. DeGuire: No, never have.

Mr. Park: You know nothing about their work, and the skill and knowledge that is required by a machinist?

Mr. DeGuire: No, sir.

Mr. Park: Do you know anything about the difference in the work that may be done in a contract shop and in railroad work?

Mr. DeGuire: Why, I have been informed that, as a rule, work in contract shops is a little the most favorable, because the work is cleaner.

Mr. Park: Does it require a greater mechanical knowledge, ordinarily?

Mr. DeGuire: As to that, I have no information.

Mr. Park: That is all.

RE-DIRECT EXAMINATION.

Mr. Carter: Mr. DeGuire, did you have any ulterior purpose in selecting machinists to make this comparison? Is it not a fact that the reason you selected machinists is because the railroads, in one of their exhibits, had presented the machinists to show how low the wages were, of machinists, compared with engineers and firemen?

Mr. DeGuire: Yes, sir, it was for that purpose that this exhibit was compiled.

Mr. Carter: And after the railroads challenged us to show that machinists did earn as much as engineers and firemen, why was the Milwaukee Road selected? Was it not the first principal road they presented?

Mr. DeGuire: It was the first principal road they presented in their exhibit 23.

Mr. Carter: Then why did you select Milwaukee switch engineers? In order to get men in the service of the same company?

Mr. DeGuire: Yes, sir.

Mr. Carter: Did you select them at the same pay?

Mr. DeGuire: Yes, sir.

Mr. Carter: If you had wanted to make a better showing, could you not have taken the west end of the Milwaukee, where they pay a much higher rate to their machinists?

Mr. DeGuire: Yes, they pay a higher rate on the west end.

Mr. Carter: But you took the east, where they pay a lower rate?

Mr. DeGuire: Yes, sir.

Mr. Carter: Then, if, as intimated, you were trying to make a showing, you could have gone to the west end of the Milwaukee, and made a far better showing, could you not?

Mr. DeGuire: Yes, it would have resulted in showing a higher rate paid to the machinists.

Mr. Carter: Now, next, it is brought out in this cross-examination, that, on the Milwaukee, they pay through freight rates for wrecking service. In cross-examination, it was brought out that on some roads they pay through freight rates to and from the wrecking place, and at the wrecking place, pay for the wrecking time. Could you not have found other roads where they pay higher rates and better conditions for machinists, by going to the Pacific Coast?

Mr. DeGuire: Yes, sir.

Mr. Carter: Now, you selected a St. Louis concern. Could you not have gone to the Pacific Coast and got still higher rates?

Mr. DeGuire: Yes, sir.

Mr. Carter: Then, Mr. DeGuire, at any time did not you try to make the comparison fair?

Mr. DeGuire: I tried to make it absolutely equitable and fair.

Mr. Carter: Now, with regard to this shop out here, did you pick out that shop because there might be a different rule in the different shops, or did you know anything about it?

Mr. DeGuire: No, I did not. I understand now that the rules for all shops are the same.

Mr. Carter: But it has been intimated here that if you had gone to another shop in Milwaukee, you might have found something else. Is that true?

Mr. DeGuire: I don't think so.

Mr. Carter: It is up to the railroads to prove that in rebuttal, is it not?

Mr. DeGuire: Yes, sir.

Mr. Carter: And if they don't prove it we will accept it as not being true?

Mr. DeGuire: Yes, sir, that is my understanding.

Mr. Carter: All right. Now, next.

Why are machinists shown here earning so much money?

Mr. DeGuire: Due to the high rate paid for overtime after eight hours.

Mr. Carter: And we recognize that no machinist ever makes this money?

Mr. DeGuire: We so recognize.

Mr. Carter: Because they are not required to work these hours?

Mr. DeGuire: That is true.

Mr. Carter: And we protest that engineers and firemen should not be required to work these hours, do we not?

Mr. DeGuire: We certainly do.

Mr. Carter: And we believe the only remedy is time and a half for overtime, so they will not be required to work these hours?

Mr. DeGuire: It is my opinion that if we secured a rule paying time and one-half after ten hours, that no yard man, unless it was in a case of emergency, would work longer than ten hours.

Mr. Park: Mr. Carter, do you advocate an eight hour day for all engineers and firemen?

Mr. Carter: I do. If I had been making the proposition I would have put it in there, too.

Mr. Park: You think every engineer and fireman should be relieved at the end of eight hours?

Mr. Carter: Yes, or else, when he is required to work over eight hours, because of the necessities of the company, he should be compensated additionally.

Mr. Park: Well, I thought the "or else" had a great bearing on it.

Mr. Carter: Now, it has been suggested here that machinists do not go to wrecks. Is it not a fact that on nearly all railroads where engines are disabled, they send machinists out to disconnect those engines?

Mr. DeGuire: Why, I understand that they do, and from testimony presented by the railroads, I understand that they send machinists out to disconnect when they have failures.

Mr. Carter: Then, if the cross-examination intimated that machinists are never sent out that way, they should prove it in sur-rebuttal, should they not?

Mr. DeGuire: I should think so.

Mr. Carter: Not by indirect questions.

Now, next, with regard to these apprentices who go to work at 16 years of age and work until they are 20, and then draw machinists' wages. When are firemen permitted to fire a locomotive? At what age?

Mr. DeGuire: At about 21.

Mr. Carter: Then it would require five years apprenticeship as a machinist before he would be old enough to fire a locomotive, isn't that true?

Mr. DeGuire: That is true.

Mr. Carter: Now, let us assume the railroad contention, as I understand it, that a fireman is an apprentice engineer, should he not receive as much wages as an apprentice engineer, being five years older than an apprentice machinist?

Mr. DeGuire: I would think so.

Mr. Carter: Now, doing a man's job, and perhaps the hardest job any man performs, running a locomotive, should he not receive the wages of the fireman, in addition to his wages as apprentice engineer?

Mr. DeGuire: That would be my understanding of it, that he certainly should.

Mr. Carter: Now, if that theory is correct, and he is an apprentice engineer, and receives the same wages for being an apprentice engineer that the machinists' apprentices receive, and then receives the wages due a man who works this hard work—performs this arduous duty and assumes these responsibilities, even he, perhaps, would be the highest paid man in the company, would he not?

Mr. DeGuire: He certainly would.

Mr. Carter: Therefore, the theory of his being an apprentice and a fireman too, would be in our favor, isn't that true?

Mr. DeGuire: That is true.

Mr. Carter: With regard to these hundreds of thousands of skilled laborers out of work in Chicago. Have you seen any notice in any newspaper to that effect?

Mr. DeGuire: No, sir.

Mr. Carter: You have seen that there are a number of unskilled laborers out of employment, haven't you?

Mr. DeGuire: Yes, sir.

Mr. Carter: Now, presuming that engineers and firemen are skilled, do you know of any other occupation that is more precarious, because of variations and fluctuations in business, than that of locomotive engineers and firemen?

Mr. DeGuire: I know of none.

Mr. Carter: That is all.

Mr. Burgess: Mr. DeGuire, just one question more. Referring to the rate of pay in rule 3, page 10, paid to machinists by the brewing companies of St. Louis, Mo., if my recollections are right, we find that the machinists would earn in eight hours \$4.20.

Mr. DeGuire: If your figures are correct, that is right. I have not made the computation.

Mr. Burgess: And if he was then required to work two more hours, he would receive time and one-half for the two hours, which as I calculate the proposition would make \$5.77.

Mr. DeGuire: That is true, so far as the application of the rule is concerned.

Mr. Burgess: So we would find a machinist working in those breweries receiving \$5.77 for a ten hour day, while the switch engineer, bearing all the hazard of bodily injury, all the risk in regard to the fluctuation of business, and assuming all the chances of making a mistake and forfeiting his position, drawing only \$4.25 in the highest paid yards in the Western Territory.

Mr. DeGuire: No, I wish to correct you there to this extent. They have more than one working rate in switching service on the Milwaukee Railroad. Therefore it would vary.

Mr. Burgess: The highest rate for switching service on the Milwaukee is what—\$4.50?

Mr. DeGuire: I can give it to you accurately. It runs from \$4.25 to \$5.50 on the Mallet type of engine.

Mr. Burgess: On the Mallet, but I am not speaking of the Mallet particularly. I am speaking of the regular and ordinary engine. Of course there is a higher rate on the Mallet.

Mr. DeGuire: \$4.50 would be the highest ordinary rate paid, if my understanding was correct.

Mr. Burgess: Did you say it was \$5.50 on the Mallet?

Mr. DeGuire: \$5.50 on the Mallet.

Mr. Burgess: Then, even taking the Mallet rate, we would find that the machinists in these brewing companies would re-

ceive at least 27 cents more than the highest amount that the switch engineer receives?

Mr. DeGuire: Yes.

Mr. Burgess: You state that there is a still higher rate than that for the machinists in the brewing companies if you go further west?

Mr. DeGuire: Yes.

Mr. Burgess: Now, in regard to the continuity of employment, I understood you to state that you had made no investigation as to that?

Mr. DeGuire: No, I have not.

Mr. Burgess: It is fair to assume, is it not, that there is a continuity of employment in a brewery in St. Louis or Milwaukee?

Mr. DeGuire: I am not prepared to say.

Mr. Burgess: That is all.

The Chairman: Mr. Sheean, have you any further questions?

Mr. Sheean: In Exhibit 23 of the railroads were shown the rates of pay and earnings of the shop crafts at the main shops, and it specified the Milwaukee shops as being the places where those earnings were made, did it not?

Mr. DeGuire: Yes, that is what it specifies—Milwaukee shops.

Mr. Sheean: And in the payroll there were shown a great many earnings of switch engineers at Milwaukee, were there not?

Mr. DeGuire: I presume there were.

Mr. Sheean: The comparisons that you made were with switchmen working at Galewood or in Chicago in each instance?

Mr. DeGuire: Yes.

Mr. Sheean: The switchmen employed by the Milwaukee road and working at Milwaukee during the month did not work as many hours as these few men here in Chicago? You took the highest number of hours worked by any of the men in switching service on the entire Milwaukee system, did you not?

Mr. DeGuire: Yes, we picked out the highest paid men shown in Exhibits 26 and 27.

Mr. Sheean: And the highest number of hours worked?

Mr. DeGuire: Yes—

Mr. Sheean: That is all.

Mr. DeGuire: But I wish to explain. I understand that the hours for the machinists in the shops at Milwaukee are the same as they are here. They have a first shift from 7 A. M. to 3 P. M., a second shift from 3 to 11 P. M., and a third shift from 11 P. M. to 7 A. M.

Mr. Sheean: Those are the repair shops, or the roundhouse, rather, not even the repair shops. Those are the roundhouse hours, where the light running repairs are made?

Mr. DeGuire: Well, as to that, they are machine shops and so considered.

Mr. Sheean: Well, they are a roundhouse where the light running repairs are made?

Mr. DeGuire: No, it is a machine shop. A roundhouse is a house in which we put engines and a machine shop is a shop in which repairs are made.

Mr. Sheean: That is all.

Mr. Burgess: Mr. DeGuire, regardless of whether it is a roundhouse, or a machine shop, or a square house, or out of doors, the fact remains they do receive compensation under the schedule arranged by the machinists' committee with the officers of the Chicago, Milwaukee & St. Paul Railway?

Mr. DeGuire: That is true.

Mr. Carter: Mr. DeGuire, can you secure for the information of counsel for the railroads, and for the Board, what are the hours worked at this main shop?

Mr. DeGuire: Sure.

Mr. Carter: Will be glad to do it?

Mr. DeGuire: Will be glad to do it.

Mr. Carter: I wish you would do that.

Mr. DeGuire: I will do that.

Mr. Carter: Next, Mr. DeGuire, why did you select the highest paid engineers and firemen?

Mr. DeGuire: Why, it was selected to show what the wages would be for a machinist required to work the same excessive number of hours.

Mr. Carter: And if they, in order to defeat this proposition, showed the highest paid men, then it was up to us to show what other employes of the same company would earn, under the same number of hours.

Mr. DeGuire: That is true.

Mr. Carter: And they are the ones that injected this machinist matter into this proposition, are they not, by their exhibit?

Mr. DeGuire: By their exhibit, showing high paid men.

Mr. Carter: Was not the Milwaukee road the first road they presented?

Mr. DeGuire: Yes, sir.

Mr. Carter: That is all. Did you have occasion to note Exhibit No. 1, presented by the railroads, wherein they compared wages of engineers and firemen in the Western Territory, Eastern Territory, and South Eastern Territory?

Mr. DeGuire: Yes, sir.

Mr. Carter: A superficial knowledge of the facts connected with this, would lead you to believe that perhaps the Western engineers were better off than the South Eastern engineers, would it not?

Mr. DeGuire: Why, that would be the understanding, I believe, the average man would secure by looking at the comparison shown on certain pages of Exhibit No. 1, presented by the railroads.

Mr. Carter: That is, a superficial examination.

Mr. DeGuire: Yes, sir.

Mr. Carter: What does a very minute and close examination show, when you compare the earnings of engineers on the Southeastern railroads with the earnings of engineers on the Western Railroads?

Mr. DeGuire: I find that the earnings of engineers on the Southeastern Railroads would run a great deal higher when put into actual practice—when you combine the rules with the rate.

Mr. Carter: Have you prepared a special statement to that effect?

Mr. DeGuire: Yes, sir.

Mr. Carter: Mr. Chairman and gentlemen, we desire to introduce this as Exhibit 84.

(The document so offered and identified, was received in evidence, thereupon marked Employees' Exhibit No. 84, March 16, 1915.)

Mr. Carter: As briefly as you can, Mr. DeGuire, will you

read the different subjects covered in this exhibit, appearing under the caption of Contents?

Mr. DeGuire: "Earnings of Engineers on Certain South-eastern Railroads Compared with Earnings of Engineers on Certain Western Railroads and What Would be Earned on Western Railroads Under the Proposition Now Arbitrated."

Mr. Carter: Passenger Service?

Mr. DeGuire: "Passenger Service; Through Freight Service; Way Freight Service."

Mr. Carter: That is one table?

Mr. DeGuire: Yes, sir.

Mr. Carter: What is the next subject?

Mr. DeGuire: "Engineers' Compensatory Rules Defining a Day's Work and Overtime in Passenger and Freight Service."

Mr. Carter: The third?

Mr. DeGuire: "Compensatory Rules and Special Rates of Wages in Effect on Southeastern Railroads Affecting Earnings of Engineers in Various Classes of Service."

Mr. Carter: Now, Mr. DeGuire, turn to page 2. By the way, your introductory page here repeats the title and states, "In rebuttal to the estimated increased cost to Western Railroads of the Proposition Now Arbitrated, which estimate, it is asserted by the Engineers, Firemen, and hostlers is grossly exaggerated, comparisons herein are thus presented.

"So far as possible comparisons are based on information found in Exhibits presented by the Railroads in this Arbitration."

This investigation, I understand, leads you to believe that the present wages on the Southeastern—or rather, the present earnings on the Southeastern Railroads, for a ten hour trip, greatly exceed the earnings of engineers on the Western Railroads for a ten hour trip?

Mr. DeGuire: That is true.

Mr. Carter: Now, will you explain why you took—now, take in passenger service. Why did you take a day of 100 miles or less, five hours or less, on pages 2 and 3?

Mr. DeGuire: Because that would compare with practically what we are requesting in the west.

Mr. Carter: We are asking for a hundred miles or less and five hours or less in passenger service?

Mr. DeGuire: Yes, sir.

Mr. Carter: Now, in making these comparisons, you took certain Southeastern railroads, to show what the practice was in the Southeast.

Mr. DeGuire: Yes, sir.

Mr. Carter: Then, you took the Illinois Central Railroad as being the closest Western railroad to the Southeast?

Mr. DeGuire: Yes, sir.

Mr. Carter: Then you took the earnings under the proposition now being arbitrated on the Western Railroads, including preparatory time?

Mr. DeGuire: That is true.

Mr. Carter: Why did you not include terminal delay?

Mr. DeGuire: Well, for this reason: If, at a railroad terminal, hostlers are used to bring the engine to the depot and the train left on time, there would be no terminal delay, and terminal delay, if there were no hostlers, might vary from a few minutes to a considerable length of time.

Mr. Carter: Suppose the designated track to deliver the engine on was in close proximity of the track where the train was delivered. The terminal delay would be exceedingly short, would it not?

Mr. DeGuire: Might not be any at all.

Mr. Carter: Therefore, you ignore the terminal delay?

Mr. DeGuire: Yes, sir.

Mr. Carter: If it is the practice of a railroad, however, to hold the man on duty, one, two or a dozen hours, before he is permitted to go on the road after he is called for duty, why, then, that terminal delay would increase the earnings under the proposition.

Mr. DeGuire: That is true.

Mr. Carter: But you did include the 30 minutes preparatory time?

Mr. DeGuire: Yes, sir.

Mr. Carter: Now, as briefly as you can, just start through the first road, Alabama Great Southern, as it heads the list. I understand these Southeastern roads are in alphabetical order?

Mr. DeGuire: Yes, sir.

Mr. Carter: Why did you take only two locomotives for the Alabama Great Southern?

Mr. DeGuire: Because those were the only weights on drivers of locomotives that I could find in the company's exhibit.

Mr. Carter: You took those two as being presented by the railroads?

Mr. DeGuire: Yes, sir.

Mr. Carter: What was the speed basis on that road?

Mr. DeGuire: It was 20 miles per hour.

Mr. Carter: Does that mean 5 hours or less, 100 miles or less?

Mr. DeGuire: Why, I would so construe it, although there are some Southeastern roads that have not got the five hour clause.

Mr. Carter: Is it a fact that some Southeastern roads guarantee more than 100 miles?

Mr. DeGuire: Oh, yes.

Mr. Carter: Now, we will get to that. The basis is 20 miles per hour.

Mr. DeGuire: Twenty miles per hour.

Mr. Carter: Now, what do you show in the second column, under rates of wages per mile, in cents? Where do you get those rates?

Mr. DeGuire: I secured the rates per mile from Railroads' Exhibit No. 1, page 78.

Mr. Carter: Then the overtime rate per hour, where did you get that?

Mr. DeGuire: I secured the overtime rate per hour from Railroads' Exhibit No. 1, page 10.

Mr. Carter: Well, what would have been the earnings for a day of 100 miles or five hours? I beg your pardon. What would be guaranteed in passenger service for a day's work, 100 miles or less, or 5 hours or less?

Mr. DeGuire: On the Alabama Great Southern?

Mr. Carter: Yes.

Mr. DeGuire: \$5.15.

Mr. Carter: Now, does that mean that they are guaranteed more than a day's work or 100 miles?

Mr. DeGuire: Yes, sir.

Mr. Carter: How much are they guaranteed on the Alabama Great Southern—about 120 miles?

Mr. DeGuire: About 121. It runs between 117 and 121.

Mr. Carter: Now, Mr. DeGuire, it was shown here by one of the witnesses for the railroads, that it was very burdensome on the Western railroads to have to pay an engineer a full day's pay for 100 miles, when he went over the road in less than 10 hours. Now, how much do they pay on the Southeastern Railroads? We will take the Alabama Great Southern as being the first road.

Mr. DeGuire: They pay \$5.15.

Mr. Carter: What would that amount to, about 121 miles?

Mr. DeGuire: On the 4.25 rate it would amount to 121 miles.

Mr. Byram: Mr. DeGuire, did you mean that no engineer runs on the Alabama Great Southern who gets less than \$5.15 a day?

Mr. DeGuire: In passenger service.

Mr. Byram: That is the least he can get?

Mr. DeGuire: We are speaking of main line service.

Mr. Byram: That is the least he can get?

Mr. DeGuire: That is the guaranteed minimum daily wage on the Alabama Great Southern in passenger service.

Mr. Byram: That is all.

Mr. Carter: Then the Alabama Great Southern guarantees its engineers 121 miles in passenger service, even though they go over the road in 8 hours, or 7 hours, or 5 hours?

Mr. DeGuire: Yes, it would run from 117 to 121, according to the rate per mile.

Mr. Carter: I see. The minimum daily wage is guaranteed, and the per mile that they guarantee would be according to the weight on the locomotive?

Mr. DeGuire: That is true.

Mr. Carter: Let us see the Illinois Central and see what it pays for the same service. Now the speed basis is the same, 20 miles per hour, is it not?

Mr. DeGuire: Yes, sir.

Mr. Carter: The rate, though, is somewhat lower, is it not?

Mr. DeGuire: The rate is higher per mile in one instance—no, it is the same in one instance, but it is higher.

Mr. Carter: How much is the overtime rate per hour there?

Mr. DeGuire: 44 cents per hour.

Mr. Carter: That is, on the Alabama Great Southern, the overtime rate in passenger service is 60 cents, while on the Illinois Central it would be 44 cents an hour on that engine?

Mr. DeGuire: Yes, sir.

Mr. Carter: That would be about time and a half, would it not, pretty near?

Mr. DeGuire: Yes; pretty close to it, 63 cents would be about time and a half and it is 60 cents.

Mr. Carter: Now, what would be the minimum daily wage guaranty for 100 miles or less, 5 hours or less, on the Illinois Central?

Mr. DeGuire: \$4.40.

Mr. Carter: Then the difference between the present pay to an engineer on these two roads, for this same service, and on exactly the same weight on drivers, is that the Alabama Great Southern pays about \$1.15 a day more than the Illinois Central. Is that true?

Mr. DeGuire: No, I do not think it varies quite that much.

Mr. Carter: How much then—\$5.15 compared with \$4.40?

Mr. DeGuire: About 75 cents.

Mr. Carter: About 75 cents. I was mistaken. Now, Mr. DeGuire, have you estimated what would be the earnings if all of our propositions were granted?

Mr. DeGuire: I do not quite get that.

Mr. Carter: Have you estimated what would be the earnings under the proposition now arbitrated, on Western Railroads, if all of our propositions were granted?

Mr. DeGuire: With the exception of terminal delay, yes.

Mr. Carter: All right, now. Let us see what you make it. Now, it is to be assumed that the Illinois Central is brought up by this Arbitration to our entire request. That is the basis of my question. How much would he make for the same five hours or less?

Mr. DeGuire: He would make \$5.28.

On the 100,000 to 140,000 pounds on drivers engines, and on the locomotive weighing 140,000 to 169,999, he would receive \$5.50.

Mr. Carter: And a comparison of the third column under the Illinois Central Railroad, with the fifth column under the proposition now arbitrated, shows what the increase in wages would be?

Mr. DeGuire: Yes.

Mr. Carter: But if you glance back to the fourth column, under the Southeastern Railroads, you will see how nearly the Southeastern Railroads are already paying what we are asking in the West?

Mr. DeGuire: That is true.

Mr. Carter: And in the last column you include preparatory time, do you?

Mr. DeGuire: Yes.

Mr. Carter: Arbitrarily?

Mr. DeGuire: We have arbitrarily allowed them thirty minutes at the five hour basis.

Mr. Carter: Now, if you glance right down through pages 2, 3, and 4 you find the principal Southeastern Railroads, do you?

Mr. DeGuire: Yes.

Mr. Carter: What road in the Southeast is nearest to the Illinois Central?

Mr. DeGuire: The Louisville & Nashville, I believe, parallels them for the greatest distance.

Mr. Carter: Then, Louisville & Nashville comparisons would practically be comparisons of a line parallel with the Illinois Central?

Mr. DeGuire: I would think so.

Mr. Carter: If these were carried out, I will take the Louisville & Nashville on the engines named there. You say you got these engines out of the railroads' exhibit?

Mr. DeGuire: Yes.

Mr. Carter: And the only locomotives shown in passenger service in the railroad exhibit?

Mr. DeGuire: Yes.

Mr. Carter: They get \$5.00 per day on those engines on the Louisville & Nashville?

Mr. DeGuire: That is true, for the minimum day's pay.

Mr. Carter: And on the Illinois Central they get \$4.15—\$4.40, the present rates are?

Mr. DeGuire: That is true.

Mr. Carter: Under the present schedule?

Mr. DeGuire: Yes.

Mr. Carter: But under the proposition they get \$4.95 and \$5.28 on the Western Railroads?

Mr. DeGuire: Yes.

Mr. Carter: On one engine they get 5 cents less than now paid on the Louisville & Nashville, and on the other engine, they get 28 cents more.

Mr. DeGuire: That is my understanding.

Mr. Carter: Now, we will turn to the next table. I understood you to say that was passenger service.

Mr. DeGuire: Passenger service. And I would also like to say that the basis of a day's work on the Illinois Central was taken from Railroads' Exhibit No. 1, page 6. Also the overtime and basis of payment was taken from the Railroads' Exhibit, on the Illinois Central, from page 49, the weights of locomotives on drivers. The rates per mile for the Illinois Central were taken from the Railroads' Exhibit No. 1, page 67.

Mr. Carter: So if anybody wants to look up these references—

Mr. DeGuire: They can find them.

Mr. Carter: I wish after every table you would read those citations into the record, so that any one may verify or check up your exhibit.

Mr. DeGuire: Yes, sir.

Mr. Carter: What is the next, on page 5?

Mr. DeGuire: The next is Earnings of Engineers in Through Freight Service for Trip of Ten Hours Between Terminals.

Mr. Carter: Why did you select a trip of ten hours between terminals, when most of these Southeastern Railroads are eight or nine hour roads, and almost all are eight hour roads?

Mr. DeGuire: Because, in order to make a comparison with our request, we would have to make a comparison on a ten hour basis.

Mr. Carter: Does our request indicate that we expect men to work ten hours for 100 miles or less?

Mr. DeGuire: Yes, in through freight service.

Mr. Carter: And in order to compare with the Southeastern Roads, you would have to arbitrarily select a ten hour trip?

Mr. DeGuire: That is true.

Mr. Carter: Because no overtime would accrue until after ten hours?

Mr. DeGuire: In the West?

Mr. Carter: Under our proposition?

Mr. DeGuire: That is true.

Mr. Carter: Now, it means that on a 100 mile division, the companies would guarantee an engineer a full day's pay for ten hours or less, 100 miles or less?

Mr. DeGuire: That is my understanding.

Mr. Carter: Therefore, you have arbitrarily, for your purpose of comparison here, selected a through service trip of ten hours between terminals?

Mr. DeGuire: Yes.

Mr. Carter: Did you select ten hours between terminals for any ulterior purpose, or to try to cover up something?

Mr. DeGuire: No, sir.

Mr. Carter: You were perfectly fair in selecting ten hours?

Mr. DeGuire: Yes.

Mr. Carter: Now, let us see what you find in freight service. We will start off with the Alabama Great Southern, and then drop down to the Louisville & Nashville, and then go on. On the Alabama Great Southern, you found four classes of locomotives in the railroad service, did you?

Mr. DeGuire: Yes.

Mr. Carter: And you found all this information in the railroads' exhibits, up to the computation?

Mr. DeGuire: Yes.

Mr. Carter: What do the computations show for a ten hour trip, between terminals?

Mr. DeGuire: In the Southeast?

Mr. Carter: Yes.

Mr. DeGuire: The computations run from \$6.35 to \$6.60.

Mr. Carter: \$7.65?

Mr. DeGuire: \$7.65 on the Mallet.

Mr. Carter: What do they run on the Illinois Central at present?

Mr. DeGuire: They run from \$4.90 to \$5.40.

Mr. Carter: What would they run under our Western proposition, including preparatory time?

Mr. DeGuire: They would run from \$5.67 to \$8.40; but you cannot compare that last rate with the Illinois Central, because they have no engines of that weight on the Illinois Central Railroad.

Mr. Carter: They have no engines on the Illinois Central Railroad weighing between 300,000 and 399,999 pounds?

Mr. DeGuire: Not to my knowledge.

Mr. Carter: That is, not shown in any information that you have?

Mr. DeGuire: No, sir.

Mr. Carter: Excluding that engine, let us ignore that engine, and take their first three engines. How much less would engineers receive under this proposition, on the smaller engine, than is now paid on the Alabama Great Southern?

Mr. DeGuire: You mean the Illinois Central?

Mr. Carter: No, sir. How much less would the engineers receive under the Western proposition than is now paid on the Alabama Great Southern?

Mr. DeGuire: They would receive about 6.35 per cent less.

Mr. Carter: Now, make comparisons of those engines all the way through, including the Mikado.

Mr. DeGuire: On the second engine it would be a difference of a little better than 8 per cent.

Mr. Carter: I thought it was 11.9 per cent.

Mr. DeGuire: On the first one, 8.11 per cent; on the second, 6.9 per cent.

Mr. Carter: And you have not made any comparisons for the Mikados?

Mr. DeGuire: No, sir.

Mr. Carter: But there is a difference?

Mr. DeGuire: On the Mallet, you mean?

Mr. Carter: On the Mallets. Under the present wage schedule on the Alabama Great Southern, engineers would receive \$7.65 on the Mallet, and under the Western Proposition they would receive \$8.40?

Mr. DeGuire: Yes.

Mr. Carter: It is only on this large Mallet that any increase is shown?

Mr. DeGuire: That is true.

Mr. Carter: Now, turn to the Louisville & Nashville.

Mr. Shea: Before you get off that, Mr. Carter, I want to ask Mr. DeGuire if this is based on ten hours' service.

Mr. DeGuire: This, here?

Mr. Shea: Yes.

Mr. DeGuire: Based on a ten hour trip between terminals.

Mr. Sheean: And those terminals just 100 miles apart?

Mr. Carter: Yes.

Mr. DeGuire: 100 miles apart, or a ten hour trip.

Mr. Shea: Now, assuming that they were 100 miles apart on the Alabama Great Southern Railroad, from when did you compute the engineer's time—from the time he was ordered to leave, or from the time he was ordered to report for duty?

Mr. DeGuire: I computed the engineer's time on the Alabama Great Southern from one hour before time ordered to leave.

Mr. Shea: That is all.

Mr. Carter: Why did you do that? We were going to bring that out later, but you may state why you did that.

Mr. DeGuire: By turning to page—

Mr. Carter: I will drop it now, and when you get to that page, we can discuss it.

Mr. DeGuire: I can read it.

Mr. Carter: All right; go ahead.

Mr. DeGuire: By turning to page 13 you will find the following rule:

“Road overtime will be computed from the time engineer is due to leave, or is called for schedule trains, or is called to leave on extra trip, until he is relieved of his engine at the end of his trip.”

Then it goes on and says:

“Engineers in road service except work train service, are required to report 30 minutes before time of departure of train. Road time of Engineers engaged in through freight service will begin one hour before the time set for the departure of their trains.”

Mr. Carter: Do you understand that that railroad thinks an engineer should be on duty one hour before the train departs, in order to see that that engine is in proper condition to depart?

Mr. DeGuire: That would be my understanding of the rule.

Mr. Carter: But you do not know.

Mr. DeGuire: No, I do not know.

Mr. Carter: All right. Now, where were we? We were turning to the Louisville & Nashville Road, were we?

Mr. DeGuire: Yes, that is what your suggestion was.

Mr. Carter: The reason we take the Louisville & Nashville Road, is because it is a parallel road to the Illinois Central?

Mr. DeGuire: Yes.

Mr. Burgess: Mr. Carter, may I interrupt you just a moment there?

Mr. Carter: Certainly.

Mr. Burgess: Just to call your attention to the fact that the Alabama Great Southern is only a portion of the Cincinnati, New Orleans & Texas Pacific.

Mr. Carter: Yes, that is true.

Mr. Burgess: And the same rules apply from Cincinnati to Meridian, Mississippi. It is all under one general manager. I wanted to invite attention to that fact, because it might obviate the possibility of some one thinking that you were segregating part of the same system.

Mr. Carter: Mr. Burgess, and gentlemen, we recognize the fact that there are two or three roads named in the Railroads' exhibits that are really one railroad, but in order to keep as close to the Railroads' exhibits as possible, we took the roads just as they were named in the Railroads' exhibit. We recognize that the Queen & Crescent does include those roads.

Mr. Burgess: Those properties are under the same general management?

Mr. Carter: Yes, but the reason we subdivided was to keep as close to the Railroads' exhibits as possible.

Mr. Burgess: My only purpose in reminding you was that I thought you had overlooked that fact.

Mr. Carter: No.

Mr. Park: You took the Alabama Great Southern because it appeared first, alphabetically?

Mr. Carter: In the Railroads' exhibit.

Mr. Park: You took the Illinois Central because it was nearest?

Mr. Carter: No, we took the Illinois Central because it was nearest the Southeastern roads. It runs, of course, largely east of the Mississippi River, and we took all these roads in the Southeast, and the reason we took the Illinois Central was because that road was the nearest of all the Western roads to these Southeastern roads; and the reason we have taken the Alabama Great Southern to exemplify the purpose of the Exhibit, is be-

cause it is the first road mentioned by the railroads in alphabetical order.

The reason we turned to the L. & N. is to show that on the L. & N. the rate proposed is not as high in some particulars as on certain other roads, but the L. & N. is a competitor from the Ohio River, or from St. Louis, really, to New Orleans, of the Illinois Central; and I think we are showing here that these railroads are not only paying more than the Illinois Central, but, in many instances, are paying more than we are asking for the Illinois Central.

Mr. Shecan: Paying, or would pay, if all their trips were exactly 100 miles?

Mr. Carter: Ten hours. I think that is fair to state, that we have arbitrarily selected a ten-hour trip, giving 100 miles; and I want to be frank with you, and to state that if they made the trip in less than eight hours, it would not make this showing. But the reason we have taken ten hours is, because in our Western proposition, it is based on a ten-hour day. As I said in reply to one of the members of the Board, if I had been writing that proposition, I would have had it eight hours, and then there would have been no trouble in comparing with eight-hour roads.

Mr. Burgess: But, regardless of whether the mileage is 100, 125, or 150, or whatever mileage it may be, the fact of the matter is that the method of obtaining additional payment is by dividing the number of miles by 12½?

Mr. Carter: Yes, on the eight hour roads. Now, turn to the Louisville & Nashville, on freight service. That is the last rate on page 6, at the bottom of the page.

Mr. DeGuire: Yes.

Mr. Carter: Now, without reading the amounts, what would be the figures to the L. & N. engineers in freight service, for a trip of ten hours between terminals, if they got our proposition that we are requesting here, instead of what they have already got?

Mr. DeGuire: On the engine weighing less than 80,000 pounds on drivers, their decrease would be 25.7 per cent.

Mr. Carter: How do you get that? Is it not 16.4?

Mr. DeGuire: 25.7.

Mr. Carter: Yes, that is right. What next?

Mr. DeGuire: On the engine weighing 80,000 to 100,000 pounds on drivers, the decrease would be 23.9 per cent.

On the engine weighing 100,000 to 140,000 pounds on drivers, the decrease would be 16.4 per cent.

On the engine weighing 140,000 to 170,000 pounds on drivers, the decrease would be 12.2 per cent.

On the engine weighing 170,000 to 199,999 pounds on drivers, the decrease would be 8.4 per cent.

On the largest locomotive, weighing between 225,000 and 250,000 pounds on drivers, their decrease would be 1.9 per cent.

Mr. Carter: And so I understand that when you examined Railroads' Exhibit No. 1, and made these computations, you found that the Louisville & Nashville are now paying to their engineers in through freight service, for a ten-hour trip, from 1 to 25 per cent more earnings than we are asking in this proposition, eliminating terminal delay.

Mr. DeGuire: That is my understanding.

Mr. Carter: What else have you here?

Mr. DeGuire: Are you going to turn to the next table now?

Mr. Carter: Turn to the next table now.

Mr. DeGuire: Before you do that I would like to read—

Mr. Carter: Read those citations.

Mr. DeGuire: The information for the Southeastern Railroads relative to basis of day's work and overtime rules, was taken from Railroads' Exhibit No. 1, page 17.

Weight of locomotives on drivers and rates of pay for Southeastern Railroad, were taken from Exhibit No. 1, page 94, with the exception of the rate of \$5.15 for the Georgia, which was taken from the Official Schedule. Railroad Exhibit No. 1 quoted a rate of \$4.75, which we found was in error.

On the Illinois Central, the basis of day's work was taken from Railroads' Exhibit No. 1, page 13.

Overtime and basis of payment was taken from Railroads' Exhibit No. 1, page 54.

Weight of locomotives on drivers and rates of pay were taken from Railroads' Exhibit No. 1, page 83.

We have added a few Mallet engine rates that the railroads' exhibits did not show, that we secured from the official schedule.

Those were on the Alabama Great Southern; Chesapeake & Ohio; Norfolk & Western; Southern, and Virginian.

Mr. Carter: And that information that was not obtainable in the Railroads' exhibit as indicated here, you secured from the official schedules?

Mr. DeGuire: Yes, sir.

Mr. Carter: Now turn to page 9. What does this purport to show?

Mr. DeGuire: "Earnings of Engineers in Way Freight Service for a Trip of 10 Hours Between Terminals."

Mr. Carter: Now, does this in like manner show the difference in the present wages on Southeastern Railroads and the present wages on the Illinois Central?

Mr. DeGuire: Yes, sir.

Mr. Carter: And the earnings on Western Railroads under the proposition now arbitrated?

Mr. DeGuire: Yes, sir.

Mr. Carter: Now, you find that in some instances here there is no decrease to the men in this class of service over what we are showing?

Mr. DeGuire: In some instances, yes, sir.

Mr. Carter: Well, generally, do you find that they are already getting as good as our Western proposition, or possibly better?

Mr. DeGuire: Why, on some roads, they are getting a little better. On some roads, not quite so good.

Mr. Carter: Now, pass to the next. By the way, what is your next table here?

Mr. DeGuire: Our next table is "Engineers' Compensatory Rules Defining Day's Work and Overtime in Passenger and Freight Service."

The Chairman: What page?

Mr. DeGuire: Page 12.

Mr. Carter: Was this included simply to complete the picture, as I believe it is called sometimes?

Mr. DeGuire: Yes, sir.

Mr. Carter: To give all the information that you could upon the subject?

Mr. DeGuire: Pertaining to the tables that we have preceded this.

Mr. Carter: Where did you get these rules?

Mr. DeGuire: These rules were taken from the railroads' exhibits, as I have outlined in the statements I have read to the Board.

Mr. Carter: In some instances, did you have to find additional rules from the official schedules, or did you find them all in the railroads' exhibits?

Mr. DeGuire: Why, I found practically all the rules in the exhibits that we quote in this table.

Mr. Carter: Now do you find, Mr. DeGuire (without taking too much time) that even on the 9 hour roads, so-called, that, in the Southeast, because the pay of the engineer begins half an hour or an hour before the leaving time of the train, that it virtually makes an 8 hour road out of what appears to be a 9 hour road?

Mr. DeGuire: Yes, that is true. For example, on the question of the clause in regard to the time of engineers being calculated before time ordered to leave, and they being on a 9 hour basis, that would practically make them an 8 hour road.

Mr. Carter: Now, is there anything in these rules as suggested by the question of Mr. Shea a while ago, that you desire to bring out?

Mr. DeGuire: Why, there is only this: On practically all of the Southeastern Railroads, the time of engineers begins 30 minutes to one hour before time ordered to leave.

Mr. Carter: Well, now, how about an 8 hour road? If they are on a 10 hour trip, would their overtime begin thirty minutes before they started?

Mr. DeGuire: Yes, sir.

Mr. Carter: And you have included that in this computation. Wherever the time is shown in these rules to begin 30 minutes before, we have computed it; and in some instances the schedules were not plain. It reads, for example, "time will be computed from the time engineer is required to be at work;" or it would say "from the time engineer is required to be at his engine;" or "from time he signs the register book."

In those instances, I have made inquiries, and learned that they are allowed 30 minutes to one hour prior to time ordered to leave.

Mr. Carter: They are ordered to be on duty from 30 minutes to an hour, possibly.

Now, Mr. DeGuire, let us be fair to everybody. If this trip on this 8 hour road did not take more than 7 hours, they would not get pay for this half hour or hour preparatory time, would they?

Mr. DeGuire: No. That is only computed in computing overtime.

Mr. Carter: But in order to make a comparison between these 8 hour roads and our 10 hour proposition, you arbitrarily computed it on a trip of 10 hours between terminals, did you?

Mr. DeGuire: Yes, sir, that is true.

Mr. Carter: And when you do that, then this time of the engineers on these Southeastern Roads began from a half hour to an hour before the leaving time of their train?

Mr. DeGuire: That is true, but on this table on the Atlanta Birmingham & Atlantic, the Atlantic Coast Line, the Chesapeake & Ohio, the Georgia, the Louisville & Nashville, the Norfolk & Western, and the Norfolk Southern, you will find that the engineers did not get that 30 minutes on this 10 hour trip, for this reason: They have got a rule on these railroads that says: "Over 30 minutes will constitute an hour." Consequently, they worked up to the 30 minutes, but they did not go beyond that; and, therefore, did not get that 30 minutes preparatory time. If they had been on the road one minute more, their pay shown in here would have been increased by one hour.

Mr. Carter: And if it had been your purpose to exaggerate these matters, you would have made a 10 hour and 30 minutes trip, in order to get this overtime.

Mr. DeGuire: Yes. We could have had, under their schedules, another hour's time.

Mr. Carter: But, by adhering strictly to this ten hour trip, we lacked just one minute of showing greater earnings on these Southeastern Railroads?

Mr. DeGuire: Yes, sir.

Mr. Carter: Now, is there anything else you care to speak of in regard to these compensatory rules, rules defining a day's work?

Mr. DeGuire: There is nothing more with the exception

of what I have called your attention to. As I have said, some railroads start time an hour before, and some thirty minutes.

Mr. Byram: Mr. DeGuire, I understood you to say these are all main line comparisons.

Mr. DeGuire: Why, not necessarily main line. We took the rates shown for passenger service out of these exhibits, and whatever it meant in your exhibit, that is what it means.

Mr. Byram: Well, I understood you to say when I asked you a question awhile ago, this was main line passenger service.

Mr. DeGuire: That is my understanding.

Mr. Byram: Then that would indicate these roads have a different basis for the payment of branch line service.

Mr. DeGuire: I believe that is true. The latter part of this exhibit will show, although I have never made any study of the branch line situation, as that is not feasible unless you know the outlay of the ground.

Mr. Carter: The next table covers that subject, just exactly what you are showing?

Mr. Byram: All right.

Mr. Carter: Now, will you turn to—

Mr. Park: Did you make any study or comparison as between the fireman's wages in the Southeastern schedules and those in the Western?

Mr. DeGuire: Why, that was impossible, because we did not have any data on the Southeastern firemen to check against the Companies exhibit, to ascertain whether it was correct or not, and therefore we were unable to make up any table covering the Southeastern firemen.

Mr. Park: Then you have no idea as to the relative relation between the two?

Mr. DeGuire: No, I have not.

Mr. Shecan: I don't quite follow you, Mr. DeGuire, when you say "I have nothing on which to check up." Have you not access to the firemen's schedules, where they have schedules there?

Mr. DeGuire: The firemen's schedules that we had in our files were all sent to one of our Vice-Presidents, who was in the South, as I understand the matter, and they did not get back in time, and in fact have not got back yet.

Mr. Carter: I was going to bring that out. I have that

question to ask and explain why we did not bring it. It is listed in our program, and we will explain at that time.

Mr. Park: Mr. DeGuire is testifying as an expert for the firemen.

Mr. Carter: We were going to explain why we did not take any firemen.

Now, take the next page, beginning on 51, what does this show?

Mr. DeGuire: This shows "Compensatory Rules and Special Rates of Wages in Effect on Southeastern Railroads, Affecting Earnings of Engineers in Various Classes of Service."

Mr. Carter: Now, you have not compared these rates, have you, to know which are branches, or anything about it?

Mr. DeGuire: No, I have not.

Mr. Carter: But do you find there that some of these rates are apparently higher?

Mr. DeGuire: There are some very fine rates in this exhibit.

Mr. Carter: Possibly some lower.

Mr. DeGuire: I think so. I think some higher.

Mr. Carter: Now, your purpose in including this was to show all the rules, for the branch service or any other service?

Mr. DeGuire: Yes, sir.

Mr. Carter: And all the information you have upon the subject is presented here?

Mr. DeGuire: That is true.

Mr. Park: Did you take into consideration the physical characteristics of the road. That is, the grade existing on these different roads, as compared with the Illinois Central and the valleys.

Mr. DeGuire: I have made no comparison of Eastern roads.

Mr. Park: Well, of Southeastern?

Mr. DeGuire: No, I have made none.

Mr. Park: There are some very heavy grades around Birmingham and through that country.

Mr. DeGuire: Well, we have some very heavy grades in the west.

Mr. Park: But you did not take the roads that had the heavy grades in the west, to make the comparison?

Mr. DeGuire: Well, we have compared it with the Western proposition for all roads.

Mr. Park: You did not compare it with the Denver & Rio Grande, or any of the Western roads operating in the mountains.

Mr. DeGuire: No, we have compared it with the valley rates. We have not added the amount that would come to these men on account of the one per cent grade. But you take our Western proposition, and it would cover every railroad in the west, except in mountain territory, and that was the comparison.

Mr. Park: That is all.

Mr. Carter: Now, Mr. DeGuire, all you know is what is shown here.

Mr. DeGuire: That is true.

Mr. Carter: And what it means, you have not investigated?

Mr. DeGuire: No, I have not had time to investigate it.

Mr. Carter: But you have reduced it, so as to give all the information obtainable?

Mr. DeGuire: That is true.

Mr. Carter: And it goes through, railroad by railroad, in alphabetical order.

Mr. DeGuire: Yes, sir.

Mr. Carter: And if it is a higher rate on a branch service it must be shown here, and if it is a lower rate it must be shown here?

Mr. DeGuire: Yes, sir.

Mr. Byram: What is the basis of overtime on branch lines shown by this exhibit?

Mr. DeGuire: As I said, I made no study whatever of the branch line end of it.

Mr. Byram: Did you ever read this exhibit?

Mr. DeGuire: Read this exhibit?

Mr. Byram: Yes.

Mr. DeGuire: I have read the rules, and published them, just as they were found in the schedule.

Mr. Byram: Don't you know what they say?

Mr. DeGuire: I made no study of them to learn how they should be applied.

Mr. Byram: Then, suppose you refer to page 52 and read the next to the last paragraph there.

Mr. DeGuire: "All time in excess of 12 hours shall be paid for at 50 cents per hour; 30 minutes not to be regarded, over 30 minutes to be regarded as one hour."

Mr. Byram: Now, is that overtime on branch lines on the Atlantic Coast Line Railroad?

Mr. DeGuire: I would so understand it, without reading the entire rule.

Mr. Byram: Now, then, please read the second paragraph from the bottom of page 52.

Mr. DeGuire: "Eleven hours or less shall constitute a day's work."

Mr. Byram: The second paragraph from the bottom on page 54.

Mr. DeGuire: Well, the second paragraph from the bottom on page 54, you cannot very well read without reading something that precedes it, because it says, "this will also include."

Mr. Byram: All right. Read the paragraph preceding it.

Mr. Carter: Let us begin at the beginning. It is not fair to pick out some parts, without reading all.

Mr. Byram: I have not any objection to how much you read, but the witness said he did not know anything about this branch line overtime rule, and I am pointing out a few things in here that he has overlooked.

Mr. Carter: I want to explain, Mr. Byram, that will force us now to have the witness read all the rules because—

Mr. Byram: Now, Mr. Carter, if you will please wait till I get through questioning the witness, you can read all you want to.

Mr. Carter: All right.

Mr. Byram: Now, Mr. Witness, will you please read the second from the last paragraph on page 54.

Mr. DeGuire: "This will also include extra service on the Perry Branch between Marshallville, Ohio, and Everett, together with required work at intermediate points and terminals. Work done outside of specified points within 12 hours will be paid for at overtime rates for actual time consumed. If engineers are called for an extra trip, after the last trip in the afternoon and before the first trip next morning, a minimum day's pay for the

class of service performed will be paid. If the mileage amounts to more than a minimum day's pay, then actual mileage will be paid. Overtime at the rate of 50 cents per hour."

Mr. Byram: Now, if you will please read the 7th paragraph from the top of page 55.

Mr. DeGuire: "Twelve hours or less to constitute one day's work. Overtime work 60 cents per hour."

Mr. Byram: Now, the next one is the fourth below that.

Mr. DeGuire: There are extremely high rates ahead of that.

Mr. Byram: The fourth below the one you just read.

Mr. DeGuire: "Twelve hours or less to constitute a day's work. Overtime rate 50 cents per hour."

Mr. Byram: Now, the third from the bottom on that page.

Mr. DeGuire: "Time in excess of 12 hours will be paid for at the rate of 50 cents per hour."

Mr. Byram: Now, Mr. DeGuire, does that indicate that—now that you are familiar with these rules—that there are some branch lines in the South where the basis is 12 hours per day?

Mr. DeGuire: It indicates to me that there are some branch lines that get \$7 a day for 12 hours, and then after that they get 60 cents an hour for overtime.

Mr. Byram: Well, will you please answer my question?

Mr. DeGuire: Read it please.

(Question read by the reporter as above reported.)

Mr. DeGuire: Yes, sir.

Mr. Byram: That is all.

Mr. Burgess: Now, Mr. DeGuire, you are not in position to state whether this engineer and fireman rendered 12 hours' actual service, or that 12 hour insertion there represents the total spread of the day, are you?

Mr. DeGuire: Why, from my experience in railroading, I would understand that it would cover the entire spread of the day.

Mr. Burgess: So that an engineer and fireman, working three hours in the morning, and having a relief period of 5 hours, and working another 3 hours, would come under this classification?

Mr. DeGuire: That is true.

Mr. Burgess: Of 12 hours per day?

Mr. DeGuire: That is my understanding.

Mr. Burgess: Or, are you in position to state that all through these tables in the Southeastern Territory the allusion to the number of hours in branch line service represents the total spread, and not the number of hours worked?

Mr. DeGuire: I have so been informed.

Mr. Park: Is it not a fact that there are a good many arbitraries in the Southeastern schedules, arbitrary allowances? Take page 53, the Central of Georgia. What do you understand by the second paragraph, "Straight mileage will be allowed to Engineers who run trains 14 and 16 out of Albany." Would that be that they are only paid, like the Wabash, the actual mileage that they run?

Mr. DeGuire: I would not think so, because the rule ahead of it says, "A minimum of \$5 will be paid engineers."

Mr. Park: "On trains 7 and 8, between Macon and Albany." So that it would appear that their schedule is made up—almost on a trip plan.

Mr. DeGuire: As I understand the rule, they get a minimum of \$5, and if the mileage at the mileage rates exceeds that minimum, they are paid on the mileage basis.

Mr. Park: Well, it doesn't say so. It says, "Straight mileage will be allowed to engineers who run trains 14 and 16 out of Albany."

Mr. DeGuire: As I said before, I did not make a study of these compensatory rules on branch lines, but I would think possibly that that was greater mileage than the minimum day.

Mr. Park: Well, all of those arbitraries and special allowances and perquisites and emoluments enter into a schedule, do they not? They are all made up locally, and they take into consideration all of the conditions surrounding the lines in the evolution from a trip basis to the so-called mileage basis; is it not necessary to analyze each schedule of each road as to all of these things, to make a fair comparison?

Mr. DeGuire: Well, it is true, everything that is put into a schedule has an effect one way or the other, and we have tried to take everything into consideration in preparing these tables on the first pages of this exhibit that would be taken into consideration on trips of this nature.

Mr. Park: You see this particular schedule is full of these things:

“Engineers on Savannah-Egypt run, to be paid \$2.50 for Sundays, when they remained with engine at Egypt.”

“Engineers on Atlanta, Jonesboro and Forest Park run, to receive one (1) hour overtime, per calendar working day,” and all through the schedules certain arbitrariness and perquisites that change the character of the schedule.

Mr. DeGuire: Well, as I would understand that, engineers on the Savannah-Egypt run are to be paid \$2.50 for Sunday when they remained with the engine at Egypt—as an allowance for remaining away from home on Sunday, \$2.50.

Mr. Park: Well, all these things enter into making a comparison of schedules.

Mr. DeGuire: Yes, that particular thing would increase the compensation.

Mr. Park: They all have a bearing?

Mr. DeGuire: Yes.

Mr. Park: It might be. You don't know all the conditions surrounding it?

Mr. DeGuire: Well, if you add \$2.50 to a man's pay for every Sunday, and he is away every Sunday in the month, that would amount to quite a little money at the end of a year?

Mr. Park: Yes, but you don't know how much he gets on that particular run.

Mr. DeGuire: That is the reason we have not made any tables up on this last part of the Exhibit.

Mr. Park: It is impossible to do that?

Mr. DeGuire: It is, because each branch has different conditions surrounding it. Now, from my experience, I know at times men will go out on a branch line, and work an hour or two and lay around five or six hours, and then do a couple of hours more work and then are done for the day, possibly. Then, on another branch, they work continuous hours.

Mr. Park: You heard Mr. Carter say that railroads are mostly composed of branches—a great proportion of their mileage is branch lines.

Mr. DeGuire: I was not here, I don't believe, when he made that statement.

Mr. Park: I think we can find some reference to it in the proceedings.

Mr. Carter: I think the record will show that Mr. Carter intended by that expression, to say that the railroads claimed they are branches. We protest that they are not branches. The C. B. & Q. mileage in branches is more than most of the railroads have altogether.

Mr. Burgess: Now, Mr. DeGuire, I understood you to say in the beginning, in presenting this Exhibit, that some of the information was obtained from the exhibit of the railroad companies, and other information, and a very small part of it, was obtained from the official schedules of the railroads.

Mr. DeGuire: Yes, sir.

Mr. Burgess: Now then, in this reprint following your Exhibit, you have only printed the rules and the rates, and the regulations for the branch line service. You have not printed the entire schedule, have you?

Mr. DeGuire: No, I have not printed it.

Mr. Burgess: Well, then, in determining on this run No. 14 and 16 out of Albany, where straight mileage would accrue, would not, logically, one specifically provide the minimum day, wherein it states on regular runs, where engineers who will make an equal to the average of five hours per day, straight mileage, will be paid so that the guaranty of \$5.00 a day applies to that run?

Mr. DeGuire: That would be my understanding.

Mr. Park: This seems to have taken it out of the guaranty and set it in a class by itself. Specifically stating that straight mileage would apply.

Mr. Burgess: In all the Southeastern schedules, Mr. Park, the branch line service is tabulated by itself, but the general rules apply.

Mr. Shecan: Mr. Burgess, I wish you would clear up for me on page 57. You probably know about it.

Mr. Burgess: Possibly not.

Mr. Shecan: It is the L. & N. I thought perhaps you would.

Mr. Burgess: I know less about that, I guess, than any other. I have not been there for so long.

Mr. Park: Does this relate to firemen or engineers?

Mr. Shecan: Engineers, Paris-Maysville, two round trips,

198 miles, passenger, per day, \$8.00. That would only be about \$4.00 a hundred miles. The second line at the bottom of page 57. Do they have as low a rate as that, 198 miles, for \$8.00?

Mr. Burgess: Oh, I think that is what they call a "shoo-fly" if I remember correctly. It is a connection between those two towns. I think it is a very light train. I am not sure about it. I have not been there in ten years.

Mr. Park: How far apart are the towns?

Mr. Burgess: I don't remember.

Mr. Stone: Is not that the one, Mr. Burgess, where they haul them up to the coal mines up there?

Mr. Sheean: On passenger.

Mr. Burgess: This says passenger.

Mr. Sheean: Pardon me.

Mr. Stone: I think it is. I am not sure.

Mr. Burgess: I think it is, too.

Mr. Stone: That is the one they put three guards on each car, with a sawed off shot gun, the last time I saw them start.

Mr. Sheean: They only pay, practically \$4.00, per 100 miles.

Mr. Burgess: That is what this exhibit shows, Mr. Sheean. I don't know anything about it. I presume that you will find others. You will find—pardon me, Mr. Sheean—you will find, to be perfectly honest and fair about it—you will find through the branch line rates in the Southeast country, speaking now in a general way—you will find some low rates, and you will find some exceptionally high rates, all of which is a matter of negotiation between the various companies and the committees representing the engineers, and those negotiations rest upon the number of miles, the number of hours and the character of the work. Those are the three factors, and I might say an additional factor is the time the run begins, and the time it ends, in regard to a man getting his meals or his rest. Those four factors are taken into consideration.

Mr. Sheean: Right on that same page, Mr. Burgess, Lexington-Paris, three or four round trips, 116-154 miles, passenger per day, \$6.00.

Mr. Burgess: What page is that?

Mr. Sheean: That is on the same page, 57. Are you famil-

lar with that? They seem to handle that, apparently, irrespective of the mileage, three or four round trips a day.

Mr. Burgess: Yes. I think that run, Mr. Sheean, is a run that connects the Queen & Crescent Railway with the Louisville & Nashville. That is a distance, I assume, for possibly twenty miles from Lexington over to Paris, and they have a train running back and forth there. They never run the train around, as I remember it. They have a pilot on each end.

Mr. Sheean: Have a flat daily rate, no matter how many miles they make, or how many round trips they make?

Mr. Burgess: It says three or four round trips. If they made five, there would be additional pay, and if they only made one, they would be paid, but the rule is elastic enough there to permit the company to get four, if necessary.

Mr. Park: On the next page, 58, Knoxville division, South Corbin-West Knoxville, via Wilton and Jellico, 117 miles, local, per month \$142.50. That seems to be a monthly—fixed, monthly basis.

Mr. Stone: That is very common, Mr. Chairman.

Mr. Park: And the overtime on that run is after fourteen hours?

Mr. Burgess: I might explain it, Mr. Park, by beginning where the company requested that regular engineers be assigned to the local freight trains. They raised the point that the crews, and the engineer, being familiar with how each other worked, they thought that they could save money on account of damage to freight. Now, that is their side.

Mr. Park: Good railroading.

Mr. Burgess: Very well, and they made a proposition to the engineers to work three crews, on each one of their local runs, and they would put three crews on, which would be, if I remember correctly, 17.39 days that the engineer would work in the month. And then they asked for overtime after fourteen hours, or twelve hours, or in some instances, it is ten hours. It is based on the usual and ordinary work of that train. Now, it is safe to say that, seven times out of ten, these engineers or crews pulling this train, go in in the ten hour period, but if they should be held out fourteen hours, the company would not be liable for any overtime, until after the expiration of the four-

teen hour period per day, but he gets his \$142.50 per month, and he only works 17.39 days, if I remember the calculation of it.

Mr. Park: Mr. Burgess, do you think, admitting that that is good railroading and it is a good thing to have regular men on regular trains, are the railroads in the Western territory open to a proposition of that kind, on a monthly basis for engineers and firemen, for local trains?

Mr. Burgess: Now, Mr. Park, you know that I am not making any proposal right now. After we get in our domicile in here, and these other gentlemen have gone home, I might.

Mr. Stone: Mr. Chairman, I should like to ask Mr. Burgess a question, if I might.

The Chairman: Yes.

Mr. Stone: Mr. Burgess, is it not a fact that it is almost standard throughout Southeastern territory to have what they call three-crew locals?

Mr. Burgess: Yes, sir; the companies like it and the men like it.

Mr. Stone: Because they have three days off out of seven?

Mr. Burgess: Yes, sir; and because of the fact that he is regular. He knows when he is going. If you will pardon me for a little bit of an explanation, and I regret to burden the record, but where you run first in and first out in irregular service, there is a great loss in preparing food and then not being called, and the engineer knows when he is going out and when he is coming in. As a general proposition, they run very nearly as regular arriving at terminal as a passenger train, and the company argued, Mr. Park,—the general manager said, "Now, we are making on all our divisions three what might be called preferred runs, or, in other words, we are giving three of the oldest men a preferred run, and we are saving money by this transaction;" and the matter of the rates, if you will go through on different divisions, you will find they vary, and that variation comes from the character of the work.

Mr. Park: I see one on the next page, \$135.00, 96 miles.

Mr. Burgess: Where is that?

Mr. Park: Copperhill-Marietta. They seem to have ignored the constructive mileage.

Mr. Burgess: Copperhill-Marietta?

Mr. Park: Yes; wipe out the constructive mileage and

go to a monthly basis, or salary; not a trip basis, not on a mileage basis, not on an hourly basis, but on a monthly salary basis, and overtime after fourteen hours.

Mr. Burgess: Yes, sir. I will explain that rate. When the Louisville & Nashville built their through trunk line from Knoxville to Atlanta, connecting with their line already built at Knoxville, they had to build a new line, practically.

This, from Copperhill to Marietta, represents the old line known as the Atlanta, Knoxville & Northern. A 20 inch cylinder on that particular run is capable of pulling five freight cars, and one hill they double with that; so the business was transferred largely to the main line and the work is very light there, and I presume that is why that rate was negotiated. Also, I was not present. Mr. Stone was present at the last negotiation.

Mr. Park: On the L. C. & L. Division, South Louisville to Bloomfield, they seem to have a day rate of \$6.00 per day?

Mr. Burgess: Yes, sir.

Mr. Park: Is that regardless of mileage or hours?

Mr. Burgess: No, it says South Louisville-Bloomfield and return, 121 miles, freight, per day, \$6.60, overtime after twelve hours.

Mr. Park: So that the mileage cuts no figure. They pay an arbitrary each day of \$6.60 for that run.

Mr. Burgess: That might possibly be your construction on the language, Mr. Park, but in fixing these rates, as I said before, the number of hours and the number of miles are the two strong factors in determining the rate, so, regardless of how the language reads—now, to a fellow that came from the Louisville & Nashville, that would indicate plainly what it meant, 121 miles and overtime after twelve hours.

Mr. Sheean: Mr. Burgess, there is one thing I do not understand. If you can help me out on that, on page 61.

Mr. Burgess: There are some things I do not know, Mr. Sheean, but I will try.

Mr. Sheean: The L. & N. men seem to have agreed on paying as low as one dollar for certain specified trips, Summer-town, Napier and return.

Mr. Burgess: Where is that?

Mr. Sheean: About the middle of the page. \$1.00 daily; Iron City, Pinkney and return, 23 miles, freight, per trip, \$1.00.

In actual practice, do you know whether they add those runs up to certain other work during the day? I assume there would be some minimum day, but they could combine that service and pay for it?

Mr. Burgess: I assume on that particular branch that that is a side trip before he has finished his minimum day. I don't know.

Mr. Martin: Side trip. Columbia to Sheffield is the run and these are side trips in making that run.

Mr. Burgess: I think so, Mr. Martin.

Mr. Sheean: Clarksville-Guthrie and return (Sunday), 26 miles, passenger, per day \$3.25. The engineer gets as low as \$3.25 for a day's work.

Mr. Burgess: Yes, he gets that \$3.25, but if that is all he does in that day, he gets his \$5.00 just the same.

Mr. Sheean: Minimum not to apply, just below it, Mr. Burgess.

Mr. Burgess: Then I don't know. I would assume if that is all that he gets that day, but I don't understand where any engine could start out of Clarksville to Guthrie, do you, Mr. Martin?

Mr. Martin: That is right.

Mr. Park: Did you make both the schedules of the Denver & Rio Grande?

Mr. Martin: No, sir; did not make either one of them. I had something to do with this one.

Mr. Park: We ought to have a blueprint of the Louisville & Nashville.

Mr. Burgess: You can go a little further down, Mr. Sheean, and you will find the local, Paris-Guthrie, 83 miles, he gets \$6.00 there, and overtime after eleven hours. That is a very good rate, when you take into consideration that half the time he gets in in seven or eight hours.

Mr. Sheean: The next page, 62, I don't understand, either. The third paragraph from the bottom, Owensboro-Moorman and return 57 miles, freight, per day, \$3.50. Overtime after six hours in connection with other service; but if he just has this 57 miles freight, the engineer gets as low as \$3.50 a day?

Mr. Burgess: No; he would get his minimum day there. I don't know about this other one that was referred to, but I

don't know of any place on the Louisville & Nashville where they don't get the minimum day, but as I say, taking all of these branch runs of the Louisville & Nashville Railroad, and comparing them with the total number of engineers, it represents a very small fraction of the men employed. I do not suppose there are over 200 engineers out of a possible 1,200, that are employed in branch service.

Mr. Sheean: I notice, too, they do have the statement in their schedule, page 66, here, "Should additional branch line service be inaugurated to which it would be unfair to apply the mileage rate, specified rates will be agreed upon, based upon other rates for similar service."

Mr. Burgess: Yes, sir; they do want their committee, Mr. Sheean, at any time that the runs are changed, whether it is one year or two years, or one day or two days, to negotiate a new rate basis on the character of the service, the miles and the hours.

Mr. Sheean: And all of the branch line is handled as a special situation, on that particular branch.

Mr. Burgess: That is true, and that is probably true of nearly all the Southeastern Lines.

Mr. Park: Mr. Burgess, at the time they make these schedules, how are the firemen's rates fixed?

Mr. Burgess: Whatever the engineer gets, the fireman gets a certain percentage of that. As I remember, it is 61 per cent.

Mr. Park: That follows all through.

Mr. Burgess: Yes, it goes up automatically.

Mr. Park: And the engineers negotiate that at the time?

Mr. Nagel: You don't want to say automatically.

Mr. Burgess: All right. I will withdraw it. I will do anything to please you, Mr. Nagel.

Well, I don't know just what interpretation you are now trying to place on the word "negotiation."

Mr. Park: I was wondering how they fixed the working conditions, we will say, for firemen.

Mr. Burgess: Well, the best illustration I can give you for fixing some of them, is, I went to the general manager myself and said, "I don't believe this fireman ought to clean engines." I said "My fireman shovels three hundred bushels of coal in four hours and twenty minutes, and he has got to stay there

two hours and clean that engine, and it is not fair in my opinion;" and he says, "I don't think so either, and we will stop it right now." I don't know whether you would call that negotiation, or what you might term it, or whether I was representing the fireman or not, but that is what resulted, and of course the men on the Louisville & Nashville Railroad have a peculiarity that they don't care how you get anything, just so that you get it.

Mr. Park: That is not characteristic of the Western Roads?

Mr. Burgess: I don't know. I am speaking about my home road.

Mr. Stone: It might apply both ways, might it not, Mr. Burgess—the railroads as well as the engineers and firemen?

Mr. Burgess: Well, without reflecting on any gentleman or getting a bit personal, there have been practices revealed here that if they had been attempted in the Southern country, there would have been trouble some way or another. I don't know who would have got whipped.

Mr. Shea: Mr. DeGuire, there has been some reference made to the rates paid the firemen in the Southeastern territory. In fact, you were questioned as to why you did not make a comparison between the rates paid to firemen in the South and those in the West. There are roads in the South where the firemen negotiate a schedule with the officers of the company, are there not?

Mr. DeGuire: Yes, sir.

Mr. Shea: Have you the schedule or joint schedule fixing the rates of pay of the engineers and firemen on the Alabama Great Southern?

Mr. DeGuire: I have the joint schedule on that railroad.

Mr. Shea: I wish you would turn to page 2 and give us the rate of firemen that fire the Mikado engines.

Mr. DeGuire: In freight service, it is \$3.50.

Mr. Shea: That is for 100 miles or less?

Mr. DeGuire: Yes, sir.

Mr. Shea: Time is computed, is it not, one hour before leaving time, the same as the engineers?

Mr. DeGuire: That is my understanding of it.

Mr. Shea: So that in that case, if the firemen worked ten

hours, they would receive in addition to the \$3.50, two hours overtime, at what rate? I wish you would turn to page 6 and give us the overtime rate, per hour, for firemen. Page 6, I believe you will find it, overtime rates of firemen in through freight service.

Mr. DeGuire: Overtime rates for firemen in through freight service, 35 cents an hour.

Mr. Shea: Thirty-five cents an hour for 2 hours would be 70 cents, would it not?

Mr. DeGuire: Yes.

Mr. Shea: Added to the daily rate of \$3.50 would be \$4.20 for 100 miles where ten hours were consumed?

Mr. DeGuire: That would be my understanding of it.

Mr. Shea: Now, in the way of comparison, I wish you would turn to the railroad exhibit giving the rates of pay for the firemen on the Illinois Central Railroad.

Mr. DeGuire: In through freight service?

Mr. Shea: Take the largest engines, the Mikado, the highest rate paid on the Illinois Central.

Mr. DeGuire: In through freight service?

Mr. Shea: Yes, the highest rate paid to the Mikado.

Mr. DeGuire: \$3.75.

Mr. Shea: That would be for 100 miles or less, ten hours or less.

Mr. DeGuire: Yes.

Mr. Shea: Now, if the fireman on the Illinois Central worked ten hours for 100 miles, he would receive \$3.75. Is that right?

Mr. DeGuire: That is true.

Mr. Shea: And on the Alabama Great Southern the same fireman, for the same class of engine, would receive \$4.20 for ten hours?

Mr. DeGuire: That is my understanding of it.

Mr. Shea: Or a difference of 45 cents for ten hours in favor of the fireman on the Alabama Great Southern?

Mr. DeGuire: That would be my understanding of the rule.

Mr. Shea: I wish you would take the next highest rate for firemen on the Alabama Great Southern and state what that is.

Mr. DeGuire: It is \$3.25.

Mr. Shea: Is it not \$3.35?

Mr. DeGuire: Not in freight service. In freight service the rates are \$3.10, \$3.25 and \$3.50.

Mr. Shea: \$3.25. Now, he would receive the same overtime rate, would he not?

Mr. DeGuire: That is my understanding of it.

Mr. Shea: Or he would receive for 10 hours compensation amounting to \$3.95. Is that right?

Mr. DeGuire: If your computation is correct, yes.

Mr. Shea: Now, I wish you would refer to the railroad exhibit and give us the next highest rate for firemen on the Illinois Central Railroad.

Mr. McGuire: \$3.45.

Mr. Shea: That would be for 10 hours?

Mr. DeGuire: That would be for 10 hours.

Mr. Shea: Then the fireman on that class of engine on the Alabama Great Southern would receive \$3.95 against \$3.40 for ten hours on the Illinois Central, or a difference of 50 cents in favor of the fireman on the Alabama Great Southern.

Mr. DeGuire: Against \$3.45, not \$3.40?

Mr. Shea: \$3.45.

Mr. DeGuire: That is what I would understand.

Mr. Shea: Now I wish you would take the lowest rate to firemen in freight service on the Alabama Great Southern and state what that is.

Mr. DeGuire: \$3.10.

Mr. Shea: Also his overtime rate, that would be 70 cents, would it not?

Mr. DeGuire: Thirty-five cents an hour.

Mr. Shea: Thirty-five cents an hour for two hours would be 70 cents, or he would receive for ten hours \$3.80.

Mr. DeGuire: That is true.

Mr. Shea: I wish you would refer to the railroad exhibit and give us the lowest rate that firemen receive on the Illinois Central Railroad.

Mr. DeGuire: \$2.95.

Mr. Shea: Haven't you got a lower rate than that? Is there not a \$2.93 rate in freight service on the Illinois Central, 8-wheel and 10-wheel Mogul?

Mr. DeGuire: Yes, there is a \$2.93 rate, but they did not have any engine of that class in service in October.

Mr. Shea: \$2.93. He would receive \$2.93 for ten hours as against \$3.80 for the fireman on the Alabama Great Southern, a difference of 87 cents in favor of the fireman on the Alabama Great Southern.

Mr. DeGuire: That would be my understanding of it.

Mr. Shea: So that the firemen in the South are not so badly off, after all, compared with some of our Western roads in this arbitration?

Mr. DeGuire: That is true.

Mr. Shea: That is all.

Mr. Stone: Mr. DeGuire, before you leave this exhibit—I think Mr. Carter is through with you—I wish you would turn to page 8 and read the basis of a day's work and overtime in through passenger service in Eastern territory.

Mr. DeGuire: Page 8?

Mr. Stone: Eastern territory.

Mr. DeGuire: It reads as follows:

"Runs of over 80 miles in one direction, 100 miles or less, 5 hours or less; overtime computed 20 miles per hour, continuous time, minute basis. If relieved at turning point, minimum of one day allowed for trip in each direction.

Mr. Stone: I just simply want to state, Mr. Chairman, that there is no such rule in the Eastern Arbitration Award for the engineers.

Mr. Sheean: It does not purport to be in the Award, does it? But, as I understand it, they have written—

Mr. Stone: Not in a single schedule in the Eastern Territory for through passenger service—absolutely not.

Mr. Carter: Mr. Chairman, perhaps I owe an apology for my seeming impatience. I have had a great ambition to have as little time charged to direct examination as possible, permitting the counsel for the railroads to use just as much time as he wanted in cross examination. Now, because of my ambition to get through with this Award, perhaps I have been impatient that the cross examination should take place in the time charged to counsel for the railroads. As the best evidence that I am in a hurry, I have no further questions to ask of the witness.

Mr. Sheean: Mr. DeGuire, on page 2 of this exhibit the heading is: "Earnings of Engineers on Certain Southeastern

Railroads Compared with Earnings of Engineers on the Illinois Central Railroad, and What Would be Earned on Western Railroads Under the Proposition Now Arbitrated." Can you give us the name of any engineer, either on the Illinois Central Railroad or on the Southeastern Railroads, whose run was 100 miles?

Mr. DeGuire: No, we could not do that.

Mr. Sheean: Or less. Do you know of anyone in through passenger service on any of the railroads shown on this tabulation who would, in practice, fall under the hypothetical case shown on this statement through a month of service?

Mr. DeGuire: I do not consider it a hypothetical case.

Mr. Sheean: Well, then, if it is not hypothetical, can you give us the name of any engineer on any of the railroads who, through a month's operations, ran on the basis shown on pages 2 and 3 of this exhibit, in the passenger service, 100 miles or less?

Mr. DeGuire: The exhibit as presented was not presented to show earnings of engineers. It was to show the earnings that could be made under certain rules or rates.

Mr. Sheean: But it is headed "Earnings of Engineers on certain Southeastern Railroads." Then it is not, in fact, the earnings of any engineer on any Southeastern Railroad?

Mr. DeGuire: Not any specific engineer, but what any engineer in the employ of those railroads could make and would make under these conditions.

Mr. Sheean: Can you tell us a place on any of the railroads named where this condition does exist in actual practice, or has at any time existed in actual practice during the last three years?

Mr. DeGuire: All I can say is that we have given you exactly what is found in the railroads' exhibit, as I have stated previously, and we have compiled them in the manner in which you see them in this table.

Mr. Sheean: Do you know of any engineer in passenger service whose day is 100 miles or less in actual operation?

Mr. DeGuire: I have no personal knowledge of any engineer being in that condition.

Mr. Sheean: No?

Mr. DeGuire: Or working under that condition.

Mr. Sheean: From the exhibit of the railroads, covering 5,128 men, and showing 19,258,728 miles, it is shown that the average miles per day in passenger service are 166. Now, Mr. DeGuire, will you take 166 miles as the average run made in passenger service, and on your page 2 show us what the earnings would be on the L. & N. as compared with the earnings on the Illinois Central on page 3, taking the weight on drivers as being 100,000 to 139,000 pounds?

Mr. Stone: Are engineers paid the average wage, or are they paid the actual wage for the miles they run?

Mr. Sheean: For the miles they run. I am taking it upon the average run in passenger service of 166 miles.

Mr. Stone: Is that the way the engineer's wage is computed, Mr. Sheean?

Mr. Sheean: No. I would be very glad to have Mr. DeGuire give me, if he can, any engineer or number of engineers who run on the hypothetical railroad situation shown on pages 2 and 3.

Mr. Stone: I thought we heard from Mr. Trenholm, of the great number of men whom they could not get either the miles or the hours out of. They must come under that, do they not, 100 miles or less.

Mr. Sheean: In the passenger service?

Mr. Stone: I think so. I think we heard of a number of them that they could not get the number of miles out of.

Mr. Sheean: Perhaps you can help the witness out by giving us this.

Mr. Stone: I thought perhaps Mr. Trenholm might be able to help you out.

Mr. Sheean: Mr. DeGuire, you do know, as a practical railroad man, that many engineers run more than 166 miles on their regular runs in passenger service, do you not?

Mr. DeGuire: I believe I know that practically all with whom I have any connection do not make 166 miles.

Mr. Sheean: No? Well, all of whom you know make more than 100 miles on their runs?

Mr. DeGuire: No, not all.

Mr. Sheean: Which one now does not make 100 miles?

Mr. DeGuire: There is the run between Kaukauna and Antigo, a distance of 95 miles.

Mr. Sheean: And that is the regular passenger run?

Mr. DeGuire: Yes. I fired it for many, many months.

Mr. Sheean: There is no turn around?

Mr. DeGuire: No. You go up one day and back the next.

Mr. Sheean: Do you know of any other one run than that one on the North Western system, where that is true?

Mr. DeGuire: Practically all of the runs on my division will average between 100 and 120 miles a day.

Mr. Sheean: Give us the highest run on your division, in mileage.

Mr. DeGuire: The highest run is 226 miles, every third day.

Mr. Sheean: Now, for the sake of illustration, just taking the average length of the run, which this exhibit, on this total number of millions of miles, shows to be 166, I wish you would, on this page 3, show us what are the earnings of a man on the L. & N. as compared with the earnings of a man on the Illinois Central.

Mr. DeGuire: Well, we can figure that out, but after we get it figured out is there anything that would give us 166 miles as the basis of a day's work in passenger service? And that is what you are getting at, if you are going to figure out an example using 166 as a basis.

Mr. Sheean: I am trying, if you will pardon me, to take an actual run and not a stage run. You have been unable to give me any cases except this one that you know of in the passenger service where the man runs 100 miles or less. Now, you need not figure it out if you do not care to do it, but upon the L. & N. a man running there would get 4.25 times 166, would he not?

Mr. DeGuire: Yes.

Mr. Sheean: And on the Illinois Central, which you say is the nearest road to that, upon the like engine he would get under the present situation 4.4 times 166.

Mr. DeGuire: Yes, considering the mileage basis without any overtime rates or delayed time at terminals.

Mr. Sheean: About how often, in your judgment, is overtime in passenger service paid on either of these roads?

Mr. DeGuire: That is something I am not prepared to say, and that is why we have not made this up on an overtime basis.

Mr. Sheean: Yes. Take, then, the cases that you know of,

Mr. DeGuire, where you say in passenger service the run is 120 miles, what would be the rate of pay on the Illinois Central, as compared with the L. & N.?

Mr. DeGuire: On a 100 mile basis?

Mr. Sheean: A 120 mile run in passenger service.

Mr. DeGuire: It would be 120 miles at 4.25, on the L. & N., and it might be 100 miles at 4.15 or 4.40 on the Illinois Central.

Mr. Sheean: No, it would be 120 miles on the Illinois Central, at 4.40.

Mr. DeGuire: Not necessarily. They have a 4.15 rate there, you know.

Mr. Sheean: Mr. DeGuire, how many engines weighing less than 80,000 pounds on drivers are in this through passenger service where this minimum guaranty obtains on the L. & N.?

Mr. DeGuire: How many engines are in the service?

Mr. Sheean: Yes, where the minimum guaranty of \$5 obtains?

Mr. DeGuire: Will you state that once more?

Mr. Sheean: I will withdraw it. Without taking any further time upon this part of the exhibit, it is true, is it not, that that on all passenger runs on the Illinois Central which are 120 miles or more in length, the Illinois Central under its present schedule on all engines except those weighing less than 80,000 pounds on drivers, pays its engineers more than the L. & N. pays on the same run?

Mr. DeGuire: Yes, that is true, but I find that they have got quite a number of engines on the Illinois Central paying that 4.15 rate. There are 41 listed in railroad exhibit No. 1 page 67.

Mr. Sheean: Yes.

Mr. DeGuire: And there are only 40 between 100,000 and 140,000, and 30 between 80,000 and 90,000 and 99 between 140,000 and 170,000.

Mr. Sheean: You have made comparisons here with the through passenger service of the L. & N.? You have not compared it with these \$3.25 and \$4.50 and \$135 a month rates?

Mr. DeGuire: Take those rates we were speaking of at \$135 a month, and by dividing 17.33 into that rate it would give you between \$7 and \$8.50 a day, I believe, for 17 days' work.

Mr. Sheean: Let us then put it in one way on which we can

all agree. On all engines in passenger service which weigh more than 80,000 pounds on drivers, on all runs above 120 miles in length, the Illinois Central, at the present time, is paying more money to its engineers than the L. & N. is paying to its engineers on runs of the same length.

when you take simply that phase of it into consideration.

Mr. Sheean: And except the one case that you spoke of on

Mr. DeGuire: I believe you are correct in that statement the North Western, you are unable to give me any other case where a man in passenger service would fall within the heading which you have here of 100 miles or less. Perhaps Mr. Burgess can help me out. Is there any regular passenger run on the L. & N. in which the mileage does not bring it up to the minimum guaranty, so that you are not paid on the strict mileage basis of 4.25?

Mr. Burgess: Well, knowing the L. & N. officers as well as I do, and working for them so long, I do not think there are very many.

Mr. Sheean: So then it is safe to say, is it not, Mr. Burgess, that the L. & N., in passenger service, is actually paying 4.25?

Mr. Burgess: No, I want to be entirely fair with you and give you a true picture, whether it is for or against the engineers. Since that schedule has been made, the L. & N. pays 4.40 for a certain size engine, just exactly the same as the Illinois Central.

Mr. Sheean: So that in actual practice, in the actual runs in passenger service, the actual payments to the engineers for the runs which they make on the L. & N. are the same as the rates paid by the Illinois Central?

Mr. Burgess: I should say that the rates on the L. & N. were practically the same; that is, the Illinois Central 4.15 and 4.40 and the L. & N. 4.25 and 4.40; but I want to be perfectly fair again, and to state that they have not got very many engines that are large enough to take the 4.40 rate; but when an engine of that size is used, they do pay the 4.40 rate.

Mr. Sheean: That is, the L. & N. are then paying the same rate as the Illinois Central?

Mr. Burgess: Yes.

Mr. Sheean: All I was trying to develop was that this

minimum guaranty of \$5 in passenger service actually worked out that the 4.25 mileage rate was made applicable to the runs in actual practice.

Mr. Burgess: If they can, yes.

Mr. Sheean: And they do in the great majority of cases?

Mr. Burgess: Yes, in the great majority of cases, and I think that as far as that is concerned that would probably be true of all the Southern roads where they can do it; but, nevertheless, that does not destroy the fact that if they do not do it, an engineer gets the \$5 guaranty instead of the 4.15.

Mr. Sheean: Precisely. That is why I turned to you, because you know the L. & N., that being the rate that is compared here. In actual practice, the engineers on the L. & N. are paid 4.25 per mile, and on the heavier engines 4.40 per mile?

Mr. Burgess: Yes.

Mr. Sheean: While the Illinois Central pays 4.4 per mile?

Mr. Burgess: Or 4.15.

Mr. Sheean: Yes. So that for the heavier engines the rate on the Illinois Central and the L. & N. are just the same in the actual operations in passenger service.

Mr. Burgess: I would say that as far as the passenger service is concerned they are probably substantially the same, but the great difference comes in the freight.

The Chairman: We will suspend.

(Whereupon, at 12:30 o'clock P. M. a recess was taken until 2:30 o'clock P. M.)

AFTER RECESS.

G. N. DEGUIRE was recalled for further examination, and having been previously sworn, testified as follows:

Mr. Sheean: Mr. DeGuire, we had passed the comparison of earnings in passenger service. Your next comparison, beginning at page 5, headed "Earnings of Engineers on Certain Southeastern Railroads, Compared with Earnings of Engineers on the Illinois Central" covers the same method of comparison as in passenger service, does it?

Mr. DeGuire: Yes, we took the table of rules as a measure, and compiled the tables from that source.

Mr. Sheean: And the comparison is the hypothetical earn-

ings of hypothetical engineers who made just 100 miles in just ten hours.

Mr. DeGuire: The comparison is a table compiled from the rates and rules shown in the official schedule.

Mr. Sheean: Well, it assumes in each case the comparison is on the assumption that the engineers whose earnings are shown made exactly 100 miles in exactly 10 hours.

Mr. DeGuire: That is true, yes sir.

Mr. Sheean: In the case of the 100 miles—if it was exactly 100 miles, if made in 8 hours, there would be no difference between the L. & N. and the Illinois Central, except such difference as there might be in the rates? If just 100 miles was the distance between the terminals, and the engineers on the two roads made that 100 miles in 8 hours, on the two roads, there would be no difference, except such difference as there may be in the rates.

Mr. DeGuire: That is true, but if he was out one minute longer than that on the L. & N. it would be greater. Out of 60 per cent of his terminals it would be greater, for his time would start out of 60 per cent—or a greater proportion of his terminals, it would start prior to the time ordered to leave, and that would not apply on the Illinois Central.

Mr. Sheean: Well, the figures you have carried out in this case are carried out on the assumption that exactly 100 miles was the distance run, and exactly ten hours was the time consumed.

Mr. DeGuire: That is true.

Mr. Sheean: Now, on page 6 where the L. & N. is shown, you show a classification or rates based on weights on drivers, or rather carried out on different weights on drivers. The fact is that both the L. & N. schedule and the Illinois Central schedule, with which you compare, do not make the rate appearing in their schedule on a weight on drivers basis, do they?

Mr. DeGuire: No, the weight on drivers basis was taken from the companies' exhibits, and was therefore applied as you applied it, or the companies applied it when they prepared this exhibit.

Mr. Sheean: And in the companies' exhibit it is shown that all of the engines of the L. & N. in through freight service,

except 12, take a \$5.40 rate, irrespective of any question of weights on drivers. Is not that true?

Mr. DeGuire: That is true. I cannot say about the 12, without referring back, but the \$5.40 and \$5.65 are the rates on the Illinois Central.

Mr. Sheean: They have just the one rate, have they not, of \$5.40, except on the 12 engines, and those 12 engines take a \$5.65 rate?

Mr. DeGuire: Those are the two rates in effect on that railroad.

Mr. Sheean: Now, the Illinois Central schedule has rates on the through freight service running from \$4.90 up to as high as \$5.40?

Mr. DeGuire: That is true.

Mr. Sheean: On this particular page of the exhibit you have made no comparison with any of the engines on the Illinois Central which take a \$5.40 rate?

Mr. DeGuire: In this table?

Mr. Sheean: Yes.

Mr. DeGuire: Oh, yes, we have.

Mr. Sheean: Which take a \$5.40 rate on the Illinois Central?

Mr. DeGuire: Yes, sir; if you will refer down.

Mr. Sheean: I don't see in the column—

Mr. DeGuire: Take the Cincinnati, New Orleans & Texas Pacific, the engine weighing 200,000 to 224,000 pounds on drivers.

Mr. Sheean: What page is that? Oh, yes, on this first page.

Mr. DeGuire: Yes.

Mr. Sheean: Yes.

Mr. DeGuire: That is on page 6.

Mr. Sheean: Yes.

Mr. DeGuire: You will find a \$5.40 rate there on the Illinois Central, compared with an engine of the same weight on the Cincinnati, New Orleans & Texas Pacific.

Mr. Sheean: But you do not make a comparison as between the \$5.40 engine on the Illinois Central with any L. & N. engine?

Mr. DeGuire: The reason for that is that the Louisville & Nashville had no engine weighing 200,000 to 224,999 pounds on drivers.

Mr. Sheean: And in none of these schedules are these rates based upon the weights on drivers, are they, except where they get above 215,000 pounds?

Mr. DeGuire: That is true. The weights on drivers, as I explained, were taken from the Exhibit No. 1, presented by the Committee of Managers.

Mr. Sheean: Taking this through freight comparison which you made on page 6, between the Louisville & Nashville and the Illinois Central, have you given any consideration to what is paid to the engineer and fireman on the L. & N., as compared with what is paid to the engineer and fireman on the Illinois Central, on an engine of like weight on drivers?

Mr. DeGuire: No, sir; for the reason, as I said this morning, that I did not have the data with which to compare those figures.

Mr. Sheean: Well, I can give you the data as to the L. & N. The pay of firemen shown in the schedule there is, white firemen will be paid 55 per cent of engineer's rates. Colored road firemen will be paid 47.3 per cent of engineer's rate except in work train and pile driver service. Article 5: The colored rate will be \$2.45. Colored switch firemen will be paid 45.1 per cent of engineer's rate.

Now, let us take the comparison on the Louisville & Nashville of this \$5.40 rate, 170,000 pounds on drivers—\$5.40 paid the engineer, and the white firemen would be paid 55 per cent of that, under this schedule, would he not?

Mr. DeGuire: I assume that is true, but you know we have no representation on the Louisville & Nashville. Therefore, that schedule is not a representative schedule of the Southeastern country.

Mr. Sheean: Not representative of the Southeastern country?

Mr. DeGuire: No, as you saw this morning, we produced a schedule on the Alabama Great Southern that is a much better schedule than the one you have.

Mr. Sheean: Let us compare the L. & N. That is the one you are comparing here as being nearest the Illinois Central, as to what is paid a crew that takes an engine for a distance of 100 miles.

Mr. DeGuire: That is true, but this table does not compare

in any way, shape or manner the wages of locomotive firemen. It is an engineer's exhibit, pure and simple.

Mr. Sheean: That is true throughout, that you have given no consideration as to what the fireman is paid upon the same run.

Mr. DeGuire: No consideration whatever.

Mr. Sheean: Well, it is true, is it not, that on the Louisville & Nashville, with which the comparison has been made, or about which we have talked in discussing this exhibit, that if you combine the wages of the engineer and fireman on the L. & N., with the wages paid the engineer and fireman on the Illinois Central, that the Illinois Central is paying more to the crew under its present schedule, than is paid by the L. & N.?

Mr. DeGuire: That is something I would be unable to answer without making a table to show it.

Mr. Sheean: In the local service, you have made the same comparison on a 100 mile run made in exactly ten hours?

Mr. DeGuire: Yes.

Mr. Sheean: And you have made no comparison as between helper service or mine run service, or anything of that sort?

Mr. DeGuire: No, we just took the three services, passenger, through freight and way freight.

Mr. Sheean: In the South or Southeast, referring to the L. & N. schedule, the basis for computing overtime in helper service seems to be after 12 hours. Do you know whether or not that obtains in other helper service, I mean on other roads?

Mr. DeGuire: I do not. I made no investigation as to helper service.

Mr. Sheean: Or as to mine runs?

Mr. DeGuire: As to mine runs I made no investigation, but I see mine run service is through freight according to the Managers' exhibit.

Mr. Sheean: But I mean as to the computation of overtime.

Mr. DeGuire: No, I made no investigation.

Mr. Sheean: The basis for computing overtime is an entirely separate proposition from the rate, is it not?

Mr. DeGuire: Oh, absolutely.

Mr. Sheean: You made no effort, in any of these comparisons, to carry out the average length of the run, either in

through freight or local freight service, any more than you did in passenger service?

Mr. DeGuire: To carry out the average length of the run?

Mr. Sheean: Yes, in through freight service. An exhibit has been introduced here from which it is shown that in Western territory the average length of the runs in through freight service is 120.7 miles, derived by taking a total number of 3,027 engineers and carrying out an aggregate of over 7,000,000 miles made by them.

Mr. DeGuire: In hours or miles?

Mr. Sheean: Over 7,000,000 miles, and their total hours 761,000. You made no effort to carry out or make comparison on the assumption that the length of a freight run in through freight service was anything other than the 100 miles?

Mr. DeGuire: No, sir, and in explaining that, I wish to say that we are requesting a 10 hour day in through freight service, 100 miles or less, ten hours or less, and, therefore, we are comparing the South with a ten hour day, and we have built up our tables to that point, and have endeavored to show where the men in the South, in through freight service, under their present rules and conditions, for 10 hours of service will average a great deal more money than we are requesting in the present arbitration.

Mr. Sheean: Mr. McGuire; in the South, if the engineer runs 125 miles in through freight service and does so in 10 hours, he receives no overtime, does he, although he is on what you call an 8 hour day?

Mr. DeGuire: If he runs 125 miles in 8 hours?

Mr. Sheean: In 10 hours. He is on duty 10 hours. He does not draw any overtime, does he, if he runs 125 miles?

Mr. DeGuire: He would make 125 miles. He would still be on a mileage basis.

Mr. Sheean: Would he draw any overtime on roads where you say the 8 hour day obtains, if he worked continuously for 10 hours and ran 125 miles?

Mr. DeGuire: No, because he would still be on a mileage basis.

Mr. Sheean: Well, then, he would not draw any overtime, although he worked ten hours on a road which you say is an 8 hour day road, provided he ran 125 miles in the 10 hours.

Mr. DeGuire: Well, it would all be considered—you would have to consider all over 100 miles overtime. We have always so considered it. A man who is on 100 miles on an 8 hour day, when you get beyond that 100 mile period you are on overtime.

Mr. Sheean: We will take a run where he is just ten hours on duty, on what you call an 8 hour day road, and in that 10 hours on duty on the L. & N. the man runs 125 miles. Is he on overtime? Does he draw any pay as overtime or does he not?

Mr. Stone: May I ask a question, so we will understand?

Mr. Sheean: Yes.

Mr. Stone: Is that ten hours between terminals?

Mr. Sheean: No, that is ten hours on duty.

Mr. DeGuire: He would be on a mileage basis.

Mr. Sheean: Does he or does he not receive any overtime?

Mr. DeGuire: Not while he is making miles.

Mr. Sheean: I mean today. This man goes to work today. He reports for duty, and he is not relieved until the expiration of 10 hours from the time that he reports. Between those two periods of continuous work of 10 hours he runs 125 miles on the L. & N. Is he paid any overtime?

Mr. DeGuire: He will be paid 125 miles.

Mr. Sheean: Is he paid any overtime? Is he paid anything in addition to the 125 miles.

Mr. DeGuire: No, sir.

Mr. Sheean: Then, on the 8 hour day roads, so-called, if the man runs 125 miles in a period of 10 hours, he does not receive any overtime?

Mr. DeGuire: Not in the sense that you put it.

Mr. Sheean: And in none of these comparisons have you carried out any computation except on the supposition that exactly 100 miles were made in exactly 10 hours.

Mr. DeGuire: Ten hours of service. But if you went along and carried it out to 11, or 12 or 13 hours of service, you would have the same thing applying.

Mr. Sheean: All right. Now let us take an 8 hour road, a road that has an 8 hour day. A man goes to work on that road and he works 13 hours continuously; and between the time that he goes to work, until the time that he is relieved, he runs 165 miles. Does he draw any overtime?

Mr. DeGuire: He would draw 165 straight miles.

Mr. Sheean: And he was 13 hours on duty?

Mr. DeGuire: True.

Mr. Sheean: And although he was on a road which you say has an 8 hour day, and although he has worked continuously 13 hours, he is not paid anything except the mileage that he makes?

Mr. DeGuire: He is being paid $16\frac{1}{2}$ hours for the 13 hours work.

Mr. Sheean: What is that?

Mr. DeGuire: He is being paid at the rate of $16\frac{1}{2}$ hours, or 165 miles for that 13 hours of service.

Mr. Sheean: Is he paid $16\frac{1}{2}$ hours, or is he paid 165 miles?

Mr. DeGuire: One hundred and sixty-five miles is the equivalent of $16\frac{1}{2}$ hours pay.

Mr. Sheean: On this particular road that I was talking about, there is a provision in the schedule whereby overtime shall be computed on the basis of $12\frac{1}{2}$ miles per hour, is there not?

Mr. DeGuire: Yes.

Mr. Sheean: Then, is $16\frac{1}{2}$ hours equivalent to 165 miles under the schedule that we are talking about?

Mr. DeGuire: Not in the Southeast. I was simply comparing it with the West, where he would be thirteen hours on duty for the sixty-five miles.

Mr. Sheean: Now, let us take any road you have in mind as being what you call an eight hour road. Is the L. & N. a satisfactory road, as being an eight hour road?

Mr. DeGuire: It is satisfactory to me.

Mr. Sheean: Then, an engineer on the L. & N., goes to work today; he works continuously for thirteen hours, from the time he goes to work until he is released, works continuously thirteen hours; he runs during that time 165 miles; is he paid anything other than the 165 miles that he ran?

Mr. DeGuire: No, he would get the 165 miles, so far as my understanding of the L. & N. schedule.

Mr. Sheean: Well, would he get anything in addition to that, under those circumstances?

Mr. DeGuire: Not to my knowledge.

Mr. Sheean: Notwithstanding the fact that he was on duty continuously for thirteen hours?

Mr. DeGuire: That is true, I believe.

Mr. Sheean: I think that is all.

The Chairman: Call your next witness.

Mr. Carter: Mr. Steinberger.

SAMUEL T. STEINBERGER was called as a witness in rebuttal, and having been previously sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: What railroad exhibit are we going to refer to first?

Mr. Steinberger: No. 2.

Mr. Carter: I think we want Exhibit No. 1.

Mr. Steinberger: I have got it; page 82.

Mr. Carter: Mr. Steinberger, have you examined Exhibit No. 1 of the Railroads, page 82?

Mr. Steinberger: Yes, sir.

Mr. Carter: Will you turn to that, please? What does that purport to show?

Mr. Steinberger: Comparative Statement, Schedule Rates Paid Engineers in Through Freight Service in Western Territory, Based on Weight on Drivers of Locomotives.

Mr. Carter: Have you prepared a statement, based upon this statement of the railroad, shown on page 82, and following pages of Exhibit No. 1?

Mr. Steinberger: Yes, sir.

Mr. Carter: Is this (indicating) the statement?

Mr. Steinberger: Yes, sir.

Mr. Carter: Mr. Chairman, we desire to introduce this as Exhibit 85.

(The document so offered and identified was received in evidence and thereupon marked "Employees' Exhibit No. 85, March 16, 1915.")

Mr. Carter: What is the general purpose of Table 1, appearing on page 2 of this exhibit?

Mr. Steinberger: To show the earnings of engineers, with present rates of wages on certain Western eight-hour railroads, compared with earnings of engineers under proposition now arbitrated, on the ten hour basis.

Mr. Carter: Was the purpose of this exhibit, Mr. Steinberger, very similar to the purpose of the last exhibit prepared by Mr. DeGuire?

Mr. Steinberger: Yes, sir.

Mr. Carter: Except in this instance, you took roads already participating in this movement?

Mr. Steinberger: Yes, sir.

Mr. Carter: What were the eight hour roads?

Mr. Steinberger: El Paso & Southwestern; Houston & Texas Central; Houston East & West Texas; Houston & Shreveport; St. Louis, Brownsville & Mexico; San Antonio & Aransas Pass.

Mr. Carter: That is shown on these two pages?

Mr. Steinberger: Yes, sir; two and three.

Mr. Carter: Where did you get your information which you used as the basis of your computations?

Mr. Steinberger: From Railroads' Exhibit No. 1, pages 82, 84, 87 and 90.

Mr. Carter: Describe, commencing with the El Paso & Southwestern, with the locomotive weighing from 140,000 to 170,000 pounds on drivers, which is the top line on page 2.

Where did you get that 45?

Mr. Steinberger: 45 was taken from column 4 on page 82 of Railroad Exhibit No. 1.

Mr. Carter: Do you understand that that indicates that during the month of October, 1913, forty-five engines of that weight were in service on the El Paso & Southwestern Railroad?

Mr. Steinberger: Yes, sir.

Mr. Carter: The second number you show is 533. What does that mean?

Mr. Steinberger: That is the rate taken from the same column in the Railroads' exhibit.

Mr. Carter: You understand then that according to the Railroads' Exhibit there were forty-five locomotives with weight on drivers, on which the rate for a day was \$5.33?

Mr. Steinberger: Yes, sir.

Mr. Carter: Did you make a computation to ascertain what would be paid for one day on all of those engines?

Mr. Steinberger: Yes, sir.

Mr. Carter: And that appears as the total amount paid for an eight hour day on the forty-five engines?

Mr. Steinberger: Yes, sir, in column 6.

Mr. Carter: That would amount to \$239.85?

Mr. Steinberger: Yes.

Mr. Carter: What does column 7 show?

Mr. Steinberger: Column 7 shows that amount, with two hours accrued overtime added.

Mr. Carter: That is, when you compare an eight hour road with our proposition you must necessarily reduce it to an eight hour basis?

Mr. Steinberger: Yes, sir.

Mr. Carter: Is that because our proposition only asks for a ten hour basis?

Mr. Steinberger: Yes, sir.

Mr. Carter: Therefore, if that engine had been in service for ten hours, the overtime for those forty-five engines would have amounted to \$59.95—is that 95?

Mr. Steinberger: 94.

Mr. Carter: What would have been the total amount paid by that railroad company for ten hours' work, on each of these forty-five engines?

Mr. Steinberger: \$299.79.

Mr. Carter: Now, taking those same engines, under the proposition now arbitrated, how much would be the earnings?

Mr. Steinberger: \$264.60, including preparatory time.

Mr. Carter: Do you exclude terminal delay?

Mr. Steinberger: Yes, sir. No terminal delay included.

Mr. Carter: Did you hear the reasons advanced by Mr. DeGuire, why we did not include terminal delay?

Mr. Steinberger: Yes, sir.

Mr. Carter: Does that same reason apply to you?

Mr. Steinberger: Yes, sir.

Mr. Carter: But including preparatory time, which is one of the arbitrary portions of the request, the expense to the railroad for one day's pay for forty-five engines, would have been \$264.60?

Mr. Steinberger: Yes, sir.

Mr. Carter: How much less would it have cost that rail-

road for those forty-five trips of ten hours, if they had had our proposition instead of their present schedule?

Mr. Steinberger: 13.30 per cent.

Mr. Carter: Then, do I understand that you can go right down through that entire page, or both pages, in the same manner, and explain the table?

Mr. Steinberger: Yes, sir.

Mr. Carter: Do I understand that the last column on the right shows the decrease in expense to the El Paso & Southwestern Railroad, and the other railroads quoted here, under the proposition here arbitrated?

Mr. Steinberger: Yes, sir.

Mr. Carter: Now, we will turn to page 4. What is that?

Mr. Steinberger: That is the same information for the firemen for the same railroads.

Mr. Carter: I notice, Mr. Steinberger, that on the larger engines it would cost the El Paso & Southwestern more under the proposition. Is that true?

Mr. Steinberger: No, sir, not on the El Paso & Southwestern.

Mr. Carter: Well, I am talking about the other roads.

Mr. Steinberger: Oh, yes, some of the other roads it would cost more.

Mr. Carter: Such as the San Antonio & Aransas Pass, the St. Louis, Brownsville & Mexico, the Houston East & West Texas, and Houston & Texas Central. Does the Houston & Texas Central schedule show it would cost more if the proposition were awarded?

Mr. Steinberger: Yes, sir, in some cases.

Mr. Carter: Now, take the last line on page 4, of the Houston & Texas Central Railroad. They had 13 locomotives reported by the railroads, weighing 170,000 to 200,000 pounds on drivers?

Mr. Steinberger: Yes, sir.

Mr. Carter: And tracing it across clear to the right, if the proposition were adopted on that railroad for that engine, it would be 10.58 per cent increase?

Mr. Steinberger: Yes, sir.

Mr. Carter: Now, do you attribute that to the request, or

to the terribly low rate now paid on that engine on the Houston & Texas Central Railroad?

Mr. Steinberger: It is the low rate now paid to the engine.

Mr. Carter: They only pay \$2.85 on that big engine?

Mr. Steinberger: Yes, sir.

Mr. Carter: What rate do they pay on such roads as the Burlington or the Great Northern, on an engine of that weight, or can you refer to it immediately?

Mr. Steinberger: On the Great Northern they would pay \$3.55.

Mr. Sheean: On an oil burner? That is an oil burner?

Mr. Steinberger: No, a coal burner.

Mr. Carter: Does the Great Northern have oil burners?

Mr. Steinberger: Yes, sir.

Mr. Carter: What would the Great Northern pay on an oil burner for that engine?

Mr. Steinberger: Three dollars and forty cents.

Mr. Carter: And the Houston & Texas Central only pays \$2.85?

Mr. Steinberger: Yes. Just a minute. The Great Northern would also pay \$3.75, for an engine of that rate, regardless of the fuel used.

Mr. Carter: Do they have a cylinder 24 inches lower?

Mr. Steinberger: Yes, sir, they have them, too.

Mr. Carter: Then because the H. & T. C. has found some means of paying nearly a dollar a day less to a fireman than other roads, if this proposition were adopted, it would cost them a little over 10 per cent more?

Mr. Steinberger: Yes, sir.

Mr. Carter: Therefore, these apparent increases in the right hand column for the fireman's table, would indicate that on some roads a very low rate is paid firemen for these very large engines?

Mr. Steinberger: Yes.

Mr. Carter: And this increase only emphasizes the low rate now paid?

Mr. Steinberger: Yes, sir.

Mr. Carter: Now, turn to the next table.

Mr. Steinberger: Page 8.

Mr. Carter: On page 8 is what? From what exhibit did you compile this table?

Mr. Steinberger: Railroads' Exhibit No. 30, sheets 2, 6, 8 and 12.

Mr. Carter: What does sheet 2 of Railroads' Exhibit No. 30 show?

Mr. Steinberger: It is a statement showing the number of assigned men; total miles run; hours on duty; total earnings; and average earnings of engineers in assigned local and way freight service.

Mr. Carter: And this table on page 8 is founded on sheet 2 of Exhibit No. 30 of the Railroads?

Mr. Steinberger: Yes, sir; that is one sheet. It is taken from various sheets.

Mr. Carter: Now, I note you qualify the effect that this table is presumed to have upon the Board by introducing some very important matter under the heading. Read the heading.

Mr. Steinberger: "Earnings of Engineers on Western Railroads Employed in Through Freight Service and Local Freight Service per day of 10 Hours. (Compiled from information found in Railroads' Exhibit No. 30, Sheets 2, 6, 8, 12 and submitted without prejudice to interests of Engineers and Firemen.")

Note—It is the contention of Engineers and Firemen that earnings per hour etc. are not as great as shown in Railroads' Exhibit No. 30.

Mr. Carter: Realizing that engineers and firemen do not earn the rate per hour as set forth in this exhibit, you have based a table upon that for the purpose of what?

Mr. Steinberger: Comparison.

Mr. Carter: Comparing?

Mr. Steinberger: Local freight rates with through freight rates.

Mr. Carter: Comparing the rates and earnings of engineers and firemen in local freight service, with through freight service.

Mr. Steinberger: Yes, sir.

Mr. Carter: Now, where did you get these amounts?

Mr. Steinberger: These amounts were copied—the first six columns were copied from Railroads' Exhibit No. 30. The fol-

lowing computations were made from these hours and rates as shown in Railroads' Exhibit No. 30.

Mr. Carter: Now, taking the railroads' schedules for what they are worth, what do you find that the through freight rate per mile shows?

Mr. Steinberger: 5.84 cents.

Mr. Carter: What do you find that the local freight rate per mile shows?

Mr. Steinberger: 6.86 cents.

Mr. Carter: Now, that would be about one cent more per mile, would it not?

Mr. Steinberger: Yes, sir.

Mr. Carter: Now, when you took the hours, what was the rate per hour in through freight?

Mr. Steinberger: 70.89 cents.

Mr. Carter: What was the rate per hour in local freight?

Mr. Steinberger: 55.01 cents.

Mr. Carter: Now, it would indicate that while the rate was a cent higher in local freight than in through freight, the earnings were approximately 15 cents per hour.

Mr. Steinberger: Yes, sir.

Mr. Carter: Now, did you arbitrarily multiply the supposed earnings per hour by 10, to find out what would be the earnings for a 10 hour day?

Mr. Steinberger: Yes, simply moved the decimal point.

Mr. Carter: Then, what did you find for a 10 hour day, in through freight service?

Mr. Steinberger: The earnings would be \$7.08 in through freight.

Mr. Carter: Mr. Steinberger, have you a pencil there?

Mr. Steinberger: Yes, sir.

Mr. Carter: How much would all the engineers earn, if that were a true statement that the average was \$7.08 per day multiplied by 30?

Mr. Steinberger: \$212.40.

Mr. Carter: Then, if this sheet was correct, the average earnings of all the engineers in this Western Territory would be how much?

Mr. Steinberger: \$212.40.

Mr. Carter: And how many were you able to find in there of that 30,000 men?

Mr. Steinberger: I don't remember exactly.

Mr. Carter: Is it because you know that the average earnings for 10 hours is not that amount, the reason we have put these precautionary remarks in the title of the table?

Mr. Steinberger: Yes, sir.

Mr. Carter: Now, how much did you find would be the earnings for 10 hours in local freight service?

Mr. Steinberger: \$5.50.

Mr. Carter: How much greater, according to the railroads' statement, are the earnings per day of 10 hours in through freight service than local service?

Mr. Steinberger: 28.87 per cent.

Mr. Carter: Notwithstanding the fact that according to the railroads the rate per mile is one cent higher in through than local freight service?

Mr. Steinberger: Yes, sir.

Mr. Carter: Now, what does the next page show?

Mr. Steinberger: Just a continuation by railroads.

Mr. Carter: And the next page?

Mr. Steinberger: It is concluded.

Mr. Carter: Now, what does page 12 show?

Mr. Steinberger: Shows the same information for firemen in the same services, through freight service and local freight service.

Mr. Carter: How far do they go with the firemen, down to page 16?

Mr. Steinberger: Page 16.

Mr. Carter: Page 15.

Mr. Steinberger: 15.

Mr. Carter: Does this table, based upon the railroads' figures and submitted without prejudice to the interests of engineers and firemen, show that it would require a much higher rate in the local freight service, to produce an earning equal to that in through freight service?

Mr. Steinberger: Yes, sir.

Mr. Carter: What have we here on page 16?

Mr. Steinberger: Differential in rates of wages paid con-

ductors and brakemen, between through or irregular freight service and local freight service.

Mr. Carter: What was that compiled from?

Mr. Steinberger: Compiled from information found in Railroads' Exhibit 24.

Mr. Carter: What does Exhibit 24 show?

Mr. Steinberger: Shows the rates of pay of our conductors and brakemen, as per schedules.

Mr. Carter: Did you prepare this table on page 16, from information found in Exhibit 24 of the Railroads?

Mr. Steinberger: Yes, sir.

Mr. Carter: What did you find out by this investigation and preparation of this table?

Mr. Steinberger: I found that on 7 railroads the rates of wages paid conductors in through freight service and in local freight service, varies the following percentages.

Mr. Carter: Now, let me ask you before you get to that, why did you take only 7 railroads, when there are more railroads? Does this foot note explain?

Mr. Steinberger: Yes, sir.

Mr. Carter: Read it.

Mr. Steinberger: "The above railroads are the only roads reported in Exhibit No. 24, where rates of wages for conductors and brakemen are on a mileage basis in both services. The remaining seven (7) roads reported in Exhibit 24 show variable bases of wages for conductors and brakemen and are not comparable."

Mr. Carter: That is, it might show a mileage rate for through freight service and a monthly rate for local service.

Mr. Steinberger: Yes, sir, or vice versa.

Mr. Carter: But these seven roads are made on the mileage rate, in both local and through freight service?

Mr. Steinberger: Yes.

Mr. Carter: What is the differential in per cent of the rates per mile paid conductors?

Mr. Steinberger: It varies from 8.85 per cent on the Chicago & North Western to 21.5 per cent on the Northern Pacific.

Mr. Carter: Now, you mean that the rate per mile on these seven roads shows that except in percentage of local freight over through freight rate?

Mr. Steinberger: Yes, sir.

Mr. Carter: What about the brakemen?

Mr. Steinberger: The brakemen, it varies from 10.8 per cent on the Chicago Great Western railroad to 25 per cent even on the Northern Pacific Railroad.

Mr. Carter: They pay the conductors and brakemen both from 8 per cent to 25 per cent higher in local freight service than in through freight service?

Mr. Steinberger: Yes, sir.

Mr. Carter: Now, did you attempt to check up, as best you could, the differential on other roads than those that have the mileage basis?

Mr. Steinberger: While you cannot make a clear estimate by checking it over, I find that it is approximately the same on a monthly basis, as it is on the rates shown in the mileage basis.

Mr. Carter: Then, it would appear that these railroads participating in this arbitration have, so far as conductors and brakemen are concerned, already granted more than the 10 per cent differential we are asking?

Mr. Steinberger: Yes, sir.

Mr. Carter: What else have you here?

Mr. Steinberger: Page 18.

Mr. Carter: On what page of the Railroads' Exhibit No. 30—or, rather, from what exhibit is this taken?

Mr. Steinberger: 30 A, sheet 2.

Mr. Carter: What does sheet 2 of Railroads' Exhibit 30 A purport to show?

Mr. Steinberger: Statement of total earnings for fiscal year ending June 30, 1914, of men who earned highest wages paid one man. Engineers in assigned local or way freight service.

Mr. Carter: Now how many men are reported on this page?

Mr. Steinberger: Sixty-two.

Mr. Carter: And other services appear on pages following.

Mr. Steinberger: Yes, sir; all the way through.

Mr. Carter: And they vary from—sometimes they have three rows across on a page and sometimes four rows across.

Mr. Steinberger: Yes, sir; 17 men in each row.

Mr. Carter: Did you take all of these men as a basis of your calculation?

Mr. Steinberger: No, sir; we just took the men who worked full time.

Mr. Carter: No; you took the men who appeared working for every month.

Mr. Steinberger: Every month in the fiscal year.

Mr. Carter: In the first column are the first seventeen names?

Mr. Steinberger: The first seventeen names at the top.

Mr. Carter: I understood you took the first seventeen names that appear?

Mr. Steinberger: Yes.

Mr. Carter: Why did you take the first seventeen names and not take them all?

Mr. Steinberger: They were the first we came to, and we just selected them.

Mr. Carter: Did you have time to work it up for all?

Mr. Steinberger: No, sir, we did not have the time.

Mr. Carter: Therefore, in taking the first seventeen names, you did not have any ulterior purpose, did you?

Mr. Steinberger: No, sir.

Mr. Carter: It might show better or worse if you took some other names?

Mr. Steinberger: Yes.

Mr. Carter: But you took the first seventeen names on each page?

Mr. Steinberger: Yes.

Mr. Carter: Did you exclude therefrom the names of all men who did not work every month in the year?

Mr. Steinberger: Yes.

Mr. Carter: Now, turning to sheet 2, of Railroads' Exhibit 30-A, and turning to page 18, I find that you have only fourteen engineers listed there, while there are seventeen listed on sheet 2. Do I understand that three of the names listed on sheet 2 did not work every month through the year?

Mr. Steinberger: Yes.

Mr. Carter: Then these fourteen names you have here on page 18 are the only names that you have made computations on?

Mr. Steinberger: Yes.

Mr. Carter: And what did you find when you began to figure a little bit on the Railroads' exhibit?

Mr. Steinberger: I found that, taking the men by their names—for instance—

Mr. Carter: Who is the highest paid man there?

Mr. Steinberger: Take M. J. Allen.

Mr. Carter: Is he the highest paid man there?

Mr. Steinberger: Yes.

Mr. Carter: Who is the lowest paid man there?

Mr. Steinberger: The lowest paid man was R. H. Garrett.

Mr. Carter: Allen earned how much in October, 1914?

Mr. Steinberger: \$301.00.

Mr. Carter: What were the highest man's average earnings as shown in Railroads' Exhibit 30-A for the last six months of the same fiscal year?

Mr. Steinberger: \$191.16.

Mr. Carter: How much did his earnings in October exceed the average for the last six months of the same fiscal year?

Mr. Steinberger: 57.46 per cent.

Mr. Carter: That is, he earned in October 57 per cent more money than his average earnings for the last six months of the same year?

Mr. Steinberger: Yes.

Mr. Carter: Now, did you make a comparison for him for the average earnings for the entire year?

Mr. Steinberger: Yes.

Mr. Carter: What did you find that he earned per day in October?

Mr. Steinberger: \$9.71.

Mr. Carter: How much did he earn per day as an average throughout the entire year, of which October was one month?

Mr. Steinberger: \$6.90.

Mr. Carter: What were his earnings in October above his average earnings for the entire year?

Mr. Steinberger: 40.7 per cent.

Mr. Carter: Then did you compare October with June?

Mr. Steinberger: Yes.

Mr. Carter: What did you find there?

Mr. Steinberger: I found that he earned \$7.24 a day in June, and his increase for October over June was 34.12 per cent.

Mr. Carter: If you take the lowest name it will show a lower increase, will it not?

Mr. Steinberger: Yes.

Mr. Carter: The higher the wages in October, apparently they were that much higher than the average?

Mr. Steinberger: Yes.

Mr. Carter: Now, what is your next table? Is it made in the same way?

Mr. Steinberger: Yes, they run just the same, one after the other.

Mr. Carter: Now, turn to page 20?

Mr. Steinberger: That is the mixed train service.

Mr. Carter: The same thing there?

Mr. Steinberger: Yes.

Mr. Carter: Turn to page 22.

Mr. Steinberger: Page 22 is engineers in helper and pusher service.

Mr. Carter: The same there?

Mr. Steinberger: Yes.

Mr. Carter: Turn to page 24.

Mr. Steinberger: Engineers in through or irregular freight service.

Mr. Carter: Is through or irregular freight service perhaps the most important of the freight services?

Mr. Steinberger: Yes.

Mr. Carter: What does this show here? Does this show an enormous difference between the earnings for October and other months?

Mr. Steinberger: Yes, the greatest of any service.

Mr. Shecan: What page is that?

Mr. Steinberger: Page 24.

Mr. Carter: That man, Durell, down there, seems to have earned 103 per cent more money in October than he did in June, and 143 per cent more money than his average for the last six months of the same fiscal year?

Mr. Steinberger: Yes.

Mr. Carter: And 82 per cent above his average for the year?

Mr. Steinberger: Yes.

Mr. Carter: Would that indicate that Exhibit 30 is hardly typical of the earnings of engineers and firemen?

Mr. Steinberger: It would show that it is not typical.

Mr. Carter: It is just as its heading says, the Highest Wages Paid?

Mr. Steinberger: Yes.

Mr. Carter: And if the intention was—I do not think it was, but if the intention was—to indicate that these men earned comparatively high wages in the other months of the same fiscal year, why, that was a mistake. Is that true?

Mr. Steinberger: Yes.

Mr. Carter: Now, I notice back here in these tables some very low increases for October over other months. Is that result not often brought about by the Railroads' table showing that perhaps a man made only one trip in one of the months reported?

Mr. Steinberger: Yes, that is true in the Firemen's service, and true in the local freight, page 25.

Mr. Carter: Just indicate one or two names.

Mr. Steinberger: Quinn.

Mr. Carter: On what page?

Mr. Steinberger: On page 25.

Mr. Carter: Of your exhibit?

Mr. Steinberger: Yes.

Mr. Carter: Page 25?

Mr. Steinberger: Where the figure 3 shows a decrease.

Mr. Carter: Quinn. The figure 3 appears, showing a decrease. That is, his earnings for October were 31 per cent less than in June.

Mr. Steinberger: Yes.

Mr. Carter: Now, let us turn to Quinn in the Railroads' Exhibit. That would be sheet 12, would it not?

Mr. Steinberger: Sheet 12.

Mr. Carter: His is the fourth name?

Mr. Steinberger: Yes.

Mr. Carter: And according to that, the month of June was the only really big month he made?

Mr. Steinberger: Yes.

Mr. Carter: And that accounts for the apparent decrease?

Mr. Steinberger: Yes.

Mr. Sheean: It shows \$5.36, as the earnings for the 365 days of the year, if I understand the table.

Mr. Carter: Mr. Quinn earned \$103.12 in June?

Mr. Steinberger: Yes.

Mr. Carter: What were his highest earnings for every other month?

Mr. Steinberger: His highest earnings for every other month were \$74.00.

Mr. Carter: How low did he go?

Mr. Steinberger: Three dollars and ninety-nine cents, one-fifth, probably.

Mr. Carter: And that would account for his earnings for June being higher than for October?

Mr. Steinberger: Yes.

Mr. Sheean: Yes, but I do not understand. If the other answer is right, in the column headed "Average Wages per Day, Year Ended June 30, 1914," \$5.36, it is shown by the footnote "In computing the average wages per day for a year, total earnings reported are divided by 365.

Mr. Carter: Where is that, on what page?

Mr. Sheean: On page 25.

Mr. Carter: About Quinn, do you mean?

Mr. Sheean: Yes, and in the column headed "Average Wages per Day, Year Ended June 30, 1914," the third column down, it shows \$5.36.

Mr. Carter: "Average Wages per Day." Why did you divide that by 365, when it would show that he was not working a part of the month?

Mr. Steinberger: We had to do it to get an average in some way.

Mr. Carter: Do you suppose it is a fact that but few firemen are able to work every day during the 365?

Mr. Steinberger: Yes.

Mr. Carter: Suppose a man laid off every Sunday, how many days would he lay off in the year?

Mr. Steinberger: Fifty-two.

Mr. Carter: Suppose he was sick as much as the average man would have a right to be sick, we will say twenty days in the year, that would make it about seventy-two days in the year that he did not work?

Mr. Steinberger: Seventy-two days.

Mr. Carter: If you were averaging his daily earnings for the entire year, would you divide by all the days in the year, or deduct the days he laid off for Sunday and the days he was sick?

Mr. Steinberger: I would divide by all the days of the year.

Mr. Carter: And that is what you did here?

Mr. Steinberger: Yes.

Mr. Carter: Now, Mr. Steinberger, you have another table on page 27.

Mr. Steinberger: Yes.

Mr. Carter: On what is that based?

Mr. Steinberger: That is the total number of locomotives.

Mr. Carter: On what is that based—Railroads' Exhibit No. 15?

Mr. Steinberger: No. 15, Sheet 1.

Mr. Carter: What does Sheet 1 of Railroads' Exhibit 15 purport to show?

Mr. Steinberger: Summary of locomotives in service; also number equipped with labor saving devices.

Mr. Carter: Do you think this table was introduced to show how many labor saving devices were in use, or how few?

Mr. Steinberger: Evidently how few.

Mr. Carter: Have you prepared a table to show how few they are?

Mr. Steinberger: Yes.

Mr. Carter: This is the table on page 27?

Mr. Steinberger: Yes.

Mr. Carter: Now, we will take freight and passenger service. How many locomotives are reported?

Mr. Steinberger: Twenty-two thousand, nine hundred and twenty-one.

Mr. Carter: And then by percentages do you show clear across the page the number of oil burners and the percentages?

Mr. Steinberger: Yes, sir.

Mr. Carter: And the number of superheaters and the percentage?

Mr. Steinberger: Yes, sir.

Mr. Carter: And the number of brick arches and percentages?

Mr. Steinberger: Yes, sir.

Mr. Carter: And the number of coal pushers and percentages?

Mr. Steinberger: Yes, sir.

Mr. Carter: The number of hopper bottom tenders and the percentage?

Mr. Steinberger: Yes, sir.

Mr. Carter: And the number of power stokers and percentages?

Mr. Steinberger: Yes, sir.

Mr. Carter: I balk on saying "automatic door openers." These air door openers.

Mr. Steinberger: Yes, sir.

Mr. Carter: Now, Mr. Steinberger, do you understand that the air door opener you operate with your foot?

Mr. Steinberger: Yes, sir.

Mr. Carter: And you shovel with both hands?

Mr. Steinberger: Yes, sir.

Mr. Carter: Then these so-called automatic door openers are a device invented by certain inventive geni, we will say, to make it possible for a locomotive fireman to use three limbs instead of two?

Mr. Steinberger: Yes, sir, three-quarter efficiency.

Mr. Carter: Is that right?

Mr. Steinberger: Yes, sir.

Mr. Carter: And, in trying to help everybody, this fellow has got a machine that he works with his foot to open the door and uses both hands to fire?

Mr. Steinberger: Yes, sir.

Mr. Carter: Now, don't you think if he didn't have to stand on the other foot there could have been something else that he could have put under that?

Mr. Steinberger: There might.

Mr. Carter: But that is the automatic door opener, anyhow?

Mr. Steinberger: Yes, sir.

Mr. Carter: Now, what do we have in the next column. The power grate shakers?

Mr. Steinberger: Yes, sir.

Mr. Carter: And the power reverse gears?

Mr. Steinberger: Yes, sir.

Mr. Carter: And the automatic ash pan?

Mr. Steinberger: Yes, sir.

Mr. Carter: And then we have in switching or yard service?

Mr. Steinberger: Yes, sir.

Mr. Carter: Now let us take those power reverse gears. What percentage of power reverse gears have the railroads supplied these switch engineers?

Mr. Steinberger: Switch engines?

Mr. Carter: Yes.

Mr. Steinberger: 1.22 per cent.

Mr. Carter: About one and a quarter per cent?

Mr. Steinberger: Yes, sir.

Mr. Carter: Do you know of anybody who needs to reverse a locomotive more than a switch engineer?

Mr. Steinberger: No, sir.

Mr. Carter: And then about one and a quarter out of every hundred men who are running these switch engines have been supplied with a power reverse gear?

Mr. Steinberger: Yes, sir.

Mr. Carter: They have got a long way to go, haven't they?

Mr. Steinberger: A long ways.

Mr. Carter: Now take the amount that appears in the lower right hand corner. What does that represent?

Mr. Steinberger: That represents the percentage that are equipped with self-dumping or automatic ash pans.

Mr. Carter: That is, of all locomotives in all classes of service, 84 per cent.

Mr. Steinberger: Yes, sir.

Mr. Carter: Can you tell me, for a guess why the other 16 per cent are not equipped with the self-dumping ash pans or automatic pans, or pans that the law says they don't have to go under the engine with?

Mr. Steinberger: I presume they are not in interstate traffic.

Mr. Shecan: How about oil burners?

Mr. Carter: They might be on oil burners, might they not?

Mr. Steinberger: Yes.

Mr. Carter: They might be on oil burners?

Mr. Steinberger: Yes.

Mr. Carter: But you don't know?

Mr. Steinberger: No.

Mr. Carter: Have you any way of finding out whether they had 16 per cent of oil burners on all these engines?

Mr. Steinberger: No, sir.

Mr. Carter: You don't know?

Mr. Steinberger: No, sir.

Mr. Carter: Now with regard to these automatic and self-dumping ash pans, what does the law require?

Mr. Steinberger: The law requires that they shall have an ash pan that can be dumped without the necessity of some one going under the engine to clean out the pan.

Mr. Carter: And it may be very complicated? It may not be automatic at all?

Mr. Steinberger: Yes.

Mr. Carter: It may not be self-dumping. It is simply an ash pan that can be cleaned without going under the engine.

Mr. Steinberger: Yes, sir.

Mr. Carter: It may be more difficult to clean it from the outside than if you could get underneath?

Mr. Steinberger: Yes, sir.

Mr. Carter: If it was frozen up, clinkers, or anything else formed in there?

Mr. Steinberger: Yes.

Mr. Carter: Now, if at any time the Board wants to know how many engines in any class of service and the percentage of those engines that have been equipped with these labor saving devices, you have prepared a compilation for them.

Mr. Steinberger: Yes, sir.

Mr. Carter: That is all.

CROSS EXAMINATION.

Mr. Sheean: Mr. Steinberger, having prepared that compilation, have you overlooked the fact, as reported here, that the third column shows that there are 15.62 per cent of the total number of engines which are oil burners—column 3?

Mr. Steinberger: 15.69. Take the bottom. That gives you the total of all.

Mr. Sheean: Yes, 15.69.

Mr. Steinberger: Yes, sir.

Mr. Sheean: And then of the percentage of automatic ash pans you have \$4.31.

Mr. Steinberger: Yes, sir.

Mr. Sheean: If you add \$4.31 to 15.69, you will get 100 per cent.

Mr. Steinberger: Yes, sir. I overlooked it.

Mr. Carter: That is one law the railroads have complied with.

Mr. Steinberger: Here is the law.

Mr. Sheean: You are the one, are you not, Mr. Steinberger, who put in this automatic ash pan?

Mr. Steinberger: Yes, that should not be in there.

Mr. Sheean: It did not appear on the railroad exhibit?

Mr. Steinberger: No.

Mr. Sheean: If there be any criticism of the word "automatic" it is in your use of it?

Mr. Steinberger: Yes, it was just overlooked in proof-reading.

Mr. Sheean: Now, going back to the earlier part of that exhibit, in the earnings on page 2, El Paso & South Western. You didn't make any use of the—

Mr. Carter: What page is that, please?

Mr. Sheean: Page 2.

Mr. Carter: In what exhibit?

Mr. Sheean: This Exhibit 85. I am not quite sure that I follow that exactly, Mr. Steinberger. The number of engine trips reported is 45.

Mr. Steinberger: Yes, sir.

Mr. Sheean: There was also reported for that month the spread at which they made their trips in freight service, was there not?

Mr. Steinberger: That was not taken into consideration at all. Suppose that all trips are made within the 8 hour period?

Mr. Sheean: What is it?

Mr. Steinberger: Suppose that all trips are made within the 8 hour period, an 8 hour road.

Mr. Sheean: Well, but the report of the El Paso & South-western during that month shows exactly what speed was in

through freight service, how many trains, and what speed they made the runs at, doesn't it?

Mr. Steinberger: I never looked it up at all. No, that is not in this exhibit. I don't know where you would find it.

Mr. Sheean: What is it?

Mr. Steinberger: It is not in this exhibit.

Mr. Sheean: Well, you apparently have examined quite a number of the exhibits of the railroad companies, have you not?

Mr. Steinberger: Just those I have made these tables from.

Mr. Sheean: Well, as Exhibit No. 10, Mr. Steinberger, there was introduced the statement of trains operated in October, 1910, and October, 1913, showing the total actual miles.

Mr. Steinberger: Yes, I have it now.

Mr. Sheean: Miles per train, and the total time put in?

Mr. Steinberger: Yes, sir.

Mr. Sheean: And that is shown as to each of the roads shown in this exhibit. That is, each of the roads in Western Territory, is it not?

Mr. Steinberger: What page? What sheet of No. 10?

Mr. Sheean: Exhibit No. 10, sheet No. 2, gives the details of the different roads. El Paso & Southwestern.

Mr. Steinberger: No, sir.

Mr. Sheean: The details of all the roads is shown on sheet No. 2. The summary is shown on sheet No. 1.

Mr. Steinberger: It shows the El Paso & Southwestern has no service. No, that is all right. I see now. It is the wrong line. 715 is the first number.

Mr. Sheean: That shows the total number of trains, and the total time in hours.

Mr. Steinberger: Yes, sir.

Mr. Sheean: Everything pertaining to it?

Mr. Steinberger: Yes, sir.

Mr. Sheean: But your comparison here, as shown on page 2, is simply the earnings, on the assumption that exactly 100 miles was made in exactly 8 hours?

Mr. Steinberger: Exactly. Like the other table that was shown before this.

Mr. Sheean: In what manner that would be affected by the fact that on the El Paso & Southwestern, in 1913, the miles

made in through freight service was 121.78, and their time was 8.78, you could not tell without carrying that out?

Mr. Steinberger: No, sir.

Mr. Shecan: This throughout is a comparison of exactly 100 miles with exactly 8 hours?

Mr. Steinberger: Yes, sir.

Mr. Shecan: So that when you take the through freight service with reference to firemen on page 4?

Mr. Steinberger: Yes, sir.

Mr. Shecan: In carrying out the requested rate now being arbitrated, that is carrying out a single fireman, is it not?

Mr. Steinberger: Well, no, there are 46 trips there. One of them is two different rates, you see. We had to carry out two rates. There was one trip made on an engine of that weight at \$3.55, and there were 45 trips receiving \$3.75 a hundred.

Mr. Shecan: I mean the second column there on firemen. There are 170,000 to 199,000 pounds on drivers; coal burning engine 23. Now, under this proposal, on those trips, any of those engines weighing 185,000 pounds would have carried two of these firemen at that rate, wouldn't it?

Mr. Steinberger: This is just one fireman.

Mr. Shecan. This carries only one fireman.

Mr. Steinberger: Only one fireman.

Mr. Shecan: And that obtains throughout, does it?

Mr. Steinberger: Yes, sir.

Mr. Shecan. And, even in carrying it out with the one fireman, it would show on some of these roads, as you called attention to the fact, a very substantial increase.

Mr. Steinberger: Yes, sir, because there are exceedingly low rates.

Mr. Shecan: That is, where there is what is called an 8 hour day on some of the roads, you find that there is a lower rate than on the so-called ten hour roads in the same territory.

Mr. Steinberger: They happen to be oil burning roads.

Mr. Shecan: Well, there are 10 roads in that same territory that burn oil?

Mr. Steinberger: Yes, sir.

Mr. Shecan: And in that same territory where oil is burned, the rate on a 10 hour road is in some cases considerably higher than the oil burning rate here.

Mr. Steinberger: Not materially higher, no.

Mr. Sheean: Well, have you carried out here any comparison of the Gulf, Colorado & Santa Fe?

Mr. Steinberger: No, sir.

Mr. Sheean: That burns oil exclusively?

Mr. Steinberger: Yes, sir.

Mr. Sheean: In this last column on each of these pages here, "Percentage of Decrease in Earnings Under Proposition Arbitrated," that ignores entirely the effect of the saving clause, does it not?

Mr. Steinberger: Yes, sir. That is, figuring that the saving clause of course would hold this increase. That is, the rates would remain the same, I presume. I don't know about that.

Mr. Sheean: Well, you know there could be no award that could bring about an actual reduction in the amounts paid under the schedule?

Mr. Steinberger: I would not think so.

Mr. Sheean: And this percentage here is on the assumption that these roads which now have what you call an 8 hour day were put upon a ten hour day?

Mr. Steinberger: Yes, they were.

Mr. Sheean: Under the proposal?

Mr. Steinberger: Yes, sir.

Mr. Sheean: Have you attempted to carry out what would be the percentage of increase to these roads if under the saving clause the so-called 8 hour day were retained and the increases here granted?

Mr. Steinberger: No, sir, I have not.

Mr. Sheean: You have made no comparison of that sort?

Mr. Steinberger: No, sir.

Mr. Sheean: But if the 8 hour day were retained under the present schedule and the rates requested were granted, it would show a greater disparity than now exists between these 8 hour day roads.

Mr. Steinberger: Very much.

Mr. Sheean: —and your 10 hour roads?

Mr. Steinberger: Yes, sir.

Mr. Sheean: Now in the comparison of earnings of engineers in through freight service compared with local, you have made no effort in that, I take it, Mr. Steinberger, to carry out

any deductions based upon the fact that local freight service is paid almost entirely in hours?

Mr. Steinberger: No, sir.

Mr. Sheean: While the through service is largely paid on miles?

Mr. Steinberger: No, sir, no deductions.

Mr. Sheean: And on your comparison in the difference in rates paid conductors and brakemen between through and local service, do you find any differential in favor of the brakeman and conductor, based on weight on drivers of the engine that may be hauling the local train or the through train?

Mr. Steinberger: No, sir, there is no comparison based on that at all.

Mr. Sheean: In just what manner did you make the comparison on the preceding pages of through freight with the local freight? That took all of the engines in through freight and all of the engines in local freight?

Mr. Steinberger: That was taken just exactly as it was shown in Railroads' Exhibit 30, sheets, 2, 6, 8 and 12, and there is no comparison of engines shown at all. They are all grouped together, I presume.

Mr. Sheean: It is a fact, is it not, that the larger heavier engines that take the higher rates, predominate more largely in the through freight than they would in the local service?

Mr. Steinberger: I would naturally think so, yes, sir.

Mr. Sheean: So that part of the difference in the comparison between through and local freight would be brought about by the fact that in the various schedules there is a difference, due to the size of the engines?

Mr. Steinberger: I don't know about that.

Mr. Sheean: You do know this from watching the schedules and, having analyzed certain schedules, Mr. Steinberger, that on the roads pretty generally, the larger engines, whether on cylinders or in some other way, take a higher rate in the engineers' and firemen's schedule?

Mr. Steinberger: Yes, sir.

Mr. Sheean: You know, in a general way, that these larger engines which take the higher rate are more generally in through freight service than in local freight service?

Mr. Steinberger: No, sir, I do not.

Mr. Sheean: What is it?

Mr. Steinberger: I do not.

Mr. Sheean: Is it your idea that the local service employs in the same proportion the larger engines as the through or what is spoken of as the drag freight service?

Mr. Steinberger: No, sir, I don't think the same proportion, but there is not such a difference in the size of the locomotives used in local freight today and in through.

Mr. Sheean: That is, on the main line locomotives?

Mr. Steinberger: Yes, sir.

Mr. Sheean: But it is a fact, is it not, that the local freights on a branch line, as well as all the service on a branch line, have smaller engines than on the main line?

Mr. Steinberger: Certainly.

Mr. Sheean: And the branch lines have to provide local service right along?

Mr. Steinberger: Yes, sir, and they also provide small engines for through freight service.

Mr. Sheean: What is it?

Mr. Steinberger: They also provide small engines for through freight service on the branch lines.

Mr. Sheean: Is it your idea that the relationship in large engines remains the same in through service that it does in local service?

Mr. Steinberger: No, I don't think so, quite.

Mr. Sheean: So a part of the spread would be due to the fact that the rates in these schedules—

Mr. Steinberger: A small part, no doubt.

Mr. Sheean: How much, you made no effort to analyze?

Mr. Steinberger: No, sir.

Mr. Sheean: Now, as to the conductors and brakemen, I think you said it did not make any difference to them, the kind or type of engine that might be hauling trains.

Mr. Steinberger: No statement here. I don't think there is any reference made to engines at all.

Mr. Sheean: In the conductors' and trainmen's schedules.

Mr. Steinberger: No, sir.

Mr. Sheean: Now, the latter part of the exhibit, beginning at page 18, Mr. Steinberger, I am not sure that I get the man-

ner in which you arrive at the average wages per day for the month of October. That is, you took the total earnings for October, and divided that by 31.

Mr. Steinberger: Thirty-one.

Mr. Sheean: And then the column next to that, "the average wages per day, year ending June 30, 1914," in each case is the wages for each of the days in the year, Sundays and holidays and every other time?

Mr. Steinberger: Yes, every day.

Mr. Sheean: Now, in assigned local or way freight service, counting the full 365 days in the year, the last man in the engineers there is shown as \$3.75 for each of the 365 days in the year, and runs up as high as \$7.69 for each calendar day in the year.

Mr. Steinberger: Yes, sir.

Mr. Sheean: And that method was adopted throughout as to that column?

Mr. Steinberger: Yes, sir.

Mr. Sheean: So that the real money drawn through the year, outside of the question of percentages, or any percentage of relationship of the money that each of these men got for the year, is shown in this column by multiplying it by 365?

Mr. Steinberger: Yes, sir.

Mr. Sheean: You made no average wages per month for the entire fiscal year? You have shown the average for six months in the second column.

Mr. Steinberger: Yes, sir.

Mr. Sheean: And as a rule, the local freight, or way freight service don't run on Sundays, do they?

Mr. Steinberger: Do not, as a rule.

Mr. Sheean: But even counting that as one of the days in this assigned local service, on those that have been run, the engineers some of them, got as high as \$7.69, pay running on just the same, whether the local ran or not, at the rate of \$7.69 a day.

Mr. Steinberger: Figured out that way, yes, sir.

Mr. Sheean: And the lowest fireman down to \$2.67, or \$2.61, apparently, up to as high as \$4.32 for each calendar day in the local way freight service?

Mr. Steinberger: Yes, sir.

Mr. Sheean: I think you said that was made up in the same way, 365 days, irrespective of the number of days worked?

Mr. Steinberger: Yes, sir.

Mr. Sheean: Even though there were no trains to run on certain days?

Mr. Steinberger: Yes, sir; those are the highest paid men.

Mr. Sheean: Was that done also in through or irregular service—counted as 365 days being the working days in through or irregular service?

Mr. Steinberger: It was used in all of them.

Mr. Sheean; I take it, Mr. Steinberger, that when you figured this—the average wages per day, and counted 365 days in the year, you made no computation as to how many hours per day, on that theory, there being 365 days worked, that would bring about?

Mr. Steinberger: No, sir.

Mr. Sheean: But the total hours, as shown on these exhibits, divided by 365, would be the proper number of hours to set up for comparison with these days of yours?

Mr. Steinberger: Yes, sir.

Mr. Sheean: I think that is all.

Mr. Burgess: Mr. Steinberger, will you kindly turn to page 27 of your exhibit? I find myself confused in regard to this table relative to labor saving devices. If I understood you correctly, the first column shows 27,221 locomotives operating in a territory wherein the railroads are located, a party to this arbitration?

Mr. Steinberger: Yes, sir, in all classes of service.

Mr. Burgess: And the total of the column under the heading of number of brick arches, I find that there are 9,512; is that right?

Mr. Steinberger: Yes, sir.

Mr. Burgess: So that we would have approximately 17,000 engines in the Western territory, operating without brick arches?

Mr. Steinberger: Yes, sir.

Mr. Burgess: Well, do you not think it is quite evident that those engines pull their trains to the terminal, after being started out?

Mr. Steinberger: I would think so.

Mr. Burgess: Then it must be apparent that the practice of the Rock Island in setting the train off, in case the brick arch falls down, is not universal in this territory?

Mr. Steinberger: No, sir, it is not.

Mr. Burgess: Now, Mr. Steinberger, even though it be admitted that there are some devices applied on the locomotive for the sole purpose of relieving the engineer and fireman, this exhibit clearly shows that that percentage is very small; is that right?

Mr. Steinberger: Exceedingly small.

Mr. Burgess: Are we to understand that there are in this vast territory only fifty power stokers installed?

Mr. Steinberger: That is what Railroads' Exhibit No. 15. shows.

Mr. Burgess: And only 3,597 mechanical door openers?

Mr. Steinberger: Yes, sir.

Mr. Burgess: And 192 power grate shakers?

Mr. Steinberger: Yes, sir.

Mr. Burgess: 1,613 power reversers?

Mr. Steinberger: Yes, sir.

Mr. Burgess: So that before the fireman or the engineer could get any substantial relief, even though these devices were tabulated as mechanical contrivances for the benefit of the engineer and fireman only, there are a great many locomotives to equip before the firemen and engineers, as a whole, will obtain any relief; is that right?

Mr. Steinberger: A great majority of them, yes, sir.

Mr. Burgess: Have you ever been a locomotive fireman?

Mr. Steinberger: Yes, sir.

Mr. Burgess: Do you believe it is necessary to set your train off, as is the practice on the Rock Island, if there is no arch in the engine?

Mr. Steinberger: Never had any experience with an arch, whatever; never saw one of them.

Mr. Burgess: That is all.

Mr. Park: Mr. Steinberger, is it not necessary, in equipping with a brick arch, to adjust the fire pan in the front end, and make a certain adjustment of the draft, to make the engine steam properly?

Mr. Steinberger: Never saw a brick arch in an engine.

Mr. Park: If that was true, and an engine was so drafted after being equipped with a brick arch, it would be in a little different class from an engine that never had a brick arch installed, would it not?

Mr. Steinberger: If that were true, yes, sir.

Mr. Burgess: Mr. Steinberger, from this table it appears that there are about 17,000 engines that have not been so drafted. Is that not a fact?

Mr. Steinberger: Yes, sir.

Mr. Burgess: So if each engine saved 30 per cent of coal, it would be reasonable to assume that that draft would be properly arranged, in order to save the money?

Mr. Steinberger: I would think the saving of fuel would more than pay for the drafting of the engine.

Mr. Park: The 30 per cent was on superheated engines that were equipped with a brick arch, was it not?

Mr. Steinberger: I don't know.

Mr. Nagel: About what proportion of engines has over 170,000 pounds weight on drivers?

Mr. Steinberger: I do not know what the proportion is.

Mr. Nagel: Not more than one-fifth, is it?

Mr. Stone: You have got it right here in your list, total number of engines.

Mr. Nagel: In the neighborhood of 6,000 out of 22,000.

Mr. Steinberger: Yes, sir.

Mr. Stone: Mr. Steinberger, it has been repeatedly mentioned here, that an engine equipped with a brick arch would save about 20 per cent in fuel, and I think the mechanical experts agree on that. Is it not a fact that there is still a vast field for improvement in economical operation, if we have 17,000 engines operating in the Western territory—over 75 per cent that have not been equipped?

Mr. Steinberger: Yes, sir, it would appear so.

Mr. Stone: How do you think a mechanical man could justify himself in burning 20 per cent more fuel, in his locomotives, when, by the device of a brick arch, costing a few dollars, he could save 20 per cent in his fuel bill, which is one of the largest items of operation?

Mr. Steinberger: I do not understand how he would do it.

Mr. Shean: Mr. Steinberger, this last table, 27, shows

that after you get up into the heavier power, 170,000 pounds and above, that the percentage of these various devices is very much larger in the heavier power than it is in the lighter?

Mr. Steinberger: I believe it is, yes, sir; probably more necessary to equip them.

Mr. Sheean: You have carried out the percentage in each of those classes, as to what the equipment is?

Mr. Steinberger: Yes, sir.

Mr. Sheean: And after this dividing line of 170,000 and upwards, speaking in a general way—not asking you about any particular one, but in a general way there is a greater installation of these various devices in the heavier power?

Mr. Steinberger: Yes, sir.

Mr. Sheean: And the higher up you get, the larger percentage of the existence of these various things?

Mr. Steinberger: Yes, sir; I presume it becomes more necessary.

Mr. Stone: They have got beyond the limit of human endurance that we have talked about, have they not, and had to have some relief.

Mr. Steinberger: I think so, yes.

Mr. Sheean: Just another question. You did not carry this out as to the passenger men, either engineers or firemen?

Mr. Steinberger: No, there are no passenger men referred to in any of these tables.

Mr. Sheean: But in this exhibit from which this was taken, I find—

Mr. Steinberger: It is the different services, the men assigned to the different services, I presume you mean.

Mr. Sheean: You have taken all the services except the passenger service?

Mr. Steinberger: No, sir, except the highest and the lowest passenger and switching service.

Mr. Sheean: You left out the switching service as well as the passenger service.

Mr. Steinberger: Yes.

RE-DIRECT EXAMINATION.

Mr. Carter: Will you describe what Railroads' Exhibit No. 28 contains?

Mr. Steinberger: The earnings of engineers and firemen not available, and the extra men in the different classes of service. •

Mr. Carter: Reading from Railroads' Exhibit No. 28, we will state what that exhibit purports to set forth.

Mr. Steinberger: It sets forth the earnings for the month of October, 1913, for engineers and firemen who were not available for duty the entire month, and who were extra men in the different classes of service.

Mr. Carter: I understand that this exhibit first sets forth all the engineers and firemen who were not available for service, and their earnings for October, 1913.

Mr. Steinberger: Yes.

Mr. Carter: And then all the extra engineers and firemen?

Mr. Steinberger: Yes.

Mr. Carter: Did you attempt to ascertain what the average earnings of these men were?

Mr. Steinberger: Yes.

Mr. Carter: How far did you get before you quit?

Mr. Steinberger: Down to and including the Missouri Pacific.

Mr. Carter: Did you prepare an exhibit on this matter?

Mr. Steinberger: Yes.

Mr. Carter: Mr. Chairman, we desire to introduce this exhibit as Employes' Exhibit 86.

(The document so offered and identified was received in evidence and thereupon marked "Employes' Exhibit No. 86, March 16, 1915.")

Mr. Carter: On what page of Employes' Exhibit 86 do you show the names of the roads that you investigated?

Mr. Steinberger: Page 2.

Mr. Carter: How many railroads appear on page 2?

Mr. Steinberger: 60.

Mr. Carter: What is the per cent of the total mileage reported in Railroads' Exhibit No. 28?

Mr. Steinberger: 71.24 per cent.

Mr. Carter: You commenced at the beginning and went through alphabetically, and when you had completed the Missouri Pacific and the St. Louis, Iron Mountain & Southern Railway, did you stop for lack of time?

Mr. Steinberger: Yes, we could not go any further.

Mr. Carter: Then all the tables in this exhibit are based on the railroads shown on page 2?

Mr. Steinberger: Yes.

Mr. Carter: And for 71 per cent of all the mileage reported in Railroads' Exhibit 28?

Mr. Steinberger: Yes.

Mr. Carter: What does the table on page 3 show?

Mr. Steinberger: Summary of number of engineers in service and average compensation for month of October, 1913, for engineers reported by the railroads as not being available for duty the entire month.

Mr. Carter: In the first column, you show the total number of engineers reported?

Mr. Steinberger: Yes.

Mr. Carter: And in the second column, the total earnings reported?

Mr. Steinberger: Yes.

Mr. Carter: And in the third, the average earnings per engineer reported?

Mr. Steinberger: Yes.

Mr. Carter: What do you understand these men to be? Have you made a reference under the first statement on page 1?

Mr. Steinberger: Yes.

Mr. Carter: Will you read that, so we may understand clearly what we are talking about?

Mr. Steinberger: "Compiled from information found in Railroads' Exhibit No. 28, for sixty railroads, or 71.24 per cent of mileage of railroads represented in arbitration, as set forth on following page.

"A reference note on sheet 2 of Railroads' Exhibit No. 29 states:

"Inquiry as to whether men were or were not available for duty the entire month, was made only when engineers and motormen received wages less than \$100.00; firemen in road service and motormen-helpers less than \$70.00; firemen in yard service and hostlers less than \$65.00. Therefore, all engineers and motormen whose earnings were \$100 or more; all firemen in road service and motormen-helpers, whose earnings were \$70.00 or more, and all firemen in yard service, and hostlers

whose earnings were \$65.00 or more; and also all extra men, regardless of their earnings, are treated in this exhibit as 'Available for duty the entire month.' "

Mr. Carter: And you understand that those reported in Exhibit 28 were the others?

Mr. Steinberger: Yes.

Mr. Carter: In this table on page 3, do you take the same sub-heads or classes of service as you find them?

Mr. Steinberger: As I found in Exhibit 28, yes.

Mr. Carter: Just go through this rapidly. What does the next page show?

Mr. Steinberger: The next page is this same information given by railroads.

Mr. Carter: That is, you found it, taking each railroad, and taking each subject and checking through?

Mr. Steinberger: Yes.

Mr. Shea: Mr. Carter, I should like to have a little more information on page No. 3. I did not quite get the purpose of that.

Mr. Carter: Go ahead.

Mr. Shea: Just have the witness explain.

Mr. Steinberger: Take, for instance, the first column.

Mr. Shea: Take the first line: "Engineers working entirely in passenger service."

Mr. Steinberger: The total number of engineers reported are 220, that we found on all railroads, working entirely in passenger service, down to and including the Missouri Pacific.

Mr. Shea: And those 220 men earned how much?

Mr. Steinberger: They earned \$13,821.51, and their average earnings were \$62.83.

Mr. Shea: That is all.

Mr. Burgess: That is \$62.83 per month?

Mr. Steinberger: Yes.

Mr. Shea: How many months?

Mr. Steinberger: For the month of October, 1913.

Mr. Carter: Then, I understand, beginning at page 4, of Employees' Exhibit 86, you show the same information by railroads?

Mr. Steinberger: Yes.

Mr. Carter: How far does that go through?

Mr. Steinberger: That goes down to page 17.

Mr. Carter: What do you show beginning on page 17?

Mr. Steinberger: The same information for firemen not available for duty the entire month.

Mr. Carter: And, if it is wanted, any one who desires to show what were the average earnings of any of these men, in any of these classes of service, can find it here by referring to these pages?

Mr. Steinberger: Yes.

Mr. Carter: Beginning on page 19, what does that table show?

Mr. Steinberger: Page 19 is the same information for firemen, shown by railroads.

Mr. Carter: Now, turn to page 31. What does that show?

Mr. Steinberger: Page 31 shows a "Summary of Number of Engineers in Service and Average Compensation for Month of October, 1913, for Engineers Reported by the Railroads as Extra Men."

Mr. Carter: I understand this is exactly the same information for the extra men that you have just gone over for the men not available for service?

Mr. Steinberger: Exactly the same information.

Mr. Carter: Do you understand that the men now available for service would be men as described in the note, who have laid off because they could not double up on their engines because of the application of the Sixteen Hour Law? For instance, a fireman comes in, and on account of the rush of business they need to call somebody else to go out before he is available. Do you understand he would be "not available"?

Mr. Steinberger: Yes.

Mr. Carter: And if he was so tired he could not go out, do you understand him to be "not available"?

Mr. Steinberger: Yes.

Mr. Shecan: Mr. Steinberger, where in the instructions do you get that deduction?

Mr. Steinberger: Which instructions?

Mr. Shecan: The instructions that went out as to reporting men who were available and not available. Where is that in the instructions?

Mr. Steinberger: I would presume that any man who was

not able to report for duty, regardless of the cause, would not be "available for duty."

Mr. Carter: I think that was thoroughly explained by Mr. Keefe when he was on the stand.

Mr. Steinberger: That is what I understood.

Mr. Sheean: I thought you were now referring to a man who was booked for rest. Perhaps I misunderstood your question. I understood you were including men booked for rest as being "not available."

Mr. Carter: I understand by Mr. Keefe's testimony—and if I am wrong I want to be corrected—that a man would be considered not available if he laid off a trip.

Mr. Sheean: Yes, if he laid off, that is quite right; but I thought your last question put to Mr. Steinberger referred to a man simply coming in and booking for rest in the manner authorized by the schedule.

Mr. Carter: He would be laying off, wouldn't he?

Mr. Sheean: No, not at all.

Mr. Stone: They would run his engine out with another man on it, and he would be laid off, wouldn't he?

Mr. Sheean: I understand there are various provisions in the schedules about booking for rest.

Mr. Stone: But there is nothing in the schedules about holding a man's engine until he is rested and ready for it.

Mr. Sheean: But this refers to men who laid off of their own accord, not booking for rest. I think Mr. Steinberger is clear on the other, and I am not qualifying that, as I understand it only covers the men who, by reason of laying off, had their earnings dropped below a certain figure.

Mr. Steinberger: Yes.

Mr. Carter: Let us straighten this out.

Mr. Stone: Do you make the claim that a man who books for rest does so of his own accord, or because he has become worked out? He might want to keep on working, but he needed the rest.

Mr. Sheean: He is required to take the rest under certain provisions. Then, there are various schedules that cover booking for rest independent of the law.

Mr. Stone: Is a man booked for rest for 12 hours "available for duty" during that time?

Mr. Sheean: No, he is not available.

Mr. Stone: Then they would put another man on his engine and send her out?

Mr. Sheean: Certainly, but he is not counted as a man laying off. That man is not laying off.

Mr. Stone: It has the same effect, and the man's engine is gone.

Mr. Carter: I think when a man says "I have got to lay off a trip because I am too tired to go out," that is laying off. Now I think the leave of absence is what you have in your mind.

Mr. Sheean: Yes.

Mr. Carter: Where the man leaves the road and goes elsewhere.

Mr. Sheean: Not necessarily goes elsewhere. A man can lay off two or three days or a week without any leave of absence; but I think we are discussing what is perhaps a purely academic question, in view of what Mr. Steinberger has just said, that in any event it is only where the lay-off, or the booking for rest, if you please, was of such duration that it brought the man's earnings down below a certain amount of money.

Mr. Carter: I think now is a mighty good time for some one representing the railroads to say exactly what they did mean.

Mr. Sheean: The instructions are here, and I do not think there is any possible question about what the instructions mean.

Mr. Carter: May I ask a question?

Mr. Sheean: They mean exactly what they say as read here by Mr. Steinberger, as quoted here on this page.

Mr. Carter: If a man came in from a run and his backbone was in a kink and he could not go out, and he said, "I will lose a trip, or lay off a trip," would you call him laying off, or would he be "not available?"

Mr. Sheean: If he laid off for the trip, if he said, "Well, I want to lay off for a certain specified time—"

Mr. Carter: If he reported "I cannot go out on my engine," would he not be "not available?"

Mr. Sheean: If he took a lay-off, yes.

Mr. Carter: Would he take a lay-off if he could not go out on his engine and so reported? That is what I want to find out, what the railroads mean by that.

Mr. Sheean: What is that?

Mr. Carter: Here is a fireman who has been on one of these big engines, and he is no hog; he knows when he has got enough. He goes in and he says, "I can't go out on that engine again. Call somebody else." And he goes home and goes to bed until he begins to recuperate; and then, when his engine comes in again or when he has recuperated, he goes back and reports, and his name is put on the board. Was he "available for duty?"

Mr. Sheean: Do you mean that he says "Take me off until I advise you to put me on again?"

Mr. Carter: Or he may lay off for a trip.

Mr. Sheean: For a trip?

Mr. Carter: Yes. If he had a regular engine he might say, "I will lay off till my engine comes back."

Mr. Sheean: "Till my engine comes back."

Mr. Carter: Or if he was in a pool—

Mr. Sheean: I would like to take one of these at a time.

Mr. Carter: Either one or the other, or both.

Mr. Sheean: On the first supposition you gave, that the man on coming in said, "Do not call me for any other service until I notify you;" and if he did not notify them for such a length of time that during the period that he was off his earnings fell below \$70, then he would be shown here.

Mr. Carter: Suppose he did not say that. Suppose he said, "I have got a kink in my back, and I can't go out. Don't call me until after my engine goes out, or I will tell you when," would that be a lay off?

Mr. Trenholm: Yes.

Mr. Sheean: Yes.

Mr. Carter: Of course.

Mr. Stone: Let me ask you another question on your Exhibit No. 20. I remember Mr. Keefe explaining in detail that the man's name would not be shown if he lost one trip.

Mr. Sheean: If the one trip brought his earnings below this amount, if the loss of that one trip dropped his earnings below that amount, then his name would appear.

Mr. Carter: Now, Mr. Steinberger, don't you think that all locomotive firemen—I will not say all, but almost all loco-

motive firemen—do lay off for rest when business is so good that the engines are on the go all the time?

Mr. Steinberger: I have had to do it.

Mr. Carter: Don't you think it is a part of a fireman's everyday life to have to lose trips?

Mr. Steinberger: Yes.

Mr. Carter: Does it not belong to engineers' lives also that they lay off?

Mr. Steinberger: Yes.

Mr. Carter: And these are the men who are included here in your note?

Mr. Steinberger: Men who earned over these amounts would not be included.

Mr. Carter: What next do you show on page 33? Are they the same things as are shown on page 31, except in detail?

Mr. Steinberger: Yes.

Mr. Carter: Now turn to page 45. What does that show?

Mr. Steinberger: The same information for firemen and extra men.

Mr. Carter: And page 47?

Mr. Steinberger: Page 47 is this information by railroads.

Mr. Carter: Now, will you read a statement which is a summary or recapitulation of the information in this exhibit?

Mr. Steinberger: Yes.

“MEN NOT AVAILABLE FOR DUTY ENTIRE MONTH.”

Engineers Working Part of Month as Firemen, Hostlers or Motormen.

Passenger Service, 3.

Through or Irregular Freight Service, 50.

Local or Way Freight Service, 11.

Switching Service, 77.

Other Classes of Service, 10.

Total, 151.

Firemen Working Part of Month as Engineers, Hostlers or Motormen.

Passenger Service, 70.

Through or Irregular Freight Service, 117.

Local or Way Freight Service, 21.

Switching Service, 76.

Other Classes of Service, 21.

Total, 305.

EXTRA MEN.

Engineers Working Part of Month as Firemen, Hostlers or Motormen.

Passenger Service, 0.

Through or Irregular Freight Service, 17.

Local or Way Freight Service, 3.

Switching Service, 27.

Other Classes of Service, 0.

Total, 47.

Firemen Working Part of the Month as Engineers, Hostlers or Motormen:

Passenger Service, 3.

Through or Irregular Freight Service, 18.

Local or Way Freight Service, 7.

Switching Service, 10.

Other Classes of Service, 3.

Total, 41.

Engineers and Firemen "Not Available for Duty," and on "Extra List:"

Working Part of the Month as Engineers, Firemen, Hostlers and Motormen:

Passenger Service, 76.

Through or Irregular Freight Service, 202.

Local or Way Freight Service, 42.

Switching Service, 190.

Other Classes of Service, 34.

Total, 544.

TOTAL MEN REPORTED "NOT AVAILABLE:"

Engineers, 2,376.

Firemen, 5,950.

"EXTRA MEN:"

Engineers, 247.

Firemen, 936.

Total, 9,509.

Mr. Carter: Now, Mr. Steinberger, begin at the third paragraph on the next page.

Mr. Steinberger: Of the 2,376 engineers "Not Available

for Duty for Entire Month," 151, or 6.36 per cent were used as firemen, hostlers and motormen.

Of the 5,950 firemen "Not Available for Duty for Entire Month," 305, or 5.16 per cent, were used as engineers, hostlers and motormen.

Of 247 engineers on "Extra List," 47 or 19.03 per cent were used as firemen, hostlers and motormen.

Of 936 firemen on "Extra List," 41 or 4.38 per cent were used as engineers, hostlers and motormen.

Of 9,509 engineers and firemen "Not Available for Duty for Entire Month" and on "Extra List," 544, or 5.74 per cent worked in other service.

Total Number of Engineers and Firemen Reported in Service During October, 1913, on Sheet 1 of Exhibit No. 29, 63,624.

Approximate Number in Service on the 60 Railroads Included in This Statement, or 71.24 per cent of the Total Mileage Represented, 45,325.

Of 45,325 Engineers and Firemen in Service on these 60 Railroads, 544, or 1.20 per cent, earned Compensation in more than one service.

Mr. Carter: Now, Mr. Steinberger, when I was a witness for the employes, I presented an exhibit purporting to show the effect of fluctuations in traffic on the earnings of engineers and firemen. I stated that engineers on the extra list, according to my understanding, were going through a starving period; that is, that they were earning actually less than they did as regular firemen on passenger runs.

The railroads, in cross examination of myself, demonstrated, I believe, that extra engineers did not go through a starving period, but as extra engineers, also, between trips fired locomotives, and that demoted engineers also made runs. How many men do you say out of 45,325 performed the two classes of service?

Mr. Steinberger: 1.20 per cent.

Mr. Carter: 544, or 1.20 per cent?

Mr. Steinberger: Yes, sir.

Mr. Carter: Taking into consideration the fact that during the month of October, there must have been a considerable number of actual promotions, do you think that possibly 1 per

cent of the men in service in October, were actually promoted from the position of fireman to engineer?

Mr. Steinberger: Yes, sir.

Mr. Carter: Then, what per cent do you think would be left for these firemen who do the extra running, and these extra engineers who run as firemen?

Mr. Steinberger: One-fifth of one per cent.

Mr. Carter: I think, Mr. Chairman, that the Railroads' exhibits as outlined here, demonstrate that my understanding of the practices on practically all railroads, is accurate. I have asked many men, from different roads, since that time, and they tell me that their extra engineers are not used to do the firing, and their firemen are not used to do the running, except in cases of emergency. That when a fireman is promoted on their roads, he becomes an engineer, and his name is marked upon the extra list, and the only service he performs is that of running engines, until business falls off, when he is demoted and takes, perhaps, a preferred job, firing, and he is not called to run an engine, until he is again promoted, except in emergencies. Now, we agree that on the Illinois Central, Chicago Division, they did not do that, so there is no question as to the matter brought up. This shows that these extra engineers are not used for firing purposes, or these firemen used for running purposes.

Mr. Sheean: I am not sure, Mr. Steinberger, that I got this that you were reading so rapidly there. Just what is that again?

Mr. Steinberger: Do you want it?

Mr. Sheean: This deduction that you make here of the 1.20 per cent. Is that derived from—

Mr. Steinberger: Sixty railroads.

Mr. Sheean: All of the sixty railroads covering this sheet No. 1?

Mr. Steinberger: Sheet No. 1, yes, sir.

Mr. Sheean: Of Exhibit 29?

Mr. Steinberger: Yes, sir. 71 per cent of the total number shown, 63,324.

Mr. Sheean: Well, that takes the total of the lines, 4, 8, 12, 16, and what other totals?

Mr. Carter: You did not take your information from this exhibit?

Mr. Steinberger: No, this was taken from Exhibit 28, which has the same subject heads, practically.

Mr. Sheean: Well, this is a summary from 28, is it not, Mr. Steinberger?

Mr. Steinberger: Yes, sir.

Mr. Sheean: Did you consider, in getting at this total, the engineers who worked part of the month as firemen, hostlers and motormen, wages as engineers being greater than firemen, hostlers and motormen, and greater portion of engineers being derived from passenger service?

Mr. Steinberger: Yes, sir.

Mr. Sheean: What are the total number of men that you arrive at, by the addition of these various columns?

Mr. Steinberger: You have it right here.

Mr. Sheean: 544, you show as being the total who worked in different classes of service?

Mr. Steinberger: Yes, sir.

Mr. Sheean: Well, Mr. Steinberger, that is what I did not follow. On Exhibit No. 29, sheet No. 1, summarized by the names given in Exhibit 28, there is shown on line 30, firemen part of the month as engineers, hostlers or motormen, wages as firemen being greater than wages as engineer, hostler or motorman, and the greater portion of the wages being derived from through or irregular freight service. It shows 759 men in that one class alone.

Mr. Steinberger: Yes, sir.

Mr. Sheean: Then, also in the yard service, line 38, firemen part of the month as engineers, hostlers or motormen, wages as firemen being greater than wages as engineers, hostlers or motormen, and the greater portion of wages being derived from yard or switching service. 447 in that one class.

Mr. Steinberger: Yes, sir.

Mr. Sheean: Wherein do you find the difference in the total, where you get only 544 men, all told, in the mixed service, as against this showing of 759, in just the one class?

Mr. Steinberger: Wait just a minute. I don't get it.

Mr. Carter: Sixty roads is all you took.

Mr. Steinberger: Sixty roads is all we took. Seventy-one per cent of the total.

Mr. Sheean: Yes, I understand that, Mr. Steinberger, but

getting only 500 men, where this shows in a single class of service 759, is something that I don't quite follow as to where the difference could be.

Mr. Steinberger: We started at page 1711, on Exhibit 28, and we went through from there to and including page 1894.

Mr. Sheean: What is it?

Mr. Steinberger: To and including page 1894. Engineers who were not available; firemen who were not available.

Mr. Sheean: Oh, yes. Of the men who did not work?

Mr. Steinberger: That is where these were taken from, exactly.

Mr. Sheean: Well, you understood that this was the detail as shown in the larger payroll of the men who were excluded, in arriving at the part shown on sheets 2 and 3?

Mr. Steinberger: These were taken from here—counted straight through.

Mr. Sheean: Do you find 45,000 men in this?

Mr. Steinberger: No, sir, we only counted down to and including the Missouri Pacific.

Mr. Sheean: Yes; well, you find of the men who did not work that month—that is, if our theory was right, of excluding all men who fell below \$75.00, and who are shown by the records to have laid off—you find 544 of those men who were in that mixed service?

Mr. Steinberger: Yes, sir.

Mr. Sheean: And then you applied them, not to the total number of the men who thus were excluded by sheets 2 and 3, but to the total payroll?

Mr. Steinberger: They were taken from Exhibit No. 29, sheet 1.

Mr. Sheean: Well, on Exhibit No. 29, sheet No. 1, there were shown all these other additional men in that mixed class of service, were there not?

Mr. Steinberger: Yes, sir; it seems like there were men in pusher and helper.

Mr. Carter: Were any of those men on the extra list?

Mr. Steinberger: Yes, sir.

Mr. Carter: These men who earned this big money and were not on the extra list, and were always available?

Mr. Steinberger: I don't get you.

Mr. Sheean: Well, no. I think Mr. Steinberger and I—I think I have discovered where the possible error of this percentage of reduction is. Sheet No. 1, Exhibit 29, Mr. Steinberger, shows all wages—the entire payments to engineers, firemen, **motormen and motormen-helpers**, in all classes of service during that month.

Mr. Steinberger: Yes, sir.

Mr. Sheean: This, irrespective of how long they worked, or the days, or anything else, is it not, on sheet 1?

Mr. Steinberger: Yes, sir.

Mr. Sheean: Then sheet 2 is the summary, taken from the same payroll, by which there are excluded simply these men not available?

Mr. Steinberger: Yes, sir.

Mr. Sheean: And then sheet No. 3 excludes the men not available, and also the extra men, where their earnings fell below a certain amount?

Mr. Steinberger: Yes, sir.

Mr. Sheean: Now, if I follow you correctly, you get 544 of the men in this mixed service, from among those excluded by us. That is, your source of information as to the 544, was taken from the detailed list of the men excluded in certain computations?

Mr. Steinberger: Yes, sir; taken out of Exhibit 28.

Mr. Sheean: Yes, but Exhibit 28 simply gives the detailed names of those excluded, does it not?

Mr. Steinberger: I presume it does.

Mr. Sheean: Just to get that entirely clear, Mr. Steinberger, Exhibit No. 27 gives the detail of all the men, does it not?

Mr. Steinberger: I don't understand those exhibits very well—never checked them.

Mr. Sheean: Exhibit 27 is where you got your 60,000 men, is it not, and your 28 is simply the certain excluded men. Now, just to make clear where I think the mathematical computation has perhaps gone wrong, take page 829 of Exhibit 27, on the Atchison, Topeka & Santa Fe, Mr. O. B. Adams is shown as a fireman in passenger service, between Kansas City and Newton, earning \$88.30, as a passenger fireman.

Mr. Steinberger: Yes, sir.

Mr. Sheean: And engineer in freight service between Argentine and return, one trip, \$6.86, and engineer in work, one

day, \$4.55; engineer in the yard at Argentine, two days, \$8.95. Now, that gentleman is shown as earning \$108.64 during the entire month, of which \$88.30 was as a fireman, but he, as you understand by the instructions read here, would not be excluded anywhere, would he, because he earned more than \$100.00?

Mr. Steinberger: Yes, sir.

Mr. Sheean: Therefore, this man in mixed service, earning more than \$190.00, would not be counted in your 544 men picked out of here?

Mr. Steinberger: No, sir.

Mr. Sheean: So that you have taken the finding of 544 men in this detail of men, who, as the railroads view it, were not available for duty during that month, and applied it on a percentage basis to all the employees of the entire road?

Mr. Steinberger: Evidently so. It was figured from Exhibit No. 29.

Mr. Sheean: But Exhibit No. 29, on sheet 1, which gives the total number of employees, also gives the total number of employees in the various classes, where they earned more than the \$100.00, as well as where they fell below it.

Mr. Steinberger: Then the computation is wrong.

Mr. Sheean: It is just a matter of percentage reduction, is it not?

Mr. Steinberger: Yes, sir.

Mr. Sheean: Now, this Exhibit No. 86, I am not sure I follow you on: Page 3 simply reduces to an average the earnings of the men who, in this part of the exhibit, were shown as not available.

Mr. Steinberger: Yes, sir; on the sixty railroads.

Mr. Sheean: And sheet No. 1 of this exhibit shows what the average would be on the entire system, if these men were included in the general average?

Mr. Steinberger: I presume so.

Mr. Sheean: Then, sheet No. 2 shows the average, excluding these men whom we thought were not available during the month, but including all extra men?

Mr. Steinberger: Yes, sir.

Mr. Sheean: And sheet No. 3, the exclusion of the men not available and the extra men. Now, do I understand that all

that is done with this is to take the men who were excluded and average these earnings?

Mr. Steinberger: Yes, sir.

Mr. Sheean: And these are averaged upon the men that we marked as not available. You have taken their total earnings and, assuming that they were available the entire month, these earnings which they did get, distributed throughout the month, would make their average monthly earnings this amount?

Mr. Steinberger: Yes, sir.

Mr. Sheean: Then I take it that you have made no effort here to ascertain whether your averaging of a man who is available ten days, with one who was available twenty—

Mr. Steinberger: No, sir; we have no knowledge of knowing how much he was available.

Mr. Sheean: Except as shown on this?

Mr. Steinberger: Yes, sir.

Mr. Sheean: Exhibit 28?

Mr. Steinberger: 28.

Mr. Shegan: But you did not make any of the deductions there, if a man did leave business for twenty days? You did not exclude the twenty days?

Mr. Steinberger: No, sir; those were his earnings for the month, regardless of the time off.

Mr. Sheean: And is that all that was done in both these cases?

Mr. Steinberger: Yes, sir.

Mr. Sheean: Taking simply what is shown on sheet 2 of this exhibit, and also what is shown on sheet 3, and making an average of it?

Mr. Steinberger: Yes, sir.

Mr. Sheean: I think that is all, Mr. Steinberger.

RE-DIRECT EXAMINATION.

Mr. Carter: Mr. Steinberger, this fireman Adams that you looked at just now?

Mr. Steinberger: Yes, sir.

Mr. Carter: Who made apparently four emergency trips in October—three emergency trips as an engineer. Was he an extra engineer?

Mr. Steinberger: Yes, sir; I think so.

Mr. Carter: What makes you say he was an extra engineer, when he was working as a fireman and only made three trips as an engineer? I think you are as badly confused as counsel for the railroads. He was a fireman, making extra trips as an engineer, is that not true? He was not an extra engineer, making trips as a fireman?

Mr. Steinberger: I did not pay any attention.

Mr. Carter: What page was it?

Mr. Steinberger: 229, I think.

Mr. Carter: Exhibit 27, page 829, was it?

Mr. Keefe: Yes.

Mr. Carter: Page 829; O. D. Adams, Fireman, Kansas City to Newton, earned \$88.30, but during the same month he made three trips as an engineer, one in freight service, one in work train service, and one in yard service. Do you see him?

Mr. Steinberger: Yes, sir; I have got him.

Mr. Sheean: Two in yard service?

Mr. Carter: Four trips. Would you consider that man an extra engineer, or a fireman, making emergency trips?

Mr. Steinberger: Fireman, pure and simple.

Mr. Carter: Was it not our purpose to show that the engineer did not make any money as a fireman?

Mr. Steinberger: Yes, sir.

Mr. Carter: We spoke about the engineer going through the starving period. We confess that a fireman, if there is no engineer available, will make emergency trips, but this man Adams was not an extra engineer.

Mr. Steinberger: No, sir; he was a fireman.

Mr. Carter: You have not found in any of these extra engineers or men not available, that there is a practice of giving extra engineers a right to make trips as a fireman, between their trips as an engineer?

Mr. Steinberger: No, sir.

Mr. Carter: Now, Mr. Chairman, perhaps we should have put more witnesses on the stand, but I am saying to you that it is the exception that when a man is an extra engineer, that he is permitted to earn any other money, so long as he remains on the extra engineers' board; and we still insist that the extra engineers have a starving period. You were looking up something, were you not?

Mr. Sheean: Just getting the converse of that in one of these exhibits, Mr. Carter, if it made any particular difference whether he was an extra engineer acting as a fireman, or a fireman who was acting as extra engineer.

Mr. Carter: What book is that, Exhibit 26?

Mr. Sheean: Exhibit 26, yes.

Mr. Carter: What page?

Mr. Sheean: Six hundred and twenty-two would serve to illustrate. Mr. M. M. Doran, an engineer, in the yard at Shopton, for twenty-one days; earned \$91.38 as engineer, and worked as fireman in the same yard for six days and earned \$15.63 as a fireman. Six hundred and twenty-two, the top man there.

Mr. Steinberger: Yes, I have got him.

Mr. Sheean: He would not be included in your computation, would he, because he is over \$100.00?

Mr. Steinberger: No, sir.

Mr. Sheean: That is, in your 522, you only took the men—

Mr. Steinberger: Says did not exclude men over \$100.

Mr. Sheean: Now, if there is any distinction, Mr. Carter, between whether this was an extra engineer, firing, or whether he was a fireman, working as an extra engineer, I do not know.

Mr. Carter: I am going to ask Mr. Steinberger about something I know he knows nothing about. Would that indicate to you this was one of the men who was either promoted or demoted during the month of October, 1913?

Mr. Steinberger: I don't know.

Mr. Carter: Would it be contempt to court to bet the counsel for the railroads that that was a man who was either demoted or promoted for the month?

Mr. Sheean: Well, take the next one, if there is any distinction on that.

Mr. Carter: We confess that firemen work part of the month as firemen and are promoted to the position of engineer, or they work part of the month as engineers, and are demoted to the position of firemen, but our insistence is that they are not both at the same time, except on the Chicago Division of the Illinois Central Railroad. We will confess that.

Mr. Sheean: That is all.

Mr. Stone: Mr. Chairman, while they are looking that up, I have had them look up for me what Mr. Keefe really said about

the ones who were excluded from the list. On page 3980 of the record of the hearings, you will find the following:

“Mr. Stone: In this 12,028 men that were not available for duty, does that include engineers and firemen who were off during the month for rest, or because of illness, or from other causes which are excluded from sheet 2? If a man became worn out and had to have rest, would he be listed as unavailable during the rest of the month?

“Mr. Keefe: If he made less than \$100 as an engineer, or \$70 as a road fireman, or \$65 as a yard fireman or hostler, during the month of October, and laid off from further service of his own accord for any reason he might care to give, he might not be shown in sheet No. 2.

“Mr. Stone: Then, in the make-up of this sheet and the general average of the other sheets, nothing is taken into consideration in regard to the human machine becoming tired out or worn out; you simply show the men who are ready to work all the time, if need be, for the month?

“Mr. Keefe: No, sheet No. 2 leaves out of consideration the men who did not avail themselves of the opportunity afforded them by the companies to earn additional compensation; whatever that reason was, they were not included.”

Mr. Sheean: That is all.

(Witness excused.)

Mr. Carter: I might consume the time before the hour for adjournment by putting on a bunch of General Chairmen here, to all of whom I have spoken, who say that when engineers are put on the extra board they are not used as firemen until they are again demoted.

The Chairman: You have five minutes remaining.

J. A. COCHRAN was recalled as a witness in rebuttal, and having been previously sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: Mr. Cochran, you have previously been sworn?

Mr. Cochran: Yes.

Mr. Carter: On your road when a fireman is promoted and his name is marked up on the extra engineers' board, is he permitted to earn, in addition to his earnings as an extra engineer, wages as a fireman?

Mr. Cochran: No, sir.

Mr. Carter: That is all.

CROSS EXAMINATION.

Mr. Sheean: Have you examined this Great Northern payroll for October, 1913?

Mr. Cochran: I have not.

Mr. Sheean: I have not either. I just want to see what we can find here with reference to those who drew pay both as engineers and firemen.

Mr. Shea: Mr. Cochran, there is a possibility, during the period of one month, to demote engineers or promote firemen.

Mr. Cochran: Yes.

Mr. Shea: In which event they would appear on both rosters, on the fireman's roster and on the engineer's roster?

Mr. Cochran: That occasionally happens.

Mr. Sheean: On the Great Northern, Wilmar Division, this payroll seems to show that in the month of October, 1913, Mr. I. H. Griffin, an engineer in the yard at Wilmar, worked 12 days, and that he also worked as a fireman on way freight between Minneapolis and Wilmar 9 days.

Mr. Cochran: I will tell you about him. He was a man who was promoted as an engineer two years before he did any running, and he was firing all the time. Now, when there was a little rush of business came on there, they wanted an extra switch engineer in an emergency case, and they grabbed Griffin for 12 days.

Mr. Sheean: So that during that month he was an engineer in the yard for 12 days, and fired way freight for 9 days.

Mr. Cochran: He was one of those emergency men we talked about the other day.

Mr. Nagel: What difference does it make whether he comes in at one door and goes out at another, or comes in at the other and goes out at the one?

Mr. Stone: I think the question is, how much money did the pay car bring him.

Mr. Sheean: It brought him \$112 that month.

Mr. Cochran: There were 36 men examined and qualified as engineers for an expected rush of business, but the rush did not come, but in what little rush there was they put on an extra

switch engine, and they were using all the extra men, and Griffin happened to be the oldest man running into Wilmar, and he was put on that switch engine for that length of time and then pulled off.

Mr. Sheean: On the Sioux City Division, F. Coffey served in the yard at Sioux City 11 days as engineer, in way freight between Garretson and Yankton 5 days, and as a fireman in passenger service between Garretson and Sioux City 10 days.

Mr. Cochran: Coffey was down there at Sioux City. There is not much business down there, and they keep the extra engineers down to the lowest possible limit. Coffey was qualified as an engineer a couple of years before he was promoted, but the company in place of putting him on the list, put him on a switch engine, possibly an extra engine put on there in the month of October to take care of some corn and wheat that came in there, and then pulled the engine off and Coffey went back to his job.

Mr. Carter: He was not an extra engineer?

Mr. Cochran: Oh, no.

Mr. Sheean: I thought you said they put an extra engineer on for 11 days?

Mr. Cochran: In an emergency, I said.

Mr. Sheean: It was like the 11-day emergency.

Mr. Cochran: It was like the case of the herder whom they had firing an engine when the fireman played out—an emergency man.

Mr. Sheean: Was he an engineer working as a fireman or a fireman working as an engineer?

Mr. Cochran: You see, Mr. Sheean, the Great Northern Railroad moves a great lot of grain in the fall, and when they anticipate a large rush of business they examine all the available men on the division and qualify them before the business comes. They may not use some of them for a couple of years, or a year or six months, but they might have a qualified fireman down there on the division.

Mr. Sheean: Here is another one, and then I will be through. There seem to be quite a number of them here.

Mr. Cochran: Yes, there are.

Mr. Sheean: I notice Mr. F. Kosek, on the Breckenridge Division, was a yard engineer 11 days, on through freight 4 days, and work train 8 days, and he was a fireman in passenger service

between Breckinridge and Devils Lake for two days and an engineer on way freight between Breckinridge and Evansville one day. He is put down at \$149.85. Apparently he made all of that \$149.85 as an engineer, but got \$11.10 as a fireman in the same month.

Mr. Cochran: You see possibly when he was promoted there, Mr. Shecan, the business dropped off and they cut the list. He was cut off of the engineers' extra list and put back on the firemen's list.

Mr. Shecan: But even there, in the busy month of October, 1913, you do find men who are earning as high as \$150, who also make \$11 of it firing and the rest of it as an engineer.

Mr. Cochran: As I explained to you before, it could have happened this way: They could have taken the fireman and used him in an emergency to take care of a particular piece of work, on a work train proposition for only one day, you said, as I remember—one day or two.

Mr. Shecan: He was a fireman on a passenger.

Mr. Cochran: You said a work train.

Mr. Shecan: He was engineer on the work train.

Mr. Cochran: How many days?

Mr. Shecan: Eight days, four days on way freight, engineer in the yard 11 days, and two days as a passenger fireman.

Mr. Cochran: As I say, this was an emergency, or the business fell off and the list was cut. But in no instance can a man do this unless it is an emergency case. He cannot go from the engineers' extra list and be called as an extra engineer, and fire in a fireman's place, because we would not tolerate that.

Mr. Shecan: Here is another man, Hornbeldt, engineer in way freight ten days; engineer on work train one day, and passenger fireman six days. He made \$158.45, all of it except \$33.65 as an engineer, but he earned \$33.65 as a passenger fireman.

Mr. Cochran: Where was he?

Mr. Shecan: He is shown on the Sioux City Division as an engineer in way freight ten days, work train one day, fireman on passenger for six days, and engineer on way freight between Benson and Watertown for five days.

Mr. Cochran: He was out of his jurisdiction when he was over at Benson and Watertown. He did not belong there.

Mr. Stone: If he went there at all, he went as an emergency man.

Mr. Cochran: Yes.

RE-DIRECT EXAMINATION.

Mr. Carter: Are any of these men extra engineers on the extra list?

Mr. Cochran: It would be apparent from the time of the year, that the first man spoken of, on the Wilmar Division, was a qualified engineer. Those men were all qualified engineers.

Mr. Carter: But he would be a regular fireman?

Mr. Cochran: Yes.

Mr. Carter: These men were used as engineers; but at any place on your road, when a man's name is marked up on the engineer's list, is he permitted to pad out his earnings by making an occasional trip as a fireman?

Mr. Cochran: Not unless the extra engineers' list is cut, and he is put back as a fireman.

Mr. Carter: Demoted?

Mr. Cochran: Yes.

The Chairman: We will take an adjournment.

(Whereupon at 5.02 o'clock P. M. Tuesday, March 16, 1915, an adjournment was taken until March 17, 1915, at 10 o'clock A. M.)

IN THE MATTER OF THE
 ARBITRATION
between the
 WESTERN RAILWAYS
and
 BROTHERHOOD OF LOCOMOTIVE
 ENGINEERS
and
 BROTHERHOOD OF LOCOMOTIVE FIRE-
 MEN AND ENGINEMEN
*under the Act approved July 15, 1913, by agree-
 ment dated August 3, 1914.*

Chicago, Illinois, March 17, 1915.

Met pursuant to adjournment at 10:15 o'clock A. M.

Present: Arbitrators and parties as before.

Mr. Burgess: Mr. Chairman, I would like to make two corrections, if you please. On page 7137, seventh paragraph, it should read:

“Well, then, in determining on this run No. 14 and 16 out of Albany, where straight mileage would accrue, would not that run come under the special provision governing the minimum day, wherein it states on regular runs, where engineers make an equal to the average of \$5.00 per day, straight mileage will be paid, so that the guaranty of \$5.00 a day applies to that run.”

On page 7138, in reply to a question by Mr. Sheean, it should read:

“That is what this exhibit shows, Mr. Sheean. I don't know anything about it. I presume that you will find others. Pardon me, Mr. Sheean, but to be perfectly fair, you will find through the branch line rates in the Southeast country, speaking in a general way, that there are some low rates, and you will find some exceptionally high rates, all of which is a matter of negotiation between the various companies and the committees representing the engineers, and those negotiations rest upon the number of miles, the number of hours, and the character of the work. Those are the three factors, and I might say an

additional factor is the time the run begins, and the time it ends, in regard to a man getting his meals or his rest. Those four factors are taken into consideration."

That is all, Mr. Chairman.

Mr. Carter: Mr. Chairman and Gentlemen of the Board: Mr. Karn has read the proceedings of March 15th, last Monday, and has called attention to the following corrections:

On page 7006, a paragraph toward the bottom of the page:

"Mr. Karn: Well, I would hate to have these records contain anything by inference that could not be clearly explained." Mr. Karn intended to say:

"Well, I would hate to have the records contain anything by inference that could be clearly explained."

Page 7014, at the bottom of the page:

"Mr. Carter: Well, it is, but not in any instructive manner." The correction should be:

"Well, it is, but not in any constructive manner."

Page 7028, last paragraph:

"Mr. Karn: * * * They have more horses to take care of, and they get greater wages, running from \$140.00 to \$165.00 a month." It should read:

"Running from \$40.00 to \$65.00 a month."

Page 7030, last paragraph:

"Mr. Karn: An investigation of that by the company and officials, and the Government, disclosed the fact, as I stated, that there was not a proper diffusion of heat in that fire box, and all other locomotives in the roundhouse at Sparks, Nevada, were ordered taken out of service."

The word "all" should be "five," and read "and five other locomotives."

Page 7040, on the last line: (Mr. Karn):

"Convinced the operating officials that the contention of the firemen that they should go from an eight to a ten hour day, was just." It should be:

"Go from a ten to an eight hour day, was just."

Page 7053, top of the page, beginning at the bottom of page 7052:

"Mr. Carter: Do you understand that these stokers don't require the attention of the engineer to see that they are operating properly." That should be:

"Do you understand that these stokers do not require the attention of an engineer to see that they are operated properly."

Page 7055, toward the bottom of the page: (Mr. Karn):

"And I think that if our proposition as submitted, with possibly one or two exceptions, where it should be classified, were accepted, that we would have a schedule standard in itself."

The word "Classified" should be "Clarified." To read: "Where it should be clarified."

On page 7060, top of the page, beginning:

"said that the combined efforts of two firemen on a locomotive weighing 185,000 pounds, should not meet with a compensation only the equivalent of the one man on the oil burner?"

The change should be:

"meet with compensation greater than the equivalent of one man on the oil burner."

Page 7061, toward the bottom of the page, there appears to be a colloquy between Mr. Burgess and Mr. Karn. Where the name "Karn" appears, it should be "Carter."

My attention is called to the first one, which I missed, on page 6985: (Mr. Karn).

"But I do know that on many railroads, where you make tests, and you make them unfairly—a recent occurrence, I received correspondence on a line," should be "I reviewed correspondence on a line."

Mr. Nagel: There is one correction on page 7189. I asked the percentage of heavy engines "in the neighborhood of 6,000 out of 22,000." I think that should be "27,000."

D. B. ROBERTSON was called as a witness in rebuttal, and having been previously sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Carter: Mr. Chairman, I think Mr. Robertson has qualified.

The Chairman: Yes, he has been sworn heretofore.

Mr. Carter: Mr. Robertson, I believe you testified when you were on the stand before, that your railroading had been done in the eastern section of the country?

Mr. Robertson: Yes, sir.

Mr. Carter: How long were you in the service of the Erie Railroad?

Mr. Robertson: A little over 16 years.

Mr. Carter: Did you examine Exhibit 1 presented by the railroads?

Mr. Robertson: I did.

Mr. Carter: What portion of the exhibit did you examine?

Mr. Robertson: That part affecting firemen in the Eastern Territory only.

Mr. Carter: Did you examine any other portion of the Exhibit?

Mr. Robertson: No, sir.

Mr. Carter: Then you devoted your examination or investigation solely to the rates and rules reported as being in effect for firemen on Eastern Railroads?

Mr. Robertson: Yes, sir.

Mr. Carter: Have you prepared a statement setting forth the results of your investigation?

Mr. Robertson: Yes, sir.

Mr. Carter: Mr. Chairman, we desire to introduce Exhibit 87.

(The document so offered and identified was received and thereupon marked "Employees' Exhibit, No. 87, March 17, 1915.")

Mr. Carter: The color of the cover is our contribution to the day.

The Chairman: We will excuse you if you do not go any farther.

Mr. Carter: Mr. Robertson, will you turn to page 8 of the Railroads' Exhibit No. 1 and explain what you have found that is wrong with the rules quoted for firemen in through passenger service in the Eastern Territory?

Mr. Robertson: On page 8 of Railroads' Exhibit No. 1, column 1, it is reported that 85 per cent of the railroads have the following rule.

Mr. Carter: In through passenger service.

Mr. Robertson: In through passenger service. "Runs of over 80 miles in one direction, 100 miles or less, 5 hours or less, overtime 20 miles per hour continuous time, minute basis. If

relieved at turning point minimum of one day allowed for trip in each direction."

Mr. Carter: Do you find any such rule anywhere in the Eastern District for through passenger service.

Mr. Robertson: No, sir.

Mr. Carter: Will you read the rule of the Eastern Award for firemen in through passenger service.

Mr. Robertson: "Overtime in passenger service except suburban service, will be paid at the rate of 30 cents per hour, on the basis of 20 miles an hour computed on the minute basis, five hours or less, 100 miles or less to constitute a day's work."

Mr. Carter: Now, taking the first paragraph on page 4 where they say that 85 per cent of the mileage in the Eastern Territory paid firemen in through passenger service under that rule, have you stripped it out and shown that no percentage is paid under that rule?

Mr. Robertson: On page 4 of Exhibit 87, now being introduced, I have done that, yes, sir.

Mr. Carter: Now where do you show the correction?

Mr. Robertson: The roads that are reported in column 1 of Railroads' Exhibit No. 1 are shown now in column 6 on page 5 of Exhibit 87.

Mr. Carter: And be Column 6, page 8 of the Railroads' exhibit?

Mr. Robertson: Yes, sir.

Mr. Carter: What percentage do they show in column 6 of the Railroads' exhibit?

Mr. Robertson: 1.322.

Mr. Carter: How much do you show?

Mr. Robertson: 96.024.

Mr. Carter: What is the percentage of the mileage in the Eastern District, where firemen are paid under a uniform or standard rule for firemen, in through passenger service?

Mr. Robertson: 97.346.

Mr. Carter: That would indicate that so far as the five hour day and overtime, twenty miles per hour, minute basis, is concerned, that it is practically standard on all railroads, is it not?

Mr. Robertson: Yes, sir.

Mr. Carter: With the exception of less than 3 per cent?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, will you please explain the difference between this Eastern standard rule, for firemen, in through passenger service, and the rule requested in this arbitration?

Mr. Robertson: The rule requested in the Arbitration, reads as follows:

“100 miles or less, five hours or less, will constitute a day’s work in all classes of passenger service. All mileage in excess of 100 miles shall be paid for pro rata. Overtime in passenger service will be computed and paid for on a basis of twenty miles per hour, at rate for each class of engine used.”

Mr. Carter: Now, please explain the difference between the rule that the firemen have on 97 per cent of the railroads in the East, and what the engineers and firemen are requesting in the West?

Mr. Robertson: The rate in effect in the Eastern country provides for a flat rate of 30 cents per hour, as pay for overtime.

Mr. Carter: In through passenger service?

Mr. Robertson: In through passenger service.

Mr. Carter: For firemen?

Mr. Robertson: For firemen. The present request, as I understand it, requires that the overtime be paid for at the same rate per hour as the straight time, or the first five hours.

Mr. Carter: Now, Mr. Robertson, let us presume that a passenger train goes 100 miles in five hours, at \$3.00 per day. What is the rate per hour for this passenger fireman, for this trip?

Mr. Robertson: Sixty cents.

Mr. Carter: In this proposition, supposing that the train was delayed one hour and it took six hours to make the hundred miles, what would be the rate of pay under our proposition, for the six hours?

Mr. Robertson: Sixty cents.

Mr. Carter: Then, our proposition only asks that the same rate per hour be paid, for overtime, that we are asking for straight time.

Mr. Robertson: Yes.

Mr. Carter: Now, the practice on the Western roads, where they pay firemen or engineers, either, on a five hour day in

passenger service, suppose on that road the rate was \$3.00 and they made the run in five hours, what would be the rate per hour?

Mr. Robertson: With the five hour rule?

Mr. Carter: Yes.

Mr. Robertson: Sixty cents.

Mr. Carter: Now, suppose, under the present rule on the Western Railroads—we will take the Illinois Central, for instance, that has this rule—suppose the train was delayed and it took six hours to make the hundred miles, what would be the rate for the overtime?

Mr. Robertson: Thirty cents.

Mr. Carter: That is, the overtime rate would be just one-half the straight time rate, under present practice in the West?

Mr. Robertson: That is my understanding.

Mr. Carter: And the proposition asks that the overtime rate be pro rated.

Mr. Robertson: Yes.

Mr. Carter: And the difference between the Eastern roads, I understand, is that they have made a flat overtime rate of thirty cents in the East.

Mr. Robertson: That is the difference, yes, sir.

Mr. Carter: Now, Mr. Robertson, during your experience in railroad service, did you often find overtime made in passenger service?

Mr. Robertson: No, sir; not very often, particularly so in through passenger service.

Mr. Carter: If there were a wreck, wash-out or something of that kind.

Mr. Robertson: That would bring it about sometimes, yes.

Mr. Carter: Would it be very seldom that a train would be scheduled at a less speed than twenty miles per hour?

Mr. Robertson: Very few of them.

Mr. Carter: What would the passengers say if they were riding over the railroad, where the schedule took five hours to make a hundred miles.

Mr. Robertson: I suppose that would depend on the district of the country they were riding over. I don't know just what they would say.

Mr. Carter: Then, according to your experience, it is seldom that firemen or engineers, either, get overtime in through passenger service?

Mr. Robertson: Very seldom.

Mr. Carter: Then when it comes to the rate of overtime, it won't amount to very much, either way, will it?

Mr. Robertson: No, sir; that is my opinion.

Mr. Carter: And if it has been suggested here by any witness for the railroads, that the adoption of this rule would practically double the expense of passenger service, why, it was a misunderstanding of the intent of the rule. Is that not true?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, in practice, it would matter but little to either the railroads or the firemen, whether it was half time for overtime or full time for overtime; is that not true?

Mr. Robertson: That has been my experience in changing from a ten hour rule to a twenty mile hour basis.

Mr. Carter: But don't you believe that in equity, that when the five hour rule has been adopted, or will be adopted, that the rate of pay for overtime should be just the same as the rate of pay for straight time?

Mr. Robertson: Yes, sir; I think a man is entitled to as much for overtime, at least, as he is for straight time.

Mr. Carter: And in investigating this page 8, you find that 97 per cent of the mileage in Eastern territory is paid firemen under the rule which you have read from the Eastern Arbitration?

Mr. Robertson: Yes, sir.

Mr. Carter: Which means 100 miles or less, five hours or less, overtime twenty miles per hour, minute basis?

Mr. Robertson: Yes, sir.

Mr. Carter: And you have said that the rate of overtime will be thirty cents. Now, what else have you discovered in this book?

Mr. Robertson: There are some other corrections there.

Mr. Carter: Well, only refer to the principal ones. I understand that you have shown all the corrections, have you not?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, just go through the book as briefly as you can.

Mr. Robertson: I will say that where there have been no corrections made, that it will not appear in Exhibit 87. The summary for page 8, Railroads' Exhibit No. 1, as compiled and shown on page 4 of this Exhibit 87, is found on page 2 of Exhibit 87, and is shown on page 5 of Railroads' Exhibit No. 1.

Mr. Carter: It will not be necessary to go further than that.

Mr. Robertson: Just change the percentage, the same as we did in the detail.

Mr. Carter: Now, you come to local passenger service.

Mr. Robertson: On page 9, Railroads' Exhibit No. 1.

Mr. Carter: Now, Mr. Robertson, in what schedule, or in what Arbitration Award did you ever find a rate for local passenger service?

Mr. Robertson: Well, I did not notice any in making this investigation, but used the term "local."

Mr. Carter: Do you know what a local passenger train is?

Mr. Robertson: Well, it might mean a train going over the railroad, making a number of stops, regardless of the mileage.

Mr. Carter: Like a local way freight, or like a local freight train?

Mr. Robertson: Yes; it might be that.

Mr. Carter: It might be a through passenger train, and yet, because of stopping at every station, be called a local passenger train?

Mr. Robertson: That might be so.

Mr. Carter: What other kind of a train might be called a local train that you have ever heard of?

Mr. Robertson: Short turn-around suburban service.

Mr. Carter: They might mean suburban service?

Mr. Robertson: Yes.

Mr. Carter: But so far as the title "Local Passenger Service," you don't find any such service in the Eastern Arbitration with the Firemen, do you?

Mr. Robertson: No, sir.

Mr. Carter: Do you find it among any of the schedules?

Mr. Robertson: One or two, yes, sir; I only recollect one—

Wheeling & Lake Erie, I think. There may be others that I don't recall now. That is the only one I can recollect.

Mr. Carter: You don't find anything to that effect, do you? Have you any corrections for that local business, in any interpretation?

Mr. Robertson: In column on page 9, Railroads' Exhibit No. 1, it is shown as 74.122 per cent of the railroads have the following rule:

"Runs of 80 miles or less, in one direction, 100 miles or less. Overtime after eight hours actual service, including periods of release not exceeding one hour, within 12 consecutive hours, and for all over 12 hours elapsed time."

Mr. Carter: Mr. Robertson, after you read that, did you find any rule like that in any schedule, or the Award? Did you find one near enough like that to indicate to you what the railroads meant by "local passenger service?"

Mr. Robertson: Yes; I took it to mean short turn-around or suburban service.

Mr. Carter: Now, will you read the rule?

Mr. Robertson: "On short turn-around runs, no single run of which exceeds 80 miles, including suburban service, overtime shall be paid for all time actually on duty or held for duty in excess of eight hours, computed on each run from the time required to report for duty to the end of that run, within 12 consecutive hours, and also for all time in excess of 12 consecutive hours, computed continuously from the time first required to report to the final release at the end of the last run. Time shall be counted as continuous service in all cases, where the interval from release at any point does not exceed one hour."

Mr. Carter: Do you presume that is intended to be the same rule?

Mr. Robertson: That is what I understand it to be.

Mr. Carter: It is shown here that 74 per cent of the total mileage is under the rule as stated by the railroads. What do you find on your page?

Mr. Robertson: Page 6 of Exhibit 87 shows that the New York, Ontario & Western Railroad, and the Vandalia Railroad, do not pay under that rule, and excluding those from the percentage would leave the percentage 70—well, practically 71 per cent.

Mr. Carter: Now, you mean that you did not find the rule, under the rule as shown on page 9 of Railroads' Exhibit No. 1, at all, but under the rule that is in effect, you found it was practically 71 per cent?

Mr. Robertson: Yes, sir. There are some other slight changes made in the percentages of columns 4, 5, 8, 9 and 10. Column 9 of Railroads' Exhibit No. 1 shows that 1.322 per cent of the railroads have the following rule in effect in local passenger service:

"100 miles or less, five hours or less. Overtime twenty miles per hour, minute basis." Percentage corrected and as found in my investigation shows that 3.798 per cent of the roads—additional roads have that same rule, which would make that percentage corrected read 5.120.

Mr. Carter: Now, without going into detail just bring out the high spots.

Mr. Robertson: The summary of the detail as shown on pages 6 and 7 of Exhibit 87 appears on page 3 of Exhibit 87 and on page 5 of Railroads' Exhibit No. 1.

The next corrections will be found on page 15 of Railroads' Exhibit No. 1, "Basis of Day's Work and Overtime, Through Freight Service."

Column 1 of Railroads' Exhibit 15 shows that 99.979 per cent of the railroads have a rule: 100 miles or less, 10 hours or less; overtime 10 miles per hour, minute basis, pro rata. That percentage has been corrected to read 100 per cent.

Mr. Carter: On what page?

Mr. Robertson: As shown on page 8 of this exhibit.

Mr. Carter: Page 8 of your exhibit?

Mr. Robertson: Yes, sir, bottom of the page.

Mr. Carter: Now, will you explain why it was 100 instead of 99.979 per cent?

Mr. Robertson: The Indianapolis Union was a party to our Eastern Arbitration.

Mr. Carter: But it might be shown, Mr. Robertson, that on the Indianapolis Union they may have no local freight service.

Mr. Sheean: That is the intention on page 15. It includes all of them except the Indianapolis Union, and that is put under the heading "No Through Freight Service."

Mr. Carter: They might not have any through freight service?

Mr. Robertson: Yes.

Mr. Carter: Do you think that the rate applies there just the same as if they did have through freight service?

Mr. Robertson: The rule is in effect on that road, yes, sir.

Mr. Carter: Suppose this arbitration hands down an award that, on locomotives weighing 200,000 pounds on drivers, a certain rate should be paid, and on one-half of the railroads in the movement at present they have not a locomotive of that weight, would not the award apply to that road for that rate, just the same as if it did have a locomotive of that weight?

Mr. Robertson: That would be my understanding, yes.

Mr. Carter: And, if, during the life of the award, they introduced a locomotive of that weight, the award would apply, would it not?

Mr. Robertson: Yes, sir.

Mr. Carter: Regardless of what was shown on the schedule, or whether they had this engine when the Award was made or not?

Mr. Robertson: Yes, sir. Some of the Eastern Railroads have refused to incorporate in their current schedules provisions of the Award, when they did not have service that would apply to that certain provision.

Mr. Carter: But the Award applied equally to all railroads, did it not?

Mr. Robertson: Yes, sir.

Mr. Carter: With the exceptions of some railroads that found means of evading the Award?

Mr. Robertson: With that exception, yes, sir.

Mr. Carter: Now, what did the Central Railroad of New Jersey do to evade the Award?

Mr. Robertson: During the time intervening from the handing down of the Award until a conference could be arranged with the Managers for the purpose of taking up and discussing the Arbitration, or rather points in dispute as to the application of the Award, the Central Railroad of New Jersey, or the members on that railroad, took up the matter with their management, and before an interpretation of the Award was made they accepted certain understandings of the Award from

their own management, and by so doing they accepted rulings that were not in accordance with the Award, that is, as was later determined by the arbitrators.

The Chairman: I did not understand that, Mr. Robertson.

Mr. Robertson: After the Award was made public there were certain disputes arose as to its proper application, and Mr. Carter, President of our organization, took up correspondence with Chairman Lee of the Conference Committee of Managers in the East with the view of bringing about a conference between the Arbitrators and the two committees representing the Managers and the Firemen, for the purpose of getting some interpretation as to the proper application of certain rules. The Managers insisted that the men on the individual railroads, the committees on the individual railroads should take the matter to their individual officials, the officials of the individual roads, and try and agree as to its application.

Mr. Carter: And agree to its interpretation?

Mr. Robertson: Yes, agree as to its interpretation. And that correspondence delayed the conference for several months and, of course, quite a number of men became impatient. I know that President Carter was accused of not doing all he could to bring about these conferences. And on some railroads these men became impatient, and the officials wanted them to come in and revise their schedules, and they came in, and in agreeing with the officials as to what the Award meant, they agreed to something that later on was determined by the arbitrators not to have been the Award. And that was what was done on the Central Railroad of New Jersey. When the interpretation of the Award was handed down they found they had agreed to something that was not intended by the Award. The arbitrators later decided that they had agreed to something they should not have agreed to, or was not intended.

Mr. Carter: Do you remember, Mr. Robertson, when the disputes began to arise, that I addressed a communication to Chairman Lee of the Eastern Managers, urging him to join with me in requesting the Arbitration Board to again convene and pass upon these disputes?

Mr. Robertson: Yes, sir.

Mr. Carter: Was that about the first of June, along early in June, or the last of May?

Mr. Robertson: About that time, yes, sir.

Mr. Carter: When did we succeed in meeting the Managers Committee?

Mr. Robertson: July 15.

Mr. Carter: July 15. We had a convention in June, did we not?

Mr. Robertson: Yes, sir.

Mr. Carter: And we met the Managers Committee on July 15. Did we again urge them to join with us in requesting the Board of Arbitration to pass upon the disputes?

Mr. Robertson: Yes, sir.

Mr. Carter: What was their reply?

Mr. Robertson: Their reply was that they desired that the committees refer the matter to their individual managements and try and agree as to the understanding of the Award, and try and adjust certain of the points that were in dispute.

Mr. Carter: And they insisted that the proper way to apply an Award was for the men on each road to agree what it meant?

Mr. Robertson: That was their position, yes, sir.

Mr. Carter: What was the position of this Brotherhood, as expressed by myself? Was it not that an arbitration Award applied to all men participating and to all railroads participating, and neither the individual general manager nor the individual committee would have a right to change that award?

Mr. Robertson: That is my understanding of it.

Mr. Carter: And the attitude of the railroads was the other way?

Mr. Robertson: Yes, sir.

Mr. Carter: Then how long was it before we secured the co-operation of the Managers' Committee in securing a meeting of the Arbitration Board to pass upon these disputes? Was it in November following?

Mr. Robertson: I think it was in November following that the arbitrators met to pass upon the points, yes, sir.

Mr. Carter: Now, was it during this delay, from May 16 to way in November, that certain committees would not wait any longer, and in their purpose to get an increase in wages went in and settled with the railroads according to the railroads' interpretation?

Mr. Robertson: Yes, sir.

Mr. Carter: And on the Central Railroad of New Jersey they lost the five hour day in passenger service?

Mr. Robertson: They lost it, yes, sir.

Mr. Carter: Was that one of the reasons, Mr. Robertson, that there was such discontent in the East against arbitration under any circumstances in any future wage movement?

Mr. Robertson: It was, yes, sir.

Mr. Carter: Was the law changed largely because of the attitude of the Railroads in such matters, when the Newlands Act was enacted?

Mr. Robertson: That is my understanding, yes.

Mr. Carter: And, under the Newlands Act, there are provisions for the Board reconvening and adjusting these disputes?

Mr. Robertson: Yes, sir.

Mr. Carter: You don't think that such a condition could ever exist again, particularly in the West, in view of our arbitration agreement, do you?

Mr. Robertson: No, I don't see how it could, no, sir.

Mr. Byram: Mr. Robertson, you are speaking now of the Award of the Board of Arbitration in the Eastern case, of the Engineers?

Mr. Robertson: The Firemen.

Mr. Byram: The Eastern Firemen?

Mr. Robertson: Yes, sir.

Mr. Carter: You think this Board ought to take into consideration that Award in its consideration of these questions?

Mr. Robertson: My understanding of the matters that the Board will take into consideration is whatever evidence is introduced, Mr. Byram.

Mr. Byram: And you are introducing evidence concerning the Award in the Eastern arbitration case?

Mr. Robertson: I am introducing evidence to show the errors that exist in Railroads' Exhibit No. 1, yes, sir.

Mr. Byram: Will you please answer my question, as to whether you think this Board ought to take into consideration or give any consideration to the Eastern Award, in considering this proposition?

Mr. Robertson: I don't see how I could answer your question directly, any further than to say that the Board, in my

opinion, would take into consideration whatever evidence is introduced. I don't think I am authority enough to say what I believe the Board should take into consideration in passing upon the matters in dispute.

Mr. Byram: You have no opinions on the subject?

Mr. Robertson: No, I don't know enough about law to know what position the Board is in in the matter of considering evidence.

Mr. Byram: You are not offering any of the evidence in connection with the Eastern Award for the consideration of this Board then?

Mr. Robertson: My purpose in preparing this exhibit here was to show the errors that exist in Railroads' Exhibit No. 1.

Mr. Byram: But you don't understand that the Award is before the Board for consideration, as evidence?

Mr. Robertson: Counsel for the employes, I imagine, would have to answer that. I don't know. The questions that have been asked me on the Award I have never heard before I sat down here.

Mr. Byram: You have no opinion then as to whether this Board should or should not consider the Eastern Award in connection with the proposition before them?

Mr. Robertson: I have no opinion as to what they will consider. I imagine they will consider whatever evidence is introduced. I could not say, Mr. Byram, what they will take into consideration.

Mr. Byram: That is all.

Mr. Burgess: Mr. Robertson, you feel reluctant to lay down any rule of action to govern the Board, do you not?

Mr. Robertson: I don't think I could. Yes, sir, I feel that way.

Mr. Burgess: That is all.

Mr. Byram: I was asking the witness's personal opinion, not expecting that he was going to make any rules for the Board.

Mr. Carter: Mr. Robertson, was Exhibit No. 1 of the Railroads the first exhibit presented by the Railroads?

Mr. Robertson: Yes, sir.

Mr. Carter: Do you think it was about the biggest exhibit presented by the Railroads? Is it pretty hard to carry from the hotel over here?

Mr. Robertson: Well, it is pretty heavy. I don't know whether it is the largest introduced or not.

Mr. Carter: Is practically one-third of that exhibit of the Railroads devoted to what firemen and engineers are receiving in the Eastern District?

Mr. Robertson: Yes, I think so, pretty close to that.

Mr. Carter: After having introduced this matter so voluminously in the first exhibit by the railroads, do you think we should be blamed for calling attention to the gross errors in Exhibit No. 1?

Mr. Robertson: No, I don't think so.

Mr. Carter: Then our purpose was simply to call attention to the errors?

Mr. Robertson: That is my understanding, yes.

Mr. Carter: All right, proceed with the errors.

Mr. Byram: Just a moment, please. Now, Mr. Robertson, do you or do you not know that one of the witnesses for the employes has stated that in his opinion this Board should not consider the Eastern award?

Mr. Robertson: I don't know that, no, sir.

Mr. Byram: If I should cite you the witness and the page where such a statement is made, would it make any difference in your opinion?

Mr. Robertson: I would not change my opinion as to what the Board should take into consideration, no, sir.

Mr. Byram: That is all.

Mr. Carter: But, Mr. Robertson, whatever the Board decides to do, you want them to have approximately accurate information, and not erroneous information when they consider it, do you not?

Mr. Robertson: Yes, sir, that is what I understand is the purpose in introducing Exhibit 87, to show the errors that exist in Railroads' Exhibit No. 1.

Mr. Carter: And if the Board in its wisdom considers Exhibit No. 1, so far as it applies to the wages of the firemen in the Eastern District, you hope that they will take into consideration the corrections you have made, do you not?

Mr. Robertson: Yes.

Mr. Carter: And that is all you have started out to do?

Mr. Robertson: That is all, yes.

Mr. Carter: Well, proceed.

Mr. Robertson: The summary of the corrections of Exhibit No. 1 introduced by the Railroads, as found on page 15, are shown on page 7 of Employes' Exhibit 87. The summary is practically the same as the detail. It includes only a correction of the percentage from 99.979 to 100 per cent on account of the Indianapolis Union being a party to our Eastern Arbitration. On page 16 of Railroads' Exhibit No. 1 is shown basis of a day's work and overtime, local freight service, Eastern Territory. The Railroads' Exhibit No. 1 shows that 99.979 per cent of the railroads have the following rule in effect in local freight service: "100 miles or less, 10 hours or less, overtime 10 miles per hour, minute basis." That is found on page 9 of the present exhibit, and is practically the same as the correction on page 15. Changes the percentage from 99.979 to 100 per cent, and will be found on page 9 of the present exhibit.

Mr. Sheean: Well, that again is simply whether the Indianapolis Union is or is not in local freight service.

Mr. Robertson: Yes, that is the question.

Mr. Sheean: As shown on page 16, the Indianapolis Union had no local freight service?

Mr. Robertson: Well, my understanding in changing this, Mr. Sheean, was to show that the Indianapolis Union obtained the rule through our Eastern Arbitration, that was all.

Mr. Sheean: And when was that Arbitration, again?

Mr. Robertson: The Award was made effective May 3, 1913.

Mr. Sheean: May 3, 1913, and effective for one year?

Mr. Robertson: Yes.

Mr. Sheean: And during that time was there any local freight service on the Indianapolis Union?

Mr. Robertson: I couldn't say, no, sir.

Mr. Sheean: And is there any provision in the Indianapolis Union schedule for local freight service?

Mr. Robertson: I could not say that.

Mr. Sheean: That is all.

Mr. Robertson: My point in that was this, that many of the railroads even though they were parties to the Eastern Arbitration, take, for instance, the Pennsylvania Railroad, had lines west that will not incorporate our provision covering electric

service in their current schedule because of the fact that they have no electric service, but they took this position, as did the Grand Rapids & Indiana when I was there incorporating the Award in their schedule, that they had no service, therefore, they would not incorporate the rule in their current schedule, but if they established the service they would apply the Award. They took the position that the Award, being signed by the arbitrators, is effective, and does not require the signature of the local committee, or its incorporation into the schedule in order to make it effective.

Mr. Sheean: And, if, during the effective period of the award, they have any service that comes under it, they will take the rate?

Mr. Robertson: My understanding of it is that it is always in effect until changed by 30 days' notice by either party to the other.

Mr. Park: Well, would that be true if that condition did not obtain during the year in which the Award was in effect, and some such service should be inaugurated one or two years thereafter, would it be retroactive? In your opinion, would it affect the schedules of that individual road, an Award that had expired? For instance, if the Pennsylvania Lines West of Pittsburgh three years from now inaugurated some electrical service on some part of its line, would not that electrical service then be open to negotiation as between the organizations, for rates of pay, or would the rates be established retroactively by referring back to an arbitration Award that had only existed for a year, and then expired?

Mr. Robertson: Well, the question of retroaction, Mr. Park, in my opinion would not come in there.

Mr. Park: They had absolutely nothing in their service which was affected by their Award?

Mr. Robertson: They had no service at the time the Award was handed down, I appreciate that, but they took the position that they will include that in their schedule because it is covered by the arbitration. But the question of retroaction does not come in, because the Award carries along with the schedule, until such time as 30 days' notice is given by either party for changing.

The Chairman: As a matter of law, the Award remains in

force, as I understand, for a year. Then, either party, if they so desire, may, upon giving thirty days' notice, terminate the Award. In other words, does not the Award, when no notice has been given, even though the year has expired, still remain in force?

Mr. Robertson: Always has, so far as I know.

Mr. Park: That is a sort of an unwritten law or understanding between the railroads and the men?

Mr. Robertson: Well, in practically every schedule that is negotiated between the organizations and the railroads, there is a terminating clause incorporated in that schedule which provides that the schedule will continue in full force and effect until terminated by notice, thirty days' notice usually, from either party to the other.

The Chairman: I have not looked into the statute, Mr. Sheean. Is there any provision?

Mr. Sheean: No. This particular arbitration contract so provided and this Award will have that effect.

The Chairman: This Award?

Mr. Sheean: Yes. But in each case it depends on the wording of the arbitration agreement provided for in this contract.

Mr. Stone: It never has been questioned.

Mr. Sheean: It never was in any other arbitration contract, so far as I know.

Mr. Park: Well, then, if a road not having any service covered by the award, and not making a rate in their schedule, for the reason that it did not concern them, after the expiration of that schedule there would be no occasion for giving thirty days notice as to a change, if that particular thing came up for consideration, because it would not be in the schedule. Would it not then be open for negotiation between the railroads and the men?

Mr. Robertson: No, sir, not in my opinion it would not, no, sir.

Mr. Park: You think that ten years from now, if there was no negotiation between that time, that anything that might have been awarded there, would apply to any particular service that might be established on any road.

Mr. Robertson: Well, I would take into consideration whatever negotiations had been conducted between the management

and the men, on the question of schedules. Now, for example, in incorporating that award into the schedule of the Grand Rapids & Indiana—and the same situation exists on the Pennsylvania Lines, West, today—the management takes the position that they have not got the electrical service, and therefore do not care to incorporate that clause in their schedule. Usually, the only way they can close up a negotiation with the committee satisfactorily, is to agree with the committee that if the service is installed, they will pay the rates. But until they have it, that the award is in effect, because of its signature by the arbitrators.

Mr. Park: Do you think that if the Illinois Central, five years from now, should establish electrical service on some part of its line, that the rates established here today would fix rates for that service five years from now, regardless of conditions, or innovations, or new changes that might occur between now and then?

Mr. Robertson: Oh, I don't believe anybody could answer that question, with all those provisos, Mr. Park. But I will say this, that if there is an award made by this Board, specifying certain rules and rates to be effective in electric service, that until such time as that has been changed by the men on any of the Railroads, parties to this agreement, and the managers of that railroad, it will continue in effect.

Mr. Park: Regardless of whether they incorporate it in their schedule or not?

Mr. Robertson: The signature of the arbitrators will make it official. At least, that has been the position of all the Managers in the East, where they have refused to incorporate a specific rule in their schedule.

Mr. Park: It makes it effective for the year, but after that, if there is no such service, and it is not incorporated in the schedule in any way, if it should later be established, I can't see how this award, or, any other award, would have a bearing on it.

Mr. Robertson: Well, you have a different condition now than they had in the East. You have an agreement now that this award will continue in full force and effect until certain notice is given by either party to the other, the full award.

Therefore, that condition cannot arise in the Western country now, in my opinion.

Mr. Park: That is what I wanted to be clear on, that any action of this Board in establishing electric rates, is very far-reaching; it covers all the roads in this territory, under all the conditions that might obtain five or ten years from now, unless it was negotiated again in some manner.

Mr. Robertson: I would say that any award handed down by this Board, of course, will be in effect, in accordance with whatever the award is. I don't know what language they will use, but it will be in effect, in my opinion, until it is changed, and will be effective on all railroads.

Mr. Park: The ratchet of the organization only works one way. They never give up anything. Never have been known to give up anything.

Mr. Robertson: Sometimes they have things taken away from them, though.

Mr. Park: But it is a matter of great importance to the railroads in the future, because it goes, we don't know how far, under those conditions.

Mr. Robertson: Well, negotiations of any kind, whether it is a schedule or what it is, are far-reaching, of course. I agree with you on that. We never know what the future holds for us. I imagine the railroads will hold their own with the men in giving up or holding on to anything in the Award—guarantees, either of them.

Mr. Park: That is all.

Mr. Burgess: Well, Mr. Robertson, in regard to the men never giving up anything, how are we to reconcile the statements of Mr. Trenholm, the Chairman of the Managers' Committee, where he stated to the Board that the men had given up something?

Mr. Sheean: For something better, wasn't it?

Mr. Burgess: What?

Mr. Sheean: For something they thought was as good or better.

Mr. Burgess: I don't recall—

Mr. Sheean: Traded something, "preparatory time."

Mr. Burgess: Well, but—

Mr. Stone: I was the one who said that. Mr. Trenholm did not say that.

Mr. Burgess: I think that is right. Now, Mr. Stone, I would like if you can give us some explanation in regard to this matter. At least one Arbitrator would like a little light. How did the men lose the 25 cents on the Illinois Central, on those big engines, if they didn't give up something?

Mr. Stone: They didn't give it up, they were just "strong-armed" out of it.

Mr. Burgess: Oh. That is all.

Mr. Carter: Proceed, Mr. Robertson.

Mr. Robertson: The next corrections that I desire to call attention to are on page 22 of Railroads' Exhibit No. 1, and which are referred to on page 10 of Exhibit 87. "Basis of day's work and overtime. Pusher, helper, mine-run, work, wreck, belt-line, transfer and all other unclassified service."

The percentage shown to have following rule in effect is 99.979. The rule reads:

"100 miles or less, 10 hours or less. Overtime 10 miles per hour. Minute basis. Pro rata."

That percentage is corrected, found to be 100. That is on account of the Indianapolis Union.

Mr. Carter: But, Mr. Robertson, what is the rule? That rule is not right. Read the rule from the Eastern Award.

Mr. Robertson: "Firemen on locomotives in pusher, helper, mine run, work, wreck, belt line, transfer and all other unclassified service, will be paid through freight rates, according to the class of engine."

Mr. Carter: That is what we are asking in the West, is it not, or do you know?

Mr. Robertson: I don't know.

Mr. Carter: Now, here, it would not indicate, on page 22 of Exhibit 1 of the Railroads, that in pusher, helper, mine-run, work, wreck, belt line, transfer, and all other unclassified service, that simply the freight rates and rules apply? To look at page 22 would not indicate that, would it?

Mr. Robertson: With the exception of the Indianapolis Union, which is regarded as having no rule on the schedule.

Mr. Carter: Should not the rule, to have been proper,

have said that in these classes of service shown on page 22, that through freight rates and rules apply?

Mr. Robertson: That is the Eastern Award, yes, sir.

Mr. Carter: Well, should not that have been shown here?

Mr. Robertson: Yes, sir.

Mr. Sheean: Well, is not the basis of the day's work and overtime on all those classes of service correctly shown there?

Mr. Robertson: That is what it is, yes, sir.

Mr. Sheean: And again you have this twenty-one thousandths of one per cent as the only difference between you and the compiler of this page 22?

Mr. Robertson: That is all, Mr. Sheean.

Mr. Sheean: And his reading there is that there is no rule in their schedule. You don't know that fact or not, not having examined the schedule?

Mr. Robertson: We have applied the Award.

Mr. Sheean: Well, how much pusher, helper, mine-run, work, wreck, belt line, transfer and all other unclassified service has the Indianapolis Union?

Mr. Robertson: I could not say that they have any and could not say that they have not any. I will say that, in preparing the corrections as reported in Exhibit 87, I have not considered whether the railroads had service, or didn't have certain service. I was guided by the fact that I understood the introduction of this Exhibit No. 1 by the railroads was to show the rules and rates that were in effect, and not to show whether or not certain service was in effect. That was my guide in the matter.

Mr. Carter: Mr. Robertson, in the East, did not the award expire before we got the railroads to consent to what it meant in the interpretation and in the arbitration of the arbitration?

Mr. Robertson: Yes, sir. It had expired.

Mr. Carter: The time of the Award had expired before the railroads would agree that what we contended was right?

Mr. Robertson: Yes.

Mr. Carter: And even when it had expired, did not all the railroads put it in effect as soon as they found out what it meant?

Mr. Robertson: Yes.

Mr. Carter: They did not contend because the Award had expired, that they would not put it in effect, did they?

Mr. Robertson: No, I don't think they did. I never heard of any.

Mr. Carter: And the probabilities are, in the East, if they want to change that Award at any time, they will do it in the usual manner of changing any agreement?

Mr. Robertson: That is the way I understand it.

Mr. Carter: No law upon the subject. It is just simply a custom and practice? Well, proceed.

Mr. Robertson: The detail of page 22 is found on page 19 of Railroads' Exhibit No. 1, and is practically the same as the corrections shown here. Changes of percentage from 99.979 to 100. That is shown on page 9 of Exhibit 87.

The next correction is found on page 25 of Railroads' Exhibit No. 1, and is referred to on page 10 of Exhibit 87, basis of a day's work, pusher and helper service. As shown in the Railroads' Exhibit No. 1, the percentage is 99.979. That has been changed to 100 per cent. The through freight rates shown in Railroads' Exhibit No. 1, are credited with having 97.656.

Mr. Carter: Now, Mr. Robertson, did it appear to you that there was an evident purpose of showing the Award was not in effect, where it was not included in the schedule, or where there was no service, where you have made these corrections?

Mr. Robertson: Yes, sir.

Mr. Carter: If the contention of the railroads in presenting this information were carried out, if, in two days after the Award expired, one of the Western Railroads introduced in service one of the larger engines, notwithstanding the fact that this Arbitration perhaps has standardized all rates, according to the theory of the railroads, they would establish an entire new rate for that engine, wouldn't they?

Mr. Robertson: That would be my understanding, yes, sir.

Mr. Carter: If this Arbitration Board does standardize wages, do you think there is a moral obligation upon the railroads, even after the expiration of the Award, to maintain that standard, unless, by the usual methods, changes are negotiated?

Mr. Robertson: Yes, sir.

Mr. Carter: It is a written obligation in the West.

Mr. Robertson: Yes, sir.

Mr. Carter: Now, let us—I think my associates are mistaken. I understand that it is the contention of the railroads

that after the award expires, if they don't have a locomotive in their service carrying one of these high rates, that because it is not included in their schedule, or it was not in the service, why, the award would not apply. I am not talking about what we are contending for, but with the understanding from the questions asked you of what the railroads are contending for.

Mr. Robertson: That is what the railroads are contending for.

Mr. Carter: And your purpose is to show by these exhibits what the rates are, if the award is introduced?

Mr. Robertson: Yes.

Mr. Carter: And they introduce these engines afterwards?

Mr. Robertson: Yes, sir.

Mr. Carter: Go ahead.

Mr. Robertson: Percentage of railroads shown on page 25, as paying through freight rates in pusher and helper service is 97.656 per cent. This percentage, as corrected and shown on page 11 of Exhibit 87, reads, 100 per cent.

Mr. Carter: What you are really trying to show is that there is a standardization, and the railroads have tried to show that there was not a standardization, and you are not going to stand for it. Is that right?

Mr. Robertson: Shown here in the Exhibit, yes, sir.

Mr. Sheean: Mr. Robertson, on that same page, you have .021 of 1 per cent, brought about by the Indianapolis Union, and the other two roads there are roads that have no pushers?

Mr. Robertson: Which?

Mr. Sheean: The other two roads. I think you show the Monon.

Mr. Robertson. Buffalo & Susquehanna and Pittsburg & Lake Erie.

Mr. Sheean: And their list of engines shows they have no helper service or pusher service. Is that the way that is brought about?

Mr. Robertson: I do not know. I could not say. I do not know whether they have pusher service or not. I have this information, though, from the Chairman of the Buffalo & Susquehanna, that in pusher service they pay through freight rates, and I have the same information from the Chicago, Indianapolis & Louisville men, and the schedule of the Pittsburgh

& Lake Erie shows that they have paid through freight rates in pusher service.

Mr. Carter. Are you through?

Mr. Sheean: Yes.

Mr. Carter: Mr. Robertson, will you turn to page 25 of Railroads' Exhibit No. 1, and read what they say is the proposed Article No. 2?

Mr. Robertson: "Pusher, Helper, Mine Runs, Work, Wreck, Belt Line, Transfer, and All Other Unclassified Service—

Engineers and Firemen on locomotives in pusher and helper service, mine runs, work, wreck, belt line, and transfer service, and all other unclassified service, will be paid through freight rate according to the class of engine."

Mr. Carter: What is the rule in the Eastern Arbitration, on firemen?

Mr. Robertson: Firemen on locomotives and so forth, in belt line and transfer service, and all other unclassified service, according to class of engine.

Mr. Carter: Do you see any difference between our proposition and the Eastern Award?

Mr. Robertson: No, sir, I don't see any difference.

Mr. Carter: And yet this page here would indicate that they are not working under that rule at all, would it not?

Mr. Robertson: Well, they show that through freight rates apply to 97.56 per cent of the mileage in the East.

Mr. Carter: But they don't quote the rule?

Mr. Robertson: No.

Mr. Carter: All right. Go ahead.

Mr. Robertson: The next correction is found on page 47 of Railroads' Exhibit No. 1, and is referred to on page 12 of Exhibit 87.

Mr. Carter: What?

Mr. Robertson: Page 47 of Railroads' Exhibit No. 1; page 12 of Exhibit 87. "Overtime in Road Service. How Computed." Through passenger service, minute basis. 89.064 per cent is shown in Railroads' Exhibit No. 1. As corrected and shown on page 12 of Exhibit 87, it should read 89.928 per cent. There has been no correction made in the next line there. The thirty minute basis is correct.

Mr. Carter: Skip those, Mr. Robertson.

Mr. Robertson: Local passenger service, 88.552, which is shown on page 13 of Exhibit 87, should read 89.928.

Mr. Carter: I would not read any of them over. Skip along, because we want to try to get through. I promised to get through.

Mr. Robertson: The next correction—

Mr. Carter: I wouldn't call the corrections. Just say that all of these rates will be shown, by any one desiring to read them. Now, turn to electric service.

Mr. Robertson: Electric service is page 174.

Mr. Carter: Now, briefly show the errors in electric service. What page?

Mr. Robertson: 174.

Mr. Carter: Of Railroads' Exhibit No. 1?

Mr. Robertson: Railroads' Exhibit No. 1, yes, sir.

Mr. Carter: Now, just briefly, without reading, tell the troubles.

Mr. Robertson: It is referred to on page 16 of Exhibit 87.

Mr. Carter: What are the principal matters you want to call attention to?

Mr. Robertson: There are no rules and rates shown to be in effect on the Baltimore & Ohio; Baltimore & Ohio Southwestern; Buffalo, Rochester & Pittsburgh, and Pittsburgh & Lake Erie. The rules and rates as found to be in effect and as corrected, will appear on pages 16, 17, 18, 19, 20, 21, 22 and 23 of Exhibit 87.

Mr. Carter: You there show twenty-eight or twenty-nine roads that have a standard rule?

Mr. Robertson: Show twenty-eight roads, in addition to the others that are shown, as corrected, as having the Eastern Rule in effect, yes, sir.

Mr. Sheean: May I ask just on that? The Eastern Award provided for a certain rate if helpers were used, did it not? Do you know whether or not on these roads that have engines that do have helpers on them—on the electric locomotives?

Mr. Robertson: I do not know, Mr. Sheean, whether they have the service or not. I could not say.

Mr. Sheean: Well, the Baltimore & Ohio has there, because

it is shown as steam engineers running locomotives and motors at a rate for them.

Mr. Robertson: Yes, sir.

Mr. Sheean: And the Eastern Award provided that where a second man was employed, he should be known as a helper and should take a second rate?

Mr. Robertson: Yes, sir.

Mr. Sheean: My understanding was that they showed here on this page the rates of engineers, where engineers were receiving rates, and also the rates of the helpers, where they had helpers.

Mr. Robertson: Engineers and firemen?

Mr. Sheean: Yes; the second column shows the helper, wherever they had helpers. You understand that, of course, on some roads they may have electric service, without having a second man.

Mr. Robertson: Multiple unit service, yes, sir.

Mr. Sheean: And I wondered whether you meant—your examination showed that any of the roads on this page 174, actually were paying rates to helpers—did have helpers that were not shown here. I don't know about it, Mr. Robertson, except to get an understanding of the difference, if any, between the two compilers.

Mr. Robertson: My compilation was for the purpose of showing the rates and rules that were in effect, without regard to whether a railroad had that kind of service or not.

Mr. Sheean: Well, of course, all parties to the Eastern Arbitration had the Award. This page 174 only attempts to show the roads that were affected by it, does it not?

Mr. Robertson: I do not know what it was intended to show. I know that during the course of the proceedings you asked Mr. Bremerman a question. You said: "Turning to page 5, Mr. Bremerman, and the first item shown in the upper lefthand corner of the page, regular passenger service, ten hours or less, 100 miles or less, 46.336 per cent of the total mileage, the total of that, as I understand, is shown in the first column on page 6?"

"Mr. Bremerman: That is correct.

"Mr. Sheean: From which you have gotten the roads in the Western territory which have that schedule provision?

“Mr. Bremerman: Yes, sir.”

I was guided largely by that statement, Mr. Sheean, that you were trying to show the roads that had the schedule provision, regardless of whether they had the service or not, and I took these rules from the schedules of the roads.

Mr. Sheean: Yes; I understand that, but this particular electric service, page 174; there is shown on this the rates paid to engineers, and also certain rates to firemen in electric service. The Award also has been filed with the Board. I was wondering whether you had any information of there being second men on any of the roads, other than the ones shown on this page 174.

Mr. Robertson: I made no investigation along that line, whatever.

Mr. Carter: Mr. Robertson, does this discussion lead you to believe that when we apply our Western Award, that the exact language of the Award should be written in every schedule?

Mr. Robertson: Yes, sir; I would draw that conclusion from the discussion.

Mr. Carter: And if a railroad hasn't any Mallet type engines, why, that part of the Award will not apply, but if they get them, it will apply.

Mr. Robertson: That is my understanding, yes, sir.

Mr. Carter: And your main purpose here, Mr. Robertson, is to show that there has been a standardization among railroads, in spite of the fact that Exhibit No. 1 would indicate that there is no standardization rule in the East.

Mr. Robertson: Yes, sir.

Mr. Carter: Go ahead.

Mr. Robertson: I will call attention to the fact, however, that there is no rate shown here for the New York Central helpers. All that is indicated in Railroads' Exhibit No. 1, is, same as engineers. There is no rate in the Engineers' provision, for firemen, and they have for some time paid firemen, or rather, helpers in electric service, on the New York Central, a certain rate, and are today paying them \$2.50 in passenger service; \$2.85 in freight service, and \$2.50 in switching service.

Mr. Carter: And what does the Exhibit No. 1 of the Railroads show?

Mr. Robertson: Does not show anything.

Mr. Carter: Down here—what is that \$2.10 man?

Mr. Robertson: That \$2.10 is the rate supposed to be in effect, as I take it, on the New Haven Road.

Mr. Carter: Is that rate in effect on the New Haven Road?

Mr. Robertson: No, sir.

Mr. Carter: What is the rate in effect on the New Haven Road?

Mr. Robertson: Passenger, \$2.50; freight service, \$2.80; switch service, \$2.80.

Mr. Carter: If the Board should reach the conclusion by Railroads' Exhibit No. 1 that the rate was \$2.10, it would be unfortunate for us?

Mr. Robertson: I would think so, yes, sir. That rate was negotiated in November, 1906.

Mr. Carter: This is an old 1906 rate?

Mr. Robertson: Yes, sir.

Mr. Carter: Do you know when the rate was changed?

Mr. Robertson: No, sir; I do not. It was changed once, I believe, since the \$2.10 rate was established. Some time in 1910 there was a general wage movement in the Eastern country. I do not know whether this change was at that time or not. The passenger rate for firemen on most all Eastern roads was changed at that time, but the Eastern awarded rate has been in effect ever since the Award was made public in May, 1913.

Mr. Carter: Have you anything else that you think should be brought out in regard to electric service?

Mr. Robertson: No, sir.

Mr. Carter: Turn to the next. I am trying to get through.

Mr. Robertson: Page 189 of Railroads' Exhibit No. 1, which is referred to on pages 23, 24 and 25 of Exhibit No. 87. I have reproduced what is shown in Railroads' Exhibit No. 1, as being the rates in effect for firemen in switching service.

The Chairman: What page?

Mr. Robertson: Page 23 of the Exhibit, bottom of the page. I have reproduced the rates shown to be in effect in switching service.

Mr. Carter: As reported?

Mr. Robertson: As reported in Railroads' Exhibit No. 1. Following that, I have shown the summary and percentage of the roads, as corrected, and have shown the rates that are in effect as disclosed by my investigation. Under the heading,

or, rather, the rule which reads "Engines Less than 140,000 Pounds on Drivers, \$2.50; Engines 140,000 Pounds on Drivers, \$2.60; Mallet Engines \$4.00."

There are 70 per cent of the railroads paying under that rule.

Mr. Carter: What is the highest percentage they show paying under any rule?

Mr. Robertson: The highest percentage shown paying under any rule, by railroads is 47.452, and I understand it is practically the same rule. The other rates shown on page 25, as being the rates in effect in switching service, are rates that are higher than those shown on page 24, under the caption "Summary and Percentage as Corrected."

Mr. Carter: You mean that 70 per cent are paying under the award, and these roads arranged on page 25 are paying a higher rate than the award, and that is why they are not there.

Mr. Robertson. Yes, sir; they are all higher rates than those handed down in the award.

Mr. Carter: You think perhaps the Arbitration Board had that possibility in view, when they made as a part of the award, Article 9, which guaranteed firemen no decrease in pay, and increase in pay and the retention of higher rates, where they had them?

Mr. Robertson: I understand that was the intention, yes.

Mr. Carter: And their saving clause was part of the award of the arbitrators themselves, was it not?

Mr. Robertson: Yes, sir.

Mr. Carter: Go ahead.

Mr. Robertson: That is all on pages 24 and 25 of Exhibit 87. On the same page, 189, of Railroads' Exhibit No. 1, are found the rates in transfer and belt line service. That is referred to on pages 26 and 27 of Exhibit 87. I have reproduced what the railroads show here as being in effect in transfer and belt line service, and following that, have shown under the caption "Summary and Percentage as Corrected," the rates as I have found them to be in effect. I have found that 91 per cent of the railroads pay through freight rates in transfer service. The highest percentage reported by the railroads as paying one rate is 16.138. Reported by the railroads in Railroads' Exhibit No. 1 as having no rule covering transfer and belt line service, there

is a percentage of 42.919 shown. That is referred to and corrected on page 27 of Exhibit 87, and shows that there is but a percentage of four that have no provision for transfer service.

Mr. Carter: Now, you don't mean to say that it is possible they might not have a transfer engine, but if they have a transfer engine, that rate applies.

Mr. Robertson: Yes, sir.

Mr. Sheean: May I ask right there on that 189? I will ask as to whether the dollars and cents showing here on page 189 are correct. You set it up by reference to through freight rates. The exhibit here showed it in dollars and cents on these different roads. Are the figures shown on this 189 as to the dollars and cents on these different roads, right?

Mr. Robertson: I could not tell that, Mr. Sheean. It was a very difficult matter for me to check your switching and your transfer service. I think you have a detail for this transfer service on page 197. You have a detail there for the rates in transfer service, and many of the railroads where you indicate no rate to be in effect, there are rates in effect in transfer service on those roads, and I have used the expression—I have ignored your rates, in preparing the corrections shown in Exhibit 87, for the fact that I could not check the thing through from the Baltimore & Ohio to the Zanesville & Western, because of the fact you don't show rates in effect, on certain railroads where there are rates. In order to avoid confusing the matter, I eliminated that entirely, and I took as a heading roads paying through freight rates in transfer service.

Mr. Sheean: Even if there be a schedule paying through freight rates, that might not be the rates in dollars and cents on different roads.

Mr. Robertson: It would differ, according to whatever the through freight rate was on those roads, and according to the size of the engine. They would be standard in the Eastern country, with the exception of those roads that have a higher rate than the rate handed down in the award.

Mr. Carter: Right there, the rules show under transfer and belt service, and you are not denying it, are you, that they are paying these rates on these engines?

Mr. Robertson: Yes, sir.

Mr. Carter: Would not these rates vary under the standard rule of the East, according to the size of the locomotive?

Mr. Robertson: Yes, sir.

Mr. Carter: And you are trying to show what the rule is, and it is simply that through freight rates will be paid in transfer service, according to the size of engine?

Mr. Robertson: Yes, sir. I will add also that it complicated the matter for me in trying to conduct the investigation on the transfer service, for the reason that you show no rates in effect, or rather, paid. As I take page 197 to be, you show no rates to be paid on the New York Central & Hudson River Railroad, in transfer service. The heading here shows rates in effect August 1, 1914. I have conducted correspondence with the Chairman of the Firemen's Committee, at every terminal on the New York Central Railroad, since I have been handling this matter. In fact, I might add that I have conducted correspondence with all the Chairmen of all the Committees on the Eastern Railroads, in order to get information as to the application of their schedules, and found that the transfer rate is paid on 54 runs on the New York Central Railroad, and I have some time slips from some men who drew transfer pay on August 1, 1914.

Mr. Sheean: But you do not find any special provision, separating transfer service from other service in their schedules?

Mr. Robertson: Yes, sir, transfer service is paid through freight rates on the New York Central Railroad. There is a special provision for it.

Mr. Burgess: Is that not true of the Pennsylvania Lines, East, Mr. Robertson?

Mr. Robertson: Pennsylvania Lines pay in accordance with the Award. At least, the Award was made effective on that railroad.

Mr. Sheean: Is that the Engineers' or Firemen's schedule?

Mr. Robertson: They pay in accordance with the Award.

Mr. Sheean: I thought you said there was a schedule provision on the New York Central?

Mr. Robertson: Yes, sir, there is. I will read it:

"Firemen on locomotives in pusher and helper service, mine runs, work, wreck, belt line, and transfer service, and all other unclassified service, will be paid through freight rates according to the class of engine."

Mr. Sheean: Well, that is the Award.

Mr. Robertson: That is the New York Central schedule.

Mr. Carter: It is the Award, too.

Mr. Sheean: They incorporate the Award in the schedule?

Mr. Robertson: Yes.

Mr. Sheean: But what I was not clear on, was whether the New York Central specially classified the certain runs as transfer runs?

Mr. Robertson: Yes, they did that. That is, wherever transfer service was determined to be in effect, they paid the rate, and I understand—I have a letter from the General Chairman here, which shows they paid the rate on fifty-four runs on that railroad.

Mr. Carter: Pass on.

Mr. Robertson: Page 297 of Railroads' Exhibit No. 1, hostler service. That is referred to on pages 27, 28 and 29, of Exhibit 87. I have reproduced here the rates shown to be in effect in hostler service, according to Railroads' Exhibit No. 1, and have followed that under the heading, "Summary and Percentage as Corrected," showing the rates as I have found them to be in effect.

Mr. Carter: What percentage of the hostlers are getting the standard rate?

Mr. Robertson: 72 per cent of the Eastern Roads pay the standard rate.

Mr. Carter: What is the highest percentage shown, keeping in mind the rate paid, Railroads' Exhibit No. 1?

Mr. Robertson: 48.353.

Mr. Carter: Would Railroads' Exhibit No. 1 indicate that they did not have a standardization of hostlers' rates?

Mr. Robertson: To that extent, yes.

Mr. Carter: And you have determined that 72 per cent of the roads are paying the hostlers' rate, as provided in the Arbitration Award?

Mr. Robertson: Yes.

Mr. Carter: Why are they not paying the Hostlers' rate on the New York Central Railroad—the awarded rate? I mean the rate by the Award?

Mr. Robertson: They pay a higher rate for road hostlers there than was included in the Eastern Award. Therefore, they

are shown separately in this compilation. The Erie Railroad is shown in the same column as the New York Central, for the reason that they pay a higher rate in the Chicago Terminal, for hostlers, than they do at other terminals. At other terminals, they pay the Eastern awarded rate. The Railroads' Exhibit shows no provisions in schedules on one per cent of railroads. That is wrong. The Railroads' Exhibit No. 1 showed that no provisions in schedules is 20.499 per cent. My investigation shows that there is only one per cent of the roads that have no provision in schedules, covering hostlers.

Mr. Carter: And why are those railroads not paying the hostlers' rate?

Mr. Robertson: Neither of them were parties to the Eastern Arbitration.

Mr. Carter: Now, Mr. Robertson, some time in the proceeding an exhibit, or statement, or something was introduced by the railroads, which would indicate that there was no standardization of hostlers' pay in the East. Is there a standardization of hostlers' rates in the East now?

Mr. Robertson: Yes, sir, practically so.

Mr. Carter: How is that?

Mr. Robertson: Practically a standardization, yes, sir.

Mr. Carter: Was there a great delay in reaching the standardization?

Mr. Robertson: In getting it in effect, yes, sir.

Mr. Carter: Why was there a great delay in standardizing the rates of pay of hostlers on the Eastern Railroads?

Mr. Robertson: Many of the railroads contended that they should not pay the rates, in certain service.

Mr. Carter: Because some hostlers were called—

Mr. Robertson: Some hostlers were called engine repairers; others were called engine watchmen. Various names were given men who the committees contended—the men contended were hostlers.

Mr. Carter: And because the name on the payroll was not "hostler," regardless of the hostling service performed, they refused to pay the rate in some instances?

Mr. Robertson: Yes, sir.

Mr. Carter: What was the attitude of the Erie Railroad,

on which you were General Chairman of the Firemen and Hostlers at that time?

Mr. Robertson: They applied the award in its entirety, with the exception of applying it to the split service. That is, where a hostler was engaged for a part of the day as a hostler, and a part of the day in shop service, why, they did not apply the award to the extent of paying him the highest rate for the entire day, but applied the award in every other respect. The reason why they did not apply the award in that particular respect was, because of the position of the Managers' Committee in the East, that split service was not paid for at the highest rate, so far as hostlers were concerned.

Mr. Carter: As soon as the matter was definitely settled by the arbitration of the Arbitration, what did the Erie Railroad do?

Mr. Robertson: General Manager A. J. Stone, of the Erie Railroad, appointed a representative to go over the system, with the General Chairman, visiting every point on the system where hostlers were employed, or such men as had been known as engine watchmen, or engine repairers, and take up each individual case and try and agree as to just what cases the award should be applied to.

Mr. Carter: Did they find, Mr. Robertson, at some points they had, say four, five or six handy men, doing all kinds of pit work and hostling engines, indiscriminately?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, what was brought out of that matter? What was the settlement? Did they assign certain men to do the hostling work and pay them hostling pay, and these other men did nothing but handy work?

Mr. Robertson: That is my understanding, yes, sir.

Mr. Carter: There was no contention on the part of the firemen and hostlers in the East, at any time, that that should not be done, was there?

Mr. Robertson: No, sir.

Mr. Carter: That was brought out repeatedly during negotiations.

Mr. Robertson: Yes.

Mr. Carter: All that was insisted on was that when a man

was required to do hostling work, he should receive a standard rate of hostler's pay?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, what is your understanding of the present situation, after all of these arbitrations, and interpretations and referees' decisions?

Mr. Robertson: With what respect, Mr. Carter?

Mr. Carter: Is the hostler question practically settled, as far as you know?

Mr. Robertson: In the Eastern country, yes, sir.

Mr. Carter: Now, if there was any trouble in applying that part of the award, what was the reason?

Mr. Robertson: The railroads refused to pay it.

Mr. Carter: That is a good reason, is it not?

Mr. Robertson: Considered so by the railroads.

Mr. Carter: Now, have you anything further to say on this exhibit?

Mr. Robertson: No, sir.

Mr. Carter: Have I handed you a letter, recently received, to show that the Western Railroads are getting ready to beat us on the hostler question?

Mr. Robertson: You handed me a letter with reference to the hostler question, yes, sir.

Mr. Carter: Please read the letter.

Mr. Robertson: This is addressed from Ennis, Texas, January 31, 1915, to Mr. W. S. Carter, President B. of L. F. & E., Peoria, Illinois:

"Dear Sir and Brother:

"It may be too late, but I am writing this to advise you that our company is making some changes in the way hostlers are worked, and I believe it is for the purpose of trying to offset any increase, if any, that we might get through the Western Movement. The past practice has been that firemen and engineers were placed on all jobs of hostling. In the past few months they have pulled off several hostlers, claiming that there was not enough business to justify them to keep a hostler, although there has been a hostler maintained at these points for the past fifteen or twenty years. And another thing is they have stopped permitting the hostlers to go on the main line, for instance, taking passenger engines to stations, which has been

the practice for many years. And another thing they are requiring the hostlers to do a great deal of switching that they have never been required to do, until now, and for this reason, I think maybe you can get the duties of hostlers defined, which would be a great help to us. Further, they are using inexperienced men on jobs of hostling, when they require all engineers and firemen to pass the same examination for hostler as they do to run an engine."

Mr. Carter: Did you know that while the railroads presented a certain exhibit pertaining to hostlers, that I stated there would be no disposition on the part of this organization to change the practice, so long as the rates awarded would be paid?

Mr. Robertson: I do not know. I didn't hear that.

Mr. Park: Mr. Carter, do we understand by that, that if a hostler is now shoveling cinders, that an engineer will shovel cinders?

Mr. Carter: I stated that there were no duties of a hostler defined in our proposition. Now, all we ask is that he be paid the hostlers' rate, if he is required to hostle. We will protest, however, Mr. Park, against changing the practice, in order to punish the man for being a beneficiary of this arbitration.

Mr. Park: Well, I just wanted to be clear, as to whether an engineer, employed as a hostler, in a position that was now being filled by a hostler from some other rank, and that man being employed at the time in wheeling cinders, or doing work of that character, if the engineer then would be glad to do that work.

Mr. Carter: Mr. Park, I must confess that I believe that when you pay that humble man the standard wages that we are going to get through this Arbitration, you will insist on having a capable man to do the work, and relieve him of his humble work.

Mr. Park: There are lots of small places on branch lines, where one man can do a lot of work of that character, but I cannot imagine that an engineer would be willing to do the work.

Mr. Carter: I believe, from our experience in the West, that we are going to have the time of our lives getting this award applied to hostlers—in the East, I meant.

Mr. Park: It is because it is a very complicated and an involved thing.

Mr. Carter: I think if there is anything in the world that will break the hearts of some railroad officials, it is paying decent wages to hostlers and putting decent men on the jobs, and they are going to fight as long as they have got any fight left in them.

Mr. Park: I think the men occupying those positions are decent. I don't know that they are not.

Mr. Sheean: Mr. Robertson, all of these difficulties that you spoke of in the East, with reference to hostlers, arose without there being any requirement that hostlers should be put on where there were a certain number of engines, and the disputes there simply arose over the fixing of the rate of pay for a hostler?

Mr. Robertson: The disputes arose over the manner of paying the men who were hostling engines. The rate is provided in the Award.

Mr. Sheean: That is, in the East, it was awarded that hostlers be paid ten hours or less, \$2.40, and that if hostlers were employed in handling engines between passenger stations and roundhouse or yards, or on the main track, they will be paid per day of ten hours or less, \$3.25, and if men are employed to assist hostlers in handling engines between passenger stations and roundhouse or yards, or on main tracks, they will be paid per day of ten hours or less, \$2.50. That was all of the Award in the East pertaining to hostlers, was it not?

Mr. Robertson: Yes, sir.

Mr. Sheean: There was no such award, or no award on any such basis as here requested, that merely by virtue of a certain number of engines going in or out of a roundhouse, that hostlers should be employed, was there?

Mr. Robertson: The Award in the East does not provide for appointing hostlers at a certain point.

Mr. Sheean: And left entirely to the judgment and discretion of the companies as to where hostlers should be employed, simply saying that where hostlers are employed, their rate will be thus and so?

Mr. Robertson: No, it does not say that with respect to hostlers in its entirety. It says hostlers for a day of ten hours or less, \$2.40.

Mr. Sheean: But there is no restriction in the East, with

reference to where hostlers shall be employed, except the good sense of the management of the railroads?

Mr. Robertson: It says that hostlers, per day of ten hours or less, will be paid \$2.40, and hostlers have been employed on practically every railroad in the East. The only dispute there was, or the only time that the point you raise was developed, was in applying the rate to road hostlers, accordingly. That is the only place the "if" appears, you know.

Mr. Sheean: Yes, but having obtained an Award that hostlers per day of ten hours or less should receive this rate of pay, it was the contention of the organizations that any man who, at any time of the day moved an engine under steam, should receive the hostler's rate of pay. That was the position of the organizations?

Mr. Robertson: I could not say whether that was exactly it or not.

Mr. Sheean: Was that the position on the Erie, where you were Chairman, that if a man having a ten hour day, moved an engine thirty minutes each day, he should be compensated for the entire ten hour day on the hostlers' basis?

Mr. Robertson: If he didn't do anything else, yes, sir.

Mr. Sheean: Whether he did or didn't do anything else, did you insist that he should be paid the hostlers' rate if, at any time during the day, he regularly moved an engine?

Mr. Robertson: I will say yes, and qualify it in this way: In applying the Award, we also agreed with the management that where three or four, or five or six men were engaged at a terminal, moving engines a part of the day, and a part of the day doing something else, that the company re-arrange the matter and say three of those are to be paid the hostler rate for the entire day and the other three men are to be paid the shop rate. That was our position all the way through.

Mr. Sheean: That you looked upon as a concession to the company, having obtained this Award?

Mr. Robertson: No, sir, that was the position, as far as I can recall, all the way through the matter.

Mr. Sheean: But where, in the work there were shop men and others, who, during the day, as a part of their work might move an engine, it was your insistence that in complying with

this Award, every man who, at any time during the day moved an engine, must take the hostlers' rate of pay.

Mr. Robertson: With the understanding that in putting it in effect, that where there were two or more men, that the arrangement could be made, whereby one man would be paid the rate and the other man paid the rate for whatever work he did.

Mr. Sheean: And having cut off these other men, or having re-arranged the work in any way they could, which was feasible, there still remained under this Award, as the organizations interpreted it, the obligation, when they had cut down as low as they could, to pay to the man, who, at any time during the day moved an engine, the hostlers' rate.

Mr. Robertson: Yes, sir.

Mr. Sheean: And whose only duty was to move the engine. If there was no work to keep him busy, he was under no obligation to do any other work?

Mr. Robertson: That question never came into it. I never saw a hostler at an outlying terminal, which is usually the case, where there is only one, that did not have plenty to do, and usually a hostler does other things besides, moving just one engine, and, of course, you might draw an extreme case, Mr. Sheean, and I would have to say yes to your question. If the man didn't do anything else but handle the engine, he would be paid the rate. The Arbitrators, on passing on the split service question, as affecting firemen, agreed that where a man performed two or more classes of service, or worked on two or more engines, that in fixing the rate, the service taking the highest rate would be paid, and in passing on the hostler question, they said the principles contained in the matters settled for the firemen should apply alike to hostlers. That settled the hostler service, so far as the split service was concerned, and on that basis, say, wherever a man handled an engine one or more times during the day, and the rate for handling the engine was the highest rate, he took that rate.

Mr. Sheean: And all of this that you have described here as to the complications or difficulties about the hostlers, arose independently of any award or any requirement that the company should instal hostlers at any designated point, based on the number of engines in and out.

Mr. Robertson: Based on the number of engines in and out?

Mr. Sheean: Yes.

Mr. Robertson: Well, our complication arose because of the fact that we had hostlers and the company would not pay the rate. We had nothing in our Award that said where a certain number of engines were handled that hostlers should be employed. We did not have that. But the same principle is in there in the practice that a man handling an engine was paid the hostler rate.

Mr. Sheean: There was nothing in that that the engineer and fireman should be relieved at any particular designated points, or nothing in the Award that prevented the company from requiring the service of engineers and firemen to begin at the roundhouse or elsewhere, as they saw fit.

Mr. Robertson: The service of engineers and firemen begins under the Eastern Award, when they are required to report for duty.

Mr. Sheean: Now in the Award, Mr. Robertson, the differences in the percentages are very largely brought about, are they not, by your including all who were parties to the Eastern Award irrespective of whether they have incorporated in their schedules or whether they have any service to which the Award applies, or does not apply.

Mr. Robertson: No, sir.

Mr. Sheean: Most of the differences in the percentages are brought about by the fact that Exhibit No. 1 was prepared showing where the schedule provisions obtain, and as in the case of the Indianapolis Union, where they reported that they had no service.

Mr. Robertson: No. I would say that most of the changes in the percentages here are due to the fact that the schedules do show the rules, and you have not reported them. About the only railroads that we have applied the award to in here are the Indianapolis Union, from which I was unable to get a schedule; the Hocking Valley, although I have a message from them to the effect that the Award is in effect; the Cincinnati, Lebanon & Northern; the Long Island, although I have a message from them that the Award was in effect, and they sent me the old 1910 schedule; Pennsylvania Lines East; Pennsylvania Lines West;

Wabash-Pittsburgh Terminal and West Side Belt; Wheeling and Lake Erie; Zanesville & Western. Those are the only roads that I have not compiled this information exactly as it appears in the schedule. I will say this, however, Mr. Sheean, that this correspondence was conducted, since I started to make these changes, with the General Chairmen, asking for interpretations of how their rules applied, or rather asking them what rate applied in certain service, and had them refer me to their rule.

Mr. Sheean: Well, I see this twenty one-thousandths of one per cent seems to run through a good many of the pages here as being the difference between the compilation shown in this exhibit and your compilation. But, going back to the larger one at page 5 of the exhibit, or page 2 of your exhibit. Now, on page 5 of the companies' exhibit, or rather the detail of that, as shown on page 8; columns 1 and 2 on page 8, the compiler of Exhibit No. 1 puts the B. & O. and the B. & O. Southwestern over in a separate clause from the 85 per cent, carrying it down by a footnote, that showed that they pay on a 30 minute basis.

Mr. Robertson: Yes, sir.

Mr. Sheean: You put them in the same class, and bring your percentage over that 9 per cent, but carry it down with a footnote, by which you show overtime, computed on each part of a run separately.

Mr. Robertson: That is the only difference in the two.

Mr. Sheean: And that is the only difference between you. You put them together and make it 97 per cent, and he separates it, showing 86 in one and 9 and a fraction in the 2nd column, and there is a slight difference between them, isn't there?

Mr. Robertson: On page 8, you mean?

Mr. Sheean: On page 8.

Mr. Robertson: Well, on page 8 you show the Baltimore & Ohio and the Baltimore & Ohio Southwestern and the Bessemer & Lake Erie as paying the overtime on the 20 mile per hour basis for each leg of a round trip run.

Mr. Sheean: Yes. And your footnote with reference to those same roads on page 2 is, "overtime computed on each part of a run separately."

Mr. Robertson: Well, as I understand it, this being through passenger service, there is very little through passenger service

—none that I have in mind, that has turn-around runs, very few of them, and from the fact that a majority of the through passenger service would come under the through passenger rules or pay under the 5 hours, or 20 miles per hour basis, it should appear the same as our column 6, with a footnote that the overtime is on—

Mr. Sheean: Well, that is all I wanted, Mr. Robertson, to develop, whether—the whole difference as to that table is—that seems to be about as big as any of them, a difference of 9 per cent there—now the compiler of this table, at page 8, shows 85.3 per cent uniform, and then carries over these three roads and shows that they differ because of the provision that they pay overtime at the rate of 20 miles per hour separately for each leg of the trip. Then, the analysis on page 2 puts the two together and thereby brings about 96 per cent. But, having brought them together, you carry down by a footnote, “overtime computed on each part of a run separately.”

Mr. Robertson: I had to do that, because they had the same rule for through passenger as they had for turn-around passenger, and in through passenger service it is 100 miles or less, 5 hours or less, on the Baltimore & Ohio. But because the same rule applies to turn-around passenger, I had to attach the foot note to it. Therefore, in through passenger service, it should appear under the 100 miles or less, 5 hours or less.

Mr. Sheean: The compiler of page 8 put them in two columns, and you put them in one column, and carry down the difference by a foot note. Is not that substantially the difference show that there was a standardization?

Mr. Robertson: Except he has them in three columns and I put them in one.

Mr. Sheean: You put them in one, and carry down a foot note to show the difference. I think that is all.

Mr. Carter: Mr. Robertson, was it not your purpose to show that there was a standardization?

Mr. Robertson: As far as it existed, yes, sir.

Mr. Carter: And the Railroads' evident purpose was to show that there was no standardization?

Mr. Robertson: Well, it is spread out more.

Mr. Carter: That is the reason that the exhibits differ. That is all.

Did you examine Exhibit No. 12 of the Railroads?

Mr. Robertson: Yes, sir.

Mr. Carter: What does Exhibit 12 purport to show?

Mr. Robertson: Statement of number of trains run; number that exceeded the 16 hour law; and the number that were tied up because of the federal hours of service law; for the year ending December 31, 1913.

Mr. Carter: Did you also examine and compare with this statement this official document issued by the Interstate Commerce Commission?

Mr. Robertson: Yes, sir.

Mr. Carter: What is the title of this official document issued by the Interstate Commerce Commission?

Mr. Robertson: A Statistical Analysis of Carriers' Monthly Hours of Service Reports, covering all railroads which reported during the year ending June 30, 1914, an aggregate respectively of twenty-five or more instances in which employees were on duty for periods other than those provided by the Federal Hours of Service Act, together with a comparative summary covering the fiscal years ending June 30, 1913 and 1914. November, 1914.

Mr. Carter: Now, Mr. Robertson, these two reports do not cover exactly the same periods, do they?

Mr. Robertson: No, sir.

Mr. Carter: Now, what period is covered by the Interstate Commerce report?

Mr. Robertson: The year ending June 30, 1914.

Mr. Carter: Would that be from June 30, 1913, to June 30, 1914?

Mr. Robertson: Yes, sir.

Mr. Carter: What period do you understand is covered by the Railroads' Exhibit 12?

Mr. Robertson: The year ending December 1, 1913.

Mr. Carter: Have you prepared a statement covering your investigation?

Mr. Robertson: Yes, sir.

Mr. Carter: Mr. Chairman and gentlemen, we desire to introduce this as Exhibit No. 88.

(The document so offered and identified was received in evidence and marked "Employees' Exhibit No. 88, March 17, 1915.")

Mr. Carter: Did you read the testimony of Mr. Jacoby, an employe witness from Moberly, Mo.?

Mr. Robertson: I did.

Mr. Carter: Did you read the testimony of Mr. Rudolph?

Mr. Robertson: I did.

Mr. Carter: An employe of the Wabash Railroad, from Peru, Indiana.

Mr. Robertson: I did.

Mr. Carter: Did the testimony of Mr. Jacoby and Mr. Rudolph indicate that there was a seeming lack of intention of the Wabash Railroad in applying the Hours of Service Act?

Mr. Robertson: That was my understanding of the testimony, yes, sir.

Mr. Carter: What did you prepare here to show the conclusion reached after examining the official report of the Interstate Commerce Commission?

Mr. Robertson: I have taken the report of the Interstate Commerce Commission, and have prepared this insert which follows page 26 of Exhibit 88.

Mr. Carter: You mean this folder in the back?

Mr. Robertson: In the back of Exhibit 88, yes, sir.

Mr. Carter: Now, how did you prepare this? Did you take all Western railroads in this movement?

Mr. Robertson: Yes, sir.

Mr. Carter: In arranging them, did you arrange them alphabetically as you found them in the Interstate Commerce Commission reports?

Mr. Robertson: No, sir.

Mr. Carter: How did you arrange them?

Mr. Robertson: I arranged them chronologically, in the order, by the number of instances, of excess service.

Mr. Carter: What road holds the place of honor?

Mr. Robertson: The Wabash.

Mr. Carter: Then Mr. Jacoby and Mr. Rudolph must have had reasons for their statements, did they not?

Mr. Robertson: It would seem so from this, yes, sir.

Mr. Carter: Now, do the total footings show here on the last page of this insert for all the railroads?

Mr. Robertson: Yes, sir.

Mr. Carter: And by glancing to the top of the column you will see the excuse offered by the railroads.

Mr. Robertson: Yes, sir.

Mr. Carter: Have you made an investigation which leads you to believe that the excuses offered by the railroads as late as 1913 or 1914 are not recognized as proper excuses by the courts of the land.

Mr. Robertson: Some of them, yes, sir.

Mr. Carter: Did you read the testimony of Mr. Cotter?

Mr. Robertson: Yes, sir.

Mr. Carter: Would that indicate that perhaps things were not as bad as Mr. Jacoby had stated?

Mr. Robertson: It would, yes, sir.

Mr. Carter: But in any event they were improving their practice?

Mr. Robertson: Yes, sir.

Mr. Carter: Mr. Robertson, after your investigation, did it appear to you that the railroads started out with the intention first, of defeating the enactment of the Hours of Service Law; second, with refusing to abide by the Hours of Service Law, in many instances?

Mr. Robertson: It would so seem. The constitutionality of the law was questioned.

Mr. Carter: Well, in the beginning did not they oppose the law, and offer reasons against it?

Mr. Robertson: Yes, sir, they were opposed to the enactment of the law.

Mr. Carter: Now will you briefly describe the first table or the first chapter, beginning on page 3?

Mr. Robertson: The first chapter, which is contained in the first 14 pages, is devoted to quotations from testimony of representatives of railroads at Congressional committee hearings, in their opposition to the enactment of the Federal Hours of Service Law.

Mr. Carter: Now, Mr. Robertson, we will furnish the stenographer with a copy of this, and read tolerably fast, and only read such matters as you think should be brought to the attention of the Board, and questions asked upon same.

Mr. Robertson: On page 3 of the exhibit, a statement made by Mr. L. E. Payson, Resident Counsel, Southern Pacific and

Union Pacific Systems, at Hearnings before Committee on Interstate and Foreign Commerce, House of Representatives, (April 27, 1906), on Bills to Limit the Hours of Service of Railroad Employes. Mr. Payson said among other things—

Mr. Carter: Who was Mr. Payson?

Mr. Robertson: Resident Counsel, Southern Pacific and Union Pacific Systems.

Mr. Carter: What did he say?

Mr. Robertson: He said the Southern Pacific and Union Pacific Systems were at that time paying time and a half for overtime, which caused a desire on the part of many of the employes to work overtime, and get extra pay.

Mr. Carter: Now was it a fact that the men were paid time and a half for overtime?

Mr. Robertson: No, sir.

Mr. Carter: He was mistaken, wasn't he.

Mr. Robertson: Yes, sir. In column 2 on the same page, Mr. Payson also calls attention to the fact that the Union Pacific and Southern Pacific, at the time they were opposing this bill, already had a schedule regulation with their employes, regulating the hours of service.

Mr. Carter: And there was a necessity for the law?

Mr. Robertson: Yes.

Mr. Carter: And yet they did not want the law?

Mr. Robertson: Yes, sir.

Mr. Carter: Were they helping the other fellow or were they helping themselves? If they had already had the law and a schedule with the employers, why would they oppose the law?

Mr. Robertson: Well, I couldn't say. They didn't want it evidently.

Mr. Carter: All right, go ahead.

Mr. Robertson: On page 4, first column, Mr. Payson further calls attention to the increase in the size of locomotives, mentioning the fact that the locomotive of today, referring to the time he was appearing before the committee, was a powerful locomotive and hauled 40 cars or more.

Mr. Carter: What would Mr. Payson think if he came across a locomotive in 1915 tied onto a string of eighty loads perhaps or 120 loads?

Mr. Robertson: I couldn't say. They hauled 250 on the

Erie one time. At the bottom of that same quotation, on page 4, in the first column, Mr. Payson calls attention to the fact that the introduction of the heavy locomotives reduces the expense of operation.

Mr. Carter: And also the reduction of grades, curves and so forth.

Mr. Robertson: Yes, sir.

Mr. Carter: Go on.

Mr. Robertson: In the second column of that page, Mr. Payson calls attention that the Hours of Service Law, if enacted, would be no incentive for railroads to change their methods of operation.

Mr. Carter: Read his language. I want to hear what he said they were going to do if the law was enacted.

Mr. Robertson: "Mr. Payson: I don't think such legislation would be any additional incentive to a railroad company to make additional regulations with reference to the management of the railroad than are in force today, because certainly a penalty of a hundred dollars visited on a corporation, looking at it simply from that side, would not amount to very much in dollars and cents; but the railroad people themselves, keeping in mind what public opinion is, and the dealings between the railroad company and its men, do the best that can be done under the circumstances, as they are dealing with the situation, and I do not think a penal clause would add to it as to the railroad companies."

Mr. Carter: Do you understand that to mean that it would be cheaper to put on the additional tonnage, and pay the fine?

Mr. Robertson: That would be my understanding of it, yes, sir.

Mr. Carter: Go on.

Mr. Robertson: On page 5, from a communication from Mr. H. T. Newcomb, counsel for Delaware & Hudson Company, which document was filed at hearing before Committee on Interstate and Foreign Commerce, House of Representatives (May 11, 1906), on Bill to Limit the Hours of Service of Railroad Employees. Mr. Newcomb said:

"For example, in another part of the system than that on which traffic is most dense, which has been discussed above, this company has a run from Albany to Whitehall, a distance of 80

miles, which is commonly doubled within the day. While under favorable conditions this can be done in 16 hours, if the proposed law were adopted, this company, for its own protection, would be obliged to make it a single run. For the 160 miles, at present, an engineer receives \$6.56. If he were only permitted to run 80 miles he would be paid for 100 miles, but would only receive \$4.10, out of which he would have to expend at least 75 cents for the extra cost of board and lodging during his lay-off away from home. Thus, while the company would be forced to pay \$8.20 for what it now obtains for \$6.56, an increase of 25 per cent, the individual employe would really be considerably damaged."

Mr. Carter: Was the representative of the Delaware & Hudson talking about our request for "held away from home terminal" when he says it costs 75 cents to take your hour's rest at the terminal?

Mr. Robertson: I don't think so. He was opposing the Hours of Service Law.

Mr. Carter: He was opposing the enactment of the Hours of Service Law, because unless he doubled back again right away he would have to be tied up under the law and take his rest under the law, and while he was taking his rest it would cost the engineer or the fireman, whoever he was, 75 cents to take rest under the law.

Mr. Robertson: Yes, sir.

Mr. Carter: And that was one of the reasons why the law should not be enacted?

Mr. Robertson: Yes, sir.

Mr. Carter: Now when we are here asking for certain compensation for practically double the rest required by the law, the representatives of the railroads do not talk about this, do they?

Mr. Robertson: Generally not, no, sir.

Mr. Carter: Well, go ahead.

Mr. Robertson: On page 6, from statement made by Mr. W. W. Baldwin, Assistant to President, C. B. & Q. Railroad, at Hearing before Committee on Interstate and Foreign Commerce, House of Representatives (May 11, 1906), on Bills to Limit the Hours of Service of Railroad Employees. Mr. Baldwin says:

"Extra trains are not run unless there is business for them to do, and Judge Norris concedes that the trains are abundant

in number for the business. As these extra trains only start, as he says, when they have a full load, they are less liable to delays, they are less liable to have to stop, as the local trains do, to take up a load, and hence the risk of keeping men on the road in continuous service for an undue length of time is less than on the local trains."

Mr. Carter: Mr. Robertson, who is Judge Norris?

Mr. Robertson: I couldn't say definitely who he was. He was one of the men appearing before the Board there.

Mr. Carter: And evidently Mr. Baldwin, representing the C. B. & Q. Railroad, agreed with him?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, at that time they stated that these extra trains only start when they have full loads for them?

Mr. Robertson: Yes, sir.

Mr. Carter: That has not been confessed here, has it, by the representatives of the railroads?

Mr. Robertson: I don't know. I have not attended the hearings.

Mr. Carter: And in addition thereto did he say that in local trains there was continuous service for an undue length of time?

Mr. Robertson: Yes, sir.

Mr. Carter: Would that indicate that there should be a 10 per cent differential paid when the engineer or fireman was working on local service?

Mr. Robertson: It would seem they are doing more work, and in my opinion they should have more pay.

Mr. Carter: All right, go on to the next one.

Mr. Robertson: Judge Norris was a Representative from the State of Nebraska.

Mr. Carter: He was a member of the Congressional Committee?

Mr. Robertson: Yes.

The next is from a statement made by Mr. H. D. Judson, General Superintendent Illinois Division, C. B. & Q. Railroad, at Hearing before Committee on Interstate and Foreign Commerce, House of Representatives (May 11, 1906), on Bills to Limit the Hours of Service of Railroad Employees. Among

other things Mr. Judson says in reply to a question asked by Mr. Esch, as follows:

"Mr. Esch: This increase of the tonnage or haul has been rendered possible by increase in the capacity of the locomotive?"

"Mr. Judson: Yes; and increasing the power and strength of our locomotives and increasing the capacity of the cars.

"Mr. Esch: Increasing the capacity of the locomotives implies an increase of the steam power?"

"Mr. Judson: Yes.

"Mr. Esch: That implies an increase of the coal consumption?"

"Mr. Judson: Yes.

"Mr. Esch: That makes the fireman's duties more onerous for the number of hours which he is on the engine?"

"Mr. Judson: Yes, that is true."

Mr. Carter: What is next?

Mr. Robertson: Mr. Judson further states on page 7, in the first column:

"Mr. Judson: I was going to say that all the criticism and comment on the Burlington methods relates to a very small percentage of the business. I ask you to bear in mind that over 50 per cent of the freight business on the Burlington is hauled on fast freight trains, on trains that run from 15 to 25 miles an hour; that is, considerably over half of it. As to the other half of it, the way freight trains, of course, there are times when trains are on the road over fifteen hours. That can scarcely be avoided, and it will not be avoided after the law is in effect. We will simply have to accept the consequences, I suppose."

Mr. Carter: Now, when Mr. Judson, as representative of the C. B. & Q. Railroad, was opposing the enactment of the Hours of Service Law, did he call attention to the great increase in tonnage?

Mr. Robertson: Yes, sir.

Mr. Carter: And the great increase in the capacity of the locomotives implied increase of steam power?

Mr. Robertson: Yes, sir.

Mr. Carter: And this implied increase of coal consumption?

Mr. Robertson: Yes, sir.

Mr. Carter: And that the fireman's duties are more onerous for the number of hours which he is on the engine?

Mr. Robertson: Yes, sir.

Mr. Carter: And yet, another representative of the C. B. & Q. Railroad comes here and testifies that in the tests that he made firemen loaf, I think, about three quarters of the time. There is a difference between the testimony of the representatives of the railroad when they are trying to defeat the passage of a bill, and when they are trying to defeat a wage increase, is there not?

Mr. Robertson: It would appear so, yes, sir.

Mr. Carter: Well, on the Burlington road, over 50 per cent of the trains were running 15 to 20 miles an hour, weren't they?

Mr. Robertson: Fifteen to twenty-five miles an hour.

Mr. Carter: Fifteen to twenty-five miles an hour. And what about the other half of them?

Mr. Robertson: "As to the other half of it, the way freight trains, of course, there are times when trains are on the road over 15 hours. That can scarcely be avoided, and it will not be avoided after the law is in effect."

Mr. Carter: Would that be a good argument here that there should be a 10 per cent differential between through and way-freight?

Mr. Robertson: Yes.

Mr. Carter: And we are using that here, are we not? We could not get Mr. Judson here to testify, so we are using his argument.

Mr. Robertson: Yes.

Mr. Carter: What else from Mr. Judson?

Mr. Robertson: On page 7, in the second column, Mr. Judson says:

"Now suppose the engine fails.

"Mr. Richardson:—"

Mr. Carter: By the way, who is Mr. Richardson?

Mr. Robertson: A member of the committee.

Mr. Carter: Of the Congressional Committee?

Mr. Robertson: Yes.

"Mr. Richardson: Do you think that the bill provides for that?

"Mr. Esch: 'Unavoidable?'

“Mr. Judson: The engine fails because the fireman is poor, and you say it is the duty of the railroad to have good firemen; but they cannot always be had. In one section of my division in the space of a few months we hired over 300 firemen.

“Mr. Richardson: Has not the number of firemen vastly increased in the last few years on account of the increase in the size of the locomotives?

“Mr. Judson: Yes, but it has not increased as much as you would think because of the size of the locomotives. The fireman has not an easy job.

“Mr. Ryan: They are practically shoveling coal all the time with these heavy engines?

“Mr. Judson: Well, they do not have any easy job of it.”

Mr. Carter: Now, who did you say Mr. Judson was?

Mr. Robertson: General Superintendent, Illinois Division of the C. B. & Q. Railroad.

Mr. Carter: And did you hear Mr. Willsie bring on tests on that same road, that contradicted Mr. Judson?

Mr. Robertson: No, sir.

Mr. Carter: You didn't hear those tests?

Mr. Robertson: No, sir.

Mr. Carter: Well, according to that, in one section of the Illinois Division of the C. B. & Q. Railroad Mr. Judson was compelled to employ over 300 firemen in a few months.

Mr. Robertson: Yes, sir.

Mr. Carter: Now, if they were loafing way back in 1906, which I understand they were, by tests recently conducted, do you think they would have to hire 300 men for this one part of a little division?

Mr. Robertson: No, sir, I don't think so, no, sir.

Mr. Carter: Do you think they would come and try it, and not be able to do it and quit?

Mr. Robertson: I don't think so, no.

Mr. Carter: Now, did Mr. Judson acknowledge, when he was trying to defeat the enactment of the Hours of Service Law, that the fireman had no easy job, and he was practically shoveling coal most of the time on the heavy engines, that were heavy back in 1906?

Mr. Robertson: When asked the question by Mr. Ryan: “They are practically shoveling coal all the time with these

heavy engines?" Mr. Judson said: "Well, they do not have any easy job of it."

Mr. Carter: Then either Mr. Judson, the Superintendent of the Illinois Division of the C. B. & Q. Railroad, or Mr. Willsie, the Chairman of the Fuel Committee covering the same division of the C. B. & Q. Railroad, must be mistaken, one or the other?

Mr. Robertson: They could not both be right.

Mr. Carter: All right. Go ahead and we will take some more from the C. B. & Q.

Mr. Robertson: On page 8, communication from Mr. J. M. Gruber, General Manager, C. B. & Q. Railroad. Document filed at Hearing before Committee on Interstate and Foreign Commerce, House of Representatives (May 11, 1906) on Bills to Limit the hours of Service of Railroad Employees. The document is addressed from Chicago, March 14, 1905 to Mr. H. D. Judson, General Superintendent, Chicago, Mr. H. C. Nutt, General Superintendent Burlington, Mr. Henry Miller, General Superintendent, St. Louis.

"Dear Sirs: We want to get out definite instructions on the matter of train men being long hours on the road. I think we shall want to make the limit 18 hours; that is, after 18 hours' continuous service, except under extraordinary conditions, such as wrecks, washouts, etc., the men shall be given at least eight hours of rest, and more if asked for.

"Of course we want, as far as possible, to make at least an average speed of 10 miles per hour across every freight district that is 100 or more miles long. Where the mileage is less than that, if we have to pay for a hundred miles, if we can get more work done by using ten hours that is what we want to do."

Mr. Carter: Now, in this letter Mr. Gruber indicated way back in 1905 that without any law they were going to limit the hours of service of employees to 18 hours, is that true?

Mr. Robertson: That seems so from the letter, yes.

Mr. Carter: Except for wrecks and washouts?

Mr. Robertson: Yes.

Mr. Carter: And the law excepts those wrecks and washouts anyhow, doesn't it?

Mr. Robertson: Yes.

Mr. Carter: Now, why do you think a railroad would fight against the enactment of a law when there is evidence that

they have practically agreed that the law was all right back in the beginning when it went into effect?

Mr. Robertson: I couldn't say.

Mr. Carter: Now, of course, in this case they were going to volunteer to make it 18 hours while the law required 16. Now, did Mr. Gruber indicate there that the average speed of the train should not exceed ten miles per hour across every freight district?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, did he do that so that he could get all the hours out of him he could? "If we can get more work done by using ten hours, that is what we want to do." Now would that indicate that they wanted to keep their men the full ten hours for the ten hours' pay?

Mr. Robertson: Yes, sir.

Mr. Carter: In a hundred mile division?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, in reaching that desirable end, if the train could not get over the road in the 16 hour period by having a heavy tonnage, why it would either have to be tied up or exceed the limit of the law, would it not?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, we will come now to Mr. Willard, who at that time was Vice President of the C. B. & Q. Railroad.

Mr. Robertson: That is on page 9.

Mr. Carter: This is a year later, is it not?

Mr. Robertson: Yes, sir, January 21, 1907.

Mr. Carter: Now, who is Mr. Willard?

Mr. Robertson: Mr. Willard at this time was Vice President of the C. B. & Q. Railroad.

Mr. Carter: And what is he now?

Mr. Robertson: President of the Baltimore & Ohio Railroad.

Mr. Carter: Is he not recognized by everybody as being a very reputable railroad official?

Mr. Robertson: That is my understanding.

Mr. Carter: A man who had exhibited great skill and efficiency in handling railroads?

Mr. Robertson: That is my understanding, yes.

Mr. Carter: He started as a fireman, didn't he?

Mr. Robertson: Yes, sir.

Mr. Carter: That shows a fireman can become something sometime, does it? Well, what did Mr. Willard say back in January, 1907?

Mr. Robertson: Mr. Willard said, "Our records show that 45 per cent of all our trains carry fast freight and on the average carry less than 68 per cent of their capacity. That is the contribution that we make to the fast freight service, and in consequence of that the rates on the fast freights are higher, and the fast freights are thought to be profitable, even under those conditions."

Mr. Carter: Then, Mr. Robertson, when they show a lot of their trains are fast freights and are going over the road in six or eight hours, do you understand that on account of the higher freight rates for fast rate that they are still profitable even under those conditions?

Mr. Robertson: President Willard said so; yes, sir.

Mr. Carter: And then it is possible that the railroad might be making just as much on the engineer and fireman by chasing him across a division in a hurry on high-priced freight, as though they made him work the full ten hours, is that not true?

Mr. Robertson: Yes, sir; and it also might be possible they are making more.

Mr. Carter: Then, taking Mr. Willard's statements and comparing them with Mr. Gruber's, it would indicate that Mr. Gruber wanted ten hours, but that Mr. Willard states that the additional higher freight rate on this fast freight was enabling them to make profit out of it anyhow.

Mr. Robertson: Yes.

Mr. Carter: Now, what else does Mr. Willard say?

Mr. Byram: Mr. Robertson, wasn't there a difference between the situation that Mr. Willard described and that which Mr. Gruber described?

Mr. Carter: What the purpose was I have not got.

Mr. Byram: If you read his letter you will find that he has referred to the runs less than 100 miles. That is all he was asking about.

Mr. Carter: I beg your pardon, I have overlooked it.

Mr. Robertson: He refers to runs less than 100 miles, and also to runs over 100 miles.

Mr. Park: And Mr. Gruber was working under the direction of Mr. Willard at that time, wasn't he?

Mr. Carter: Yes, I think so.

Mr. Park: Subject to his orders and instructions.

Mr. Carter: I think Mr. Gruber was a General Manager under Mr. Daniel Willard, Vice-President of the C., B. & Q. Railroad. I think so, and if I am wrong I will be glad to be corrected.

Mr. Park: Was Mr. Willard at the hearing in opposition to the law?

Mr. Carter: No, sir.

Mr. Park: He was there favoring it?

Mr. Carter: A year later he was opposing the law, he was agreeing with the other representatives of the railroads in opposing the law.

Now what does he say about tonnage must be reduced?

Mr. Robertson: Mr. Mann, a member of the committee, asked the question:

"Suppose you had a coal train out that had been delayed so that it would not reach its terminal in sixteen hours at the rate you usually had the train go. Would it be possible, with a little extra work in firing, to get up steam enough to make the train run faster?

"Mr. Willard: No; I have assumed that the train makes the speed I have spoken of with the engine doing what it was intended to do.

"Mr. Mann: You are assuming that the trains are heavy enough to exercise the full duty of the engine, so that you cannot make any better speed?

"Mr. Willard: Yes.

"Mr. Kennedy: To increase the speed you would have to lessen the load?

"Mr. Willard: That is what we would have to do. We do that with fast freight trains because we cannot do anything else. As I said, we get only 68 per cent of the capacity of the engine on fast freights.

"Mr. Mann: Would it be possible to set out part of the cars and thereby reduce the weight of the train load, and thereby make better speed?

"Mr. Willard: It is possible to do that, but it would be

uneconomical and delay the business set off. Another train would have to pick it up."

Mr. Carter: Now, let us analyze that as we understand it. The law could **be** observed, that is, the 16 hour service would not necessarily be exceeded if we set off a few of the cars because that would increase the speed of the trains so they could get over the road. Is that right?

Mr. Robertson: Yes, sir.

Mr. Carter: And it would perhaps avoid tying up engineers and firemen on the road, is that not true?

Mr. Robertson: Yes, sir.

Mr. Carter: But according to the statement it would be uneconomical. Now, Mr. Willard said it would be uneconomical to increase the speed of the train by setting off the cars. Now, taking the statement of the first representative of the railroad that you have quoted, Mr. Payson, that it would be easier to pay the fine or the penalty than to observe the law, and the statement of Mr. Willard that it would be uneconomical to set off these cars so as to increase the speed of the train, would that indicate to you that the setting off of two or three cars might reduce the earnings for the railroad of that train to a great extent?

Mr. Robertson: Yes, sir, it would reduce the revenue of the train.

Mr. Carter: Now, have you an estimate there of what would be the effect of setting out a single car?

Mr. Robertson: Well, the revenue gained from a single car of coal—

Mr. Carter: Now, on what do you base this?

Mr. Robertson: On the rate.

Mr. Carter: Yes, but from Chicago to Kalamazoo or where?

Mr. Robertson: I was just going to get to that. The revenue, or rather the rate on a car of coal, per ton, from Galesburg to Chicago on the C. B. & Q. Railroad is \$1.03.

Mr. Carter: Well, suppose you had 40 tons.

Mr. Robertson: Forty tons bring a revenue of \$41.20.

Mr. Carter: Five cars on an 8-car train, how much would those five cars bring?

Mr. Robertson: They would bring a little over \$200.

Mr. Carter: Now would it be economical to put those five cars on a train, even if you had to tie up the engine crew or exceed the Hours of Service Law?

Mr. Robertson: Yes, it would be more economical to put the cars on and pay the fine.

Mr. Carter: Now, if all these hundreds of dollars are added to the revenue of the railroad by adding these cars to the train, don't you think in addition to paying the penalty they could afford to pay the engineer and fireman continuous time when tied up under the law?

Mr. Robertson: Yes, sir, there would be money left then.

Mr. Carter: What proportion of this \$300 or \$400 that you speak of would be required to pay the continuous time to the engineer and fireman? Any considerable part of that?

Mr. Robertson: I have not computed that.

Mr. Carter: Have you got some other freight rates there besides coal?

Mr. Robertson: Well, the rate on a car of corn from Galesburg to Chicago would be \$1.60 a ton. Forty tons cars would bring in a rate of \$40.

Mr. Carter: Now, suppose you had five cars on that train that caused a tie-up, how much would that amount to in revenue?

Mr. Robertson: \$320.

Mr. Carter: How much?

Mr. Robertson: \$320.

Mr. Carter: Then it would be more profitable even though this Board awards continuous time for time tied up and time and one half for overtime when the speed of the train is less than ten miles an hour, it would then be profitable for the railroad to still hang on to the five cars of freight and pay this continuous time and time and one half overtime?

Mr. Robertson: Yes, sir.

The Chairman: We will now take a recess.

(Whereupon, at 12:30 o'clock P. M. a recess was taken until 2:30 o'clock P. M.)

AFTER RECESS.

D. B. ROBERTSON was recalled as a witness, and having been previously sworn, testified as follows:

Mr. Carter: Mr. Robertson, I think we had reached the bottom of the second column on page 9, continuing Mr. Willard's statement.

Mr. Robertson: The next article appearing in the second column on page 9, under the caption, "Readjustment of Divisions to 100 Miles in Length Would Be Necessary if Hours of Service Were Limited to 16."

Mr. Stevens, a member of the Commission, asks this question:

"You spoke of taking coal from Southern Illinois to St. Paul, and you said you must move it at a low rate or not at all?

"Mr. Willard: Yes.

"Mr. Stevens: If you based your rate on a 3,000-ton load for that distance, you would take into consideration this matter of laying off a certain portion of the cars for a certain time, say a month?

"Mr. Willard: No. If we found this section of the bill were put into effect, we would have to readjust that piece of road and make the divisions as near as possible 100 miles in length."

Mr. Carter: Have you heard that that division has been changed?

Mr. Robertson: No, I understand the division from La Crosse to St. Paul is 120 miles.

Mr. Carter: Now, have you something here to show that it was anticipated that the enactment of this law, would be very expensive to the railroads?

Mr. Robertson: Not at this particular—

Mr. Carter: Well, read what you have.

Mr. Robertson: The next is a statement, on page 10, from Mr. W. L. Park, at that time general superintendent of the Union Pacific Railroad. Rather, it was filed in the form of a document, at meetings before the Committee on Interstate and Foreign Commerce, House of Representatives, January 21, 1907, on bills to limit the hours of service of railroad employees. The first column of Mr. Park's statement shows that it would be absolutely impossible to entirely prevent cases of hours on duty over sixteen. In the same column, beginning at the bottom of the page, under the caption: "Great Care Will Have to Be Exer-

cised by the Government in Enforcing Hours of Service Law, if They Would Avoid a Panic and Great Suffering With Perhaps Loss of Life," Mr. Park says among other things: "There will be the greatest congestion of traffic in this country heretofore known in the world's history. It may result in a panic, and will surely cause great suffering and perhaps loss of life, practically taking over the immediate supervision of some 218,000 miles of railroad, the operation of which is as delicately balanced as a watch; to put the finger in the works in the wrong place will have a serious effect."

Mr. Carter: Without reading further, would that not indicate that before the Hours of Service Law was enacted, that there was a fear of great disaster if the law were enacted?

Mr. Robertson: Yes, sir.

Mr. Park: In your research, do you know how the original bill was constructed? Was it modified by the efforts of the railroad officials, from its original form?

Mr. Robertson: I could not say, Mr. Park, no, sir.

Mr. Park: You haven't seen the original bill?

Mr. Robertson: No, sir.

Mr. Park: You don't know that it imposes penalties in the way of fines and imprisonment on train despatchers, for the violation of the law, which, tends to unnerve them and unfit them for their duties as train despatchers?

Mr. Robertson: I never read the original bill, no, sir.

Mr. Park: And even in the exercise of due diligence and foresight they were not excused, as the bill was originally introduced. Do you know from your research that the bill was full of unreasonable and inconsistent things that were opposed by the managers?

Mr. Robertson: Why, no, I don't know that, except from that I can get from the statements here.

Mr. Park: Do you know that the Congressional Committee was flooded with protests from engineers and conductors against the bill in its original form.

Mr. Robertson: Yes, sir, that is true of most every bill that is introduced in Congress though.

Mr. Park: And the viewpoint of the managers was that the bill was apt to create a condition which practically took out of the hands of the managers the operation of the trains, and

they well knew, as was stated at that time, that it was utterly impossible to absolutely prevent trains from being on the road over 16 hours, in the practical operation of the railroads, and that has been borne out by the sequel, has it not, from the records you have of the different roads, showing that even at this date it is impossible to operate the roads without having some of the trains on the road over 16 hours?

Mr. Robertson: Well, they are not operating them without having some on the road over 16 hours.

Mr. Park: That may be, but if it is impossible, they simply have to submit to that. Was it not a fact that at that time all of the schedules of the employes contained a provision by which they were permitted to call for rest if they felt they required it, after they had been on duty 8 hours.

Mr. Robertson: I will say that I believe a great many schedules provided that firemen would be given a certain amount of rest after they arrived at the terminal, but I do not know of a schedule that ever had a provision in it requiring railroads to tie a man up en route or deadhead him into a terminal after a certain number of hours.

Mr. Park: The caption of this bill was "To prevent accidents to passengers and employes," I believe.

Mr. Robertson: "Promote the safety of employes and travelers."

Mr. Park: And at that time, after a very careful research of all of the accidents that had been reported to the Interstate Commerce Commission during the period of seven or eight years, there appeared to be only 23 accidents, out of the many thousands, in which the employes concerned were on duty over 16 hours, and by the greatest stretch of imagination only 9 of them could have been attributed to overwork, and the managers at that time felt that in order to avoid the very drastic provisions of the original bill, that they would be called upon to expend many thousands of dollars, ostensibly to prevent injury to employes and passengers, and at the same time they well knew that by expending much less money in the way of real preventives of accidents, they could accomplish a great deal more. You did not go into those details?

Mr. Robertson: I do know that Mr. Mosely, Secretary of the Interstate Commerce Commission, I believe, at the time, ap-

peared before the same Commission that I believe your document was read before, Mr. Park—No, he appeared before the other one, in 1906, and in his testimony he stated that cases of engineers being found asleep on duty were common in railroad accidents.

Mr. Park: Well, there were only twenty-three cases, if you look through the records of accidents, where employes were concerned, and where the employes were on duty over sixteen hours. Mr. Mosely was very much interested in the bill. He was the father of the bill, and I think pushed it through harder than any other one individual. Do you know how the inspection of those Hours of Service Laws was arranged? Were the inspectors all made from the ranks of the organizations?

Mr. Robertson: I couldn't say, no, sir.

Mr. Park: You don't know as to that.

Mr. Robertson: No.

Mr. Park: You don't know what Mr. Mosely's policy as to that was?

Mr. Robertson: No, sir.

Mr. Park: That is all.

Mr. Robertson: You mentioned a point, Mr. Park, the twenty-three, or a certain number of cases of accidents occurring after employes had been on duty over sixteen hours. There is a point in that connection that is very misleading, as to the result of men being on duty long hours. For instance, I have railroaded, myself, on a locomotive, and I have come in after being out on duty twenty-three hours, and have been in bed one hour, and have gone out on the railroad again and made another trip. And if I had had an accident after I had been on duty three hours, I would not come within the range of the man whom you quote as being one of those twenty-three, but I believe I ought to be considered in the same category with that man.

Mr. Park: No, and at present, if you were operating a locomotive and had your usual good night's rest, and was around town during the day, and went out that evening after sixteen hours had elapsed from the time you had gotten out of bed, wouldn't you have been just as much incapacitated as you would if you had started out in the evening and lapped over a little in the morning?

Mr. Robertson: No, sir, not in the case I referred to.

Mr. Park: Have you made any investigation of accidents and their causes?

Mr. Robertson: No, sir.

Mr. Park: You don't know what percentage is caused for different reasons?

Mr. Robertson: No, sir.

Mr. Park: That is all.

Mr. Carter: Mr. Robertson, do you expect to file here for the information of the Board, the complete reports from which this data is taken?

Mr. Robertson: Yes, sir, we have them.

Mr. Carter: And where there are three periods indicating an omission, what else was said upon the subject may be found in these documents we are going to file?

Mr. Robertson: Yes, sir.

Mr. Carter: Will not the entire statement of Mr. Park be there, subject to inspection of Mr. Park?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, let us read what Mr. Park said as to the reasons for the opposition to the law?

Mr. Robertson: In his statement he says: "If the government is sincere in enforcing the law as it passed the Senate, they will drive from the service the really capable and conservative despatchers. They will not put themselves at the mercy of the rank and file with such penalties as the result of holding a crew on duty over the prescribed time. I will state further that in my opinion, based on thirty years of actual and active experience in the train service and the handling of trains, the Government cannot enforce the law literally; it is a practical impossibility as the railroads are now constituted. If they do not, the responsibility for accidents occurring under circumstances in which the hours on duty are involved, will fall on its agents. It will bring the Interstate Commerce Commission troubles and perplexities beyond anything they have yet experienced or conceived of. Detectives will not be necessary, the rank and file will furnish plenty of cases and ample evidence. It will be held to menace the official who may for cause discharge them."

Mr. Carter: Now, wouldn't it appear in this part of Mr. Park's statement, that the principal objection to the bill was the penalty being imposed upon train despatchers and other officials?

Mr. Robertson: It would seem so from this, yes, sir.

Mr. Carter: Will we show later that under the present law, since the last 12 months they are beginning to penalize these officials?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, what does the next table show?

Mr. Robertson: This is the table that was filed with Mr. Park's document.

Mr. Park: Penalize the officials, Mr. Carter? How do you mean?

Mr. Carter: For requiring trainmen to be in service more than sixteen hours.

Mr. Park: In what way, in the way of fine, or how?

Mr. Carter: We will get to it in a few minutes, and show you the names of the officers who have been fined in the last twelve months, under the present law.

Mr. Robertson: Statement on pages 11 and 12 is taken from the document filed by General Superintendent Park, of the Union Pacific Railroad, and shows continuous hours on duty for the month of November, 1906, of dispatchers, operators, engineers, firemen, conductors, brakemen, yardmen and tower men on the Union Pacific Railroad.

Mr. Carter: Now, what is the next statement? Does Mr. Baldwin file a statement for Mr. H. U. Mudge?

Mr. Robertson: Yes, sir.

Mr. Carter: Read that.

Mr. Robertson: On page 13, from statement filed by W. W. Baldwin, for Mr. H. U. Mudge, Vice-President, Rock Island Lines. On the first column of that page, Mr. Mudge contends that the train dispatcher should be the sole judge as to the exceptions of the law in its application.

Mr. Carter: How many times do you think a man would get rest if the train dispatcher was the sole judge, with these modern heavy tonnage practices?

Mr. Robertson: Well, I could not say. That would depend on the judgment of the train dispatcher, I presume.

Mr. Carter: All right, go ahead.

Mr. Robertson: In the second column on page 13, Mr. Mudge states:

“The majority of men in service do not want this law, and in urging its passage the leaders of the railway labor organizations do not properly represent the views of the masses, but simply represent what they themselves to be the interest of the organization. Unfortunately, these organizations are forced to take care in some manner, of a large floating element of inferior men. In seeking to limit the hours of labor, they hope to provide additional work for these men. As the basis of pay of all Western Roads is by the mile, the Railway Company has no interest in reducing the number of men on the payroll. On the contrary, it will cost them less to provide a sufficient number of men so that no overtime will be necessary.”

Mr. Carter: Now, let us start in the beginning. There, the statement is made that the railroad employes do not want this. Will you supply the Board with certain letters written by certain railroad employes protesting against the enactment of the Hours of Service Law?

Mr. Robertson: Yes, sir, they will be included in some of this supporting data.

Mr. Carter: Mr. Robertson, in your experience, have you found, or have you noticed that the real roads never have much trouble in getting some employes to go and try to prevent the enactment of any safety device?

Mr. Robertson: They usually find somebody that will go, yes, sir.

Mr. Carter: When the Brotherhood of Railroad Trainmen, with the Grand Master of that organization at that time, was earnestly advocating the enactment of a Safety Coupler Law, did the railroads find any difficulty in bringing many switchmen to Washington to say that they would rather use the old link-and-pin coupler than an automatic coupler?

Mr. Robertson: I could not state positively on that point. I don't know the evidence in that case.

Mr. Carter: I wish everybody had the recollections that I have.

Mr. Park: Is it a matter of record?

Mr. Carter: A matter of record, sir. Mr. Park, I remember distinctly the scene, and I remember what was thought of those switchmen who would come in there and try and prevent

the Brotherhood of Trainmen securing a law that has saved the lives and limbs of thousands of brakemen.

Mr. Carter: But they had no trouble in getting switchmen to come in and say they would rather use the link and pin coupling. Now, Mr. Robertson, under your general observation, don't the railroads always find people working for them who will often take the positions of their associate employes if they strike?

Mr. Robertson: Yes, sir, that is true.

Mr. Carter: Is it not a fact that there are a considerable number of railroad employes who would rather take men's positions who go on a strike, than do any other kind of work? That is, go from one part of the country—

Mr. Robertson: Go from one part of the country to the other.

Mr. Carter: Is it surprising that any railroad company may find some of its employes who would be willing to write a letter, to Congress, protesting against the enactment of the Hours of Service Law?

Mr. Robertson: No, sir.

Mr. Carter: Or any other law; and in this statement you will file directly will appear letters written from what railroad?

Mr. Robertson: C. B. & Q.

Mr. Carter: What year were they written?

Mr. Robertson: I think in 1906. I can tell in a minute.

Mr. Carter: They had conductors, brakemen, firemen and engineers on that road, who were willing, at the request of the officials, to address communications to Congress protesting against the Hours of Service Law being enacted; is that not true?

Mr. Robertson: Yes, sir; the letter was filed by Mr. Willard of the C. B. & Q. Railroad at that time, under date of January 2, 1907. I will change that. The letter was written under date of January 2, 1907.

Mr. Park: Does that show the employes were coerced into writing the letter?

Mr. Robertson: No, sir; the letter does not show that.

Mr. Carter: Would it indicate that the employes were coerced into writing the letter, when I think you will state that

our employes are now clamoring for another reduction in hours of service, so far as firemen are concerned?

Mr. Robertson: The letter does not show whether the employes were coerced into writing it or not, but experience is that they usually find employes who will write such letters.

Mr. Byram: Now, Mr. Carter, you said awhile ago that there were always employes on every railroad who were willing to do these things?

Mr. Carter: Sure.

Mr. Byram: Well, those men who might be willing to do certain things would not need to be coerced, would they?

Mr. Carter: I guess you are right, Mr. Byram. They like to do it.

Mr. Park: You would not consider it reprehensible for an employe to be loyal to the company he works for, would you?

Mr. Carter: I think that many officials today on railroads owe their positions to this character of loyalty. For instance, I think on roads mentioned here, where the official went behind the committee and beat the committee to it, the leading member of one of the organizations, who assisted in undermining that committee, has been promoted since, and holds an official position.

A way back when I was firing, a third of a century ago, a passenger conductor on the I. & N. G. Railroad, Bill Mulvey, who had been there for years, and had the best job there was, when there was a strike of switchmen on the Southern Pacific in the Houston yard, Bill Mulvey gave up a high-priced passenger run—I don't know how high the price was in those days, because they had a bell cord then, and he went to Houston and took a job of a low-paid switchman at about half the wages that he got as a conductor (not counting the perquisites), and he was then promoted to Superintendent of the Southern Pacific Railroad, as a reward for quitting his job as one of the oldest passenger conductors on the I. & N. G., and coming and helping the Southern Pacific win the strike in Houston in 1884 or 1885, as I remember it.

Now, you see by that kind of loyalty many employes expect advancement.

Now, will you turn to the next?

Mr. Robertson: On page 13, the next statement is from

Mr. Percy R. Todd, President, Bangor & Aroostook Railroad Company.

Mr. Carter: Now, by the way, this statement comes down to what date?

Mr. Robertson: February 2, 1915.

Mr. Carter: When was February 2, 1915?

Mr. Robertson: Last month.

Mr. Carter: Last month? Well, we are bringing this up to date. What was said by a representative of the railroads on February 2, 1915, six weeks ago, say?

Mr. Robertson: Mr. Todd was a member of a special committee representing 219 railroads, and 203,522 miles of track. He appeared before the Committee on Interstate Commerce, United States Senate, on February 2, 1915, on Bill H. R. 17893, Relating to Hours of Service of Employees of Common Carriers. Among other things—

Mr. Carter: What did Mr. Todd say?

Mr. Robertson: He was asked the question by the Chairman:

“The assertion has been made that where the penalty may be merely nominal—where there is no minimum penalty—that fact constitutes an encouragement to the management of railroads to indifference in regard to observing the law, and to rely upon lack of deliberate violation as a mitigating circumstance. I wonder if you have anything directly to suggest on that point?

“Mr. Todd: I have heard that statement. I take no stock in it at all, and for this reason: Taking the most cold-blooded view of it, I think that every railroad man and every laboring man will agree with me that there is no desire to work men like they were worked 15 or 20 years ago. We are talking about the weak things in the law, not the law itself. I think every railroad manager will agree with me the hours-of-service-act is a proper and humane thing, but we want it interpreted properly.”

Mr. Carter: Senator Robinson?

Mr. Robertson: Senator Robinson asked the question: “But the railroads did not advocate it when it was here.

“Mr. Todd: I know.

“Senator Robinson: And that has so often been the case. Bills have been before the committee that have passed unanimously, but the railroads have vigorously opposed them, and

in many instances it is legislation that has subsequently proved to be of benefit, and nobody objects to it after it has been in operation awhile.

"Mr. Todd: Mr. Chairman, I agree with you thoroughly, and I think it is a great mistake.

"Senator Robinson: I think this safety appliance act was objected to with all the vigor that the railroads could command, on the theory that it was a very dangerous thing to undertake to regulate them in that way, and now they all concede it is a good law.

"Mr. Todd: I was going to say that from a selfish standpoint you cannot expect men to give good work after 16 hours; you cannot get the service out of the men.

"You are paying for something you do not get, because they cannot give it. Therefore, the railroads would rather reduce their time and are trying to reduce their time below 16 hours."

Mr. Carter: Now, Mr. Robertson, does this show that Mr. Todd, representing how many railroads last month?

Mr. Robertson: 219 railroads.

Mr. Carter: Agreed that it was a mistake for these railroad officials to go to Washington and oppose legislation that was really not objectionable?

Mr. Robertson: Yes, sir.

Mr. Carter: And did not he also testify, representing all these railroads last named, that all of these premonitions of dangers, that the catastrophes and all of these things, were seldom realized?

Mr. Robertson: He said he thought it was a great mistake, yes, sir.

Mr. Carter: Would that probably also apply to some wage negotiations with which you have been connected in the past, when you asked for something, as to how much it was going to cost, and how it was going to bankrupt the railroads? Have you had experience of that character?

Mr. Robertson: Well, this same principle could be applied, yes, sir.

Mr. Carter: And after the wage movement is over, and the increase has been granted, it is forgotten about, and the road is not wrecked, is it?

Mr. Robertson: No, sir.

Mr. Carter: Now, Mr. Robertson, I believe somebody said something like this, that the pleasure of anticipation exceeds those of realization. Whether that is true or not, could we paraphrase it and say that in the enactment of life-saving rules, or in the increasing of wages, the dangers and horrors of anticipation are never equal to the dangers and horrors of realization?

Mr. Robertson: You could say that, yes, sir.

Mr. Carter: Now, have you some statements that you can file for the general information of the railroads, from which you take most of this?

Mr. Chairmen and gentlemen, we will file these, for the information of all concerned, and while perhaps it is aside to make the remark, those are planograph copies of the original on file in the Library at Washington. That far surpasses a photostat copy. You perhaps do not know that is made by planograph copy, but that is a reproduction of the original reports in the Library at Washington.

Mr. Robertson: We only have here copies of two of the originals.

Mr. Carter: You have not any originals. You think they are originals. Most wonderful work I ever saw. Not printing at all. It is a photographic reproduction. In this, Mr. Chairman and gentlemen, you will find a more complete record than has been presented in Employees' Exhibit 88.

Now, Mr. Robertson, what is your next chapter devoted to?

Mr. Robertson: "Efforts of Federal Government to Enforce Hours of Service Law."

Mr. Carter: What is the first subject head?

Mr. Robertson: "Statement of Action Taken With Respect to Cases Under the Hours of Service Act During the Fiscal Years Ending June 30, 1913 and 1914, and for the Six Months Ending December 31, 1914."

Mr. Carter: On reading it, does that show the number of actions brought and penalties imposed for the years 1913 and 1914, and six months ending December 31, 1914?

Mr. Robertson: It shows the number of cases and the number of violations involved in the cases; also the penalties assessed. It also shows the number of cases in which the railroads entered a plea of guilty.

Mr. Carter: Passing to page 16, what do we see?

Mr. Robertson: "Statement to the press of the Interstate Commerce Commission Regarding Violations of Federal Hours of Service Law." Also reference to railroad officials on the Pennsylvania Railroad, and the Pennsylvania Railroad Company, in general.

Mr. Carter: Do you know where I got this, or have you heard?

Mr. Robertson: Yes, sir; it was taken—it is a press bulletin that was placed on the bulletin board by the Interstate Commerce Commission for the information of the public press.

Mr. Carter: They had a bulletin board there that whatever they have to give out to the press, the matter is printed and hung on the board for any person who wants to have it?

Mr. Robertson: Yes.

Mr. Carter: What date was this?

Mr. Robertson: I think it was issued in January some time.

Mr. Carter: About two months ago?

Mr. Robertson: Oh, I don't mean in January. We just got that a few days ago.

Mr. Carter: Now, read the prominent matters, reading only briefly.

Mr. Robertson: That came under date of February 10th.

"The following is a statement of the hours of service cases against the Pennsylvania Railroad and certain officers of that company, the Pennsylvania Company, and the P. C. C. & St. L. Railway Company, in which pleas of guilty were entered at Pittsburgh on February 4th, and penalties assessed aggregating \$9,750."

Now, the balance of Column 1 calls attention to the specific cases, and the amount of fines imposed in each case. In the second column, on the same page, it refers to certain cases of actual dispatchers.

Mr. Carter: Read the first paragraph.

Mr. Robertson: "In one case O. J. Williams and O. J. Ritchey, train dispatchers, and H. H. Brunner, assistant trainmaster, all located at Oil City, Pennsylvania, required trainmen to be on duty as follows: 19 hours and 50 minutes for the engine crew, and 19 hours and 20 minutes for the train crew.

"On February 4, 1915, the defendants entered a plea of

guilty in this case and were fined \$25.00 and costs on each violation."

Mr. Carter: This train despatcher was fined, was he?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, the next.

Mr. Robertson: Also the assistant trainmaster. "In the other case against the officials, L. M. Scott, train despatcher, and H. H. Brunner, assistant trainmaster, located at Oil City, were charged with having required over 22 hours' service of a certain freight train crew. In this case a plea of guilty was also entered, and District Judge Orr assessed a penalty of \$25 and costs on each violation."

Mr. Carter: Now, Mr. Robertson, would that indicate that, as interpreted by the lower courts, at least, that the original dangerous features of the bill are now being imposed—that is, penalizing the officials of the company instead of the company?

Mr. Robertson: They are penalizing the officials of the company, yes, sir.

Mr. Carter: Now, Mr. Robertson, what would be the difference between penalizing the Pennsylvania Company and penalizing a trainmaster for the Pennsylvania Company, if the Pennsylvania Company pays the fine of the trainmaster?

Mr. Robertson: So far as the fine is concerned, I don't suppose there would be any difference.

Mr. Carter: Therefore, they will have to do something else for the railroads, won't they, to evade the law, because they would pay the fines, would they not?

Mr. Robertson: Well, they might.

Mr. Park: Mr. Carter, did not the original bill provide for the imprisonment of the despatchers?

Mr. Carter: I don't remember.

Mr. Park: In this copy of my statement before the Interstate Commerce Commission, I said, "Mr. Chairman and gentlemen: I think the amendment proposed fixes the bill satisfactorily to us." Those are the first words that I spoke to the committee indicating that all of those things were ironed out.

Mr. Carter: Pardon me, Mr. Park. I must confess I don't know what features were taken out.

Mr. Park: I don't recollect the details.

Mr. Carter: I think it was fining the officials, was it not? Penalizing the officials? I don't mean fining.

Mr. Park: My recollection is that the bill contemplated imprisonment for the dispatchers, and left no latitude by which, even in the exercise of due diligence and foresight, these things occurred.

Mr. Robertson: Those documents that have been filed here will not disclose anything of that kind. I have read them all through and the principal objections of the railroads—or rather, as you have now brought it to my mind, Mr. Park, by saying this amendment would make the law approved by the railroads—brings to my mind this fact, that the contention of the railroads was that they wanted the law amended, so that it read “knowingly and willfully permitting an employe to remain on duty.” Those words were included in the law, relating to the car of stock, after twenty-eight hours, and it was shown there that the railroads absolutely ignored that law, because of the fact that it could not be proven that they willfully and knowingly violated the law, and that was the amendment that was introduced at these conferences by certain railroad officials, and that was considered as being approved by the railroads.

Mr. Park: Now, in connection with this letter that you said had been submitted to the Commission, as emanating from an employe on the Burlington Railroad, I notice that this letter, protesting against the bill in its original form, was signed by M. E. Crane, Chief Conductor, Order Railway Conductors; John Steward, Chief Engineer, Brotherhood Locomotive Engineers; L. Stevens, Master, Brotherhood Railway Trainmen; C. V. Charter, Master, Brotherhood Locomotive Firemen.

All four organizations protested against the bill in that form, apparently.

Mr. Robertson: Yes; but you don't mention who filed this letter with the Committee, Mr. Park.

Mr. Park: Mr. Willard went there to protest against the drastic and unreasonable things that were proposed in the bill.

Mr. Robertson: Yes, sir; and he filed the letter. The representatives of the men did not file the letter. Mr. Willard filed it.

Mr. Carter: Mr. Park, we acknowledge that. I think the O. R. C. had a general chairman, who is now a general mana-

ger, and he is certainly putting the screws to the other conductors, worse than any man we have ever seen.

Mr. Park: Here is a letter on the next page, signed by F. S. Barnes, for the Conductors. I understand Mr. Barnes is now chairman of the Conductors' Committee—Trainmen's Committee.

Mr. Robertson: I don't know.

Mr. Park: The effort on the part of the managers at that time was well supported by their loyal employees, to see that a bill was not framed there which was unreasonable, inconsistent and improper, and I think they succeeded quite well, so far as they could.

Mr. Carter: Mr. Park, we confess—

Mr. Park: Except, after they had this hearing, it was agreed that the bill should go through in that form, and an amendment was introduced applying to the Telegraphers, which is still inconsistent; inconsistent in one particular, as I remember it, that you can work an operator twelve hours at a station, where he can take fifty orders, check 100 pieces of baggage and answer a hundred questions, but at the next station, where he absolutely takes no train orders, you can only work him eight hours by reason of the continuity of service between the two stations. Now, that is in the law. It is impossible to get it out; and everybody admits it is absurd and did not have the proper consideration.

Mr. Carter: We recognize, Mr. Park, that members of these organizations do those things. Now, I want to say that sometimes members of those organizations do those things, without knowing what they are doing, and sometimes they do all they can to excuse themselves. Now, for instance, on one of the roads parties to this agreement, when there was a great strike on that road some years ago, engineers from other sections of the country came and took the engineers' places. Now, you might say, they were trying to defeat their fellow engineers, but since that time we have found there has been such a change of heart in those men, that one of them became so radical that the officials of that road refused to do business with him. So you see that men can do things at one time, that subsequently they recognize is wrong, and they go just as far the other way.

Mr. Park: At the time this letter was signed, the engineers

on the Burlington were members of the Brotherhood of Locomotive Engineers, were they not?

Mr. Carter: Yes, sir. We have officers of those organizations now, who, in addition to drawing pay from this Brotherhood, are drawing pay from a certain railroad. Now, men of that calibre come to the front. On one railroad they make a specialty of doing that, and in order to see how much they are doing it, I have had some of our officers go on their payrolls, and I have photographs of their pay checks; so you see you can't sometimes always tell.

Will you go on, Mr. Robertson?

Mr. Robertson: On page 17, under the chapter head "Digest of Decisions Under the Federal Hours of Service Act, by O. B. Kent, 1915," Column 1 shows the purpose of the law, as set forth by various courts and as taken from Mr. Kent's digest of decisions.

Mr. Carter: Now, Mr. Robertson, will you just show the appearance of Kent's Digest, so that at any time any railroads want to see what the law is, and enforce it, they can secure that from where? Who publishes it?

Mr. Robertson: O. B. Kent, Attorney, Interstate Commerce Commission, by direction of the Commission, Washington, Government Printing Office.

Mr. Carter: They can get it from the Washington Government Printing Office, if they want to know about the law?

Mr. Robertson: Yes, sir.

Mr. Carter: Now, Mr. Robertson, without posing as a lawyer, because we have some men learned in law on the Board, if they read this, will they see citations, showing that the very reasons assigned by the railroads for reasons for exceeding the Sixteen Hour Law, in three box heads up here on this insert, have been decided by the courts to be illegal?

Mr. Robertson: Many of them, yes, sir.

Mr. Carter: Now, Mr. Robertson, have you anything further to say on that exhibit?

Mr. Robertson: No, sir.

Mr. Carter: That is all.

CROSS EXAMINATION.

Mr. Sheean: Mr. Robertson, this letter that Mr. Willard filed, points out that while legislation might be needful to prevent

the long hours in service, that possibly exists in some localities, we believe that a bill can be drafted which will contain reasonable remedy for such evils, and proceeds to point out certain specific things that they thought, in the bill then pending, ought not to be contained in it. Is not that the sum and substance, practically, of all you have cited here, that the bill as originally drafted, in that form, was not satisfactory to the men who were before the Committee?

Mr. Robertson: That is not what I have attempted to show by this exhibit; no, sir.

Mr. Sheean: You have not attempted to show by this exhibit either, what the bill under consideration was, at the time these comments were made concerning that draft of the bill, have you?

Mr. Robertson: No, sir.

Mr. Sheean: But you do know that the comments that were then made, were preceding the time that the law was passed, and were not made with reference to the laws that exist at the present time?

Mr. Robertson: They were made as objections to the enactment of the law.

Mr. Sheean: Well, they were made as objections to the bill which was then before this committee?

Mr. Robertson: Yes, sir.

Mr. Sheean: And you have not pointed out anywhere, what resemblance, if any, the bill that was then before the committee, bears to the law that was finally passed and is now in force?

Mr. Robertson: No, sir.

Mr. Sheean: Now, in the tables that you filed as a part of this exhibit, where you show the number of cases where the period on duty was more than sixteen hours, each train which violated the sixteen hour law would be regarded as five violations, if it was the original train crew?

Mr. Robertson: I don't know as I could answer that. I copied that right from the Interstate Commerce Commission's statistical analysis here, and I will read what they say: "All railroads which reported during the year ending June 30, 1914, an aggregate, respectively, of twenty-five or more instances in which employes were on duty for periods other than those provided by the Federal Hours of Service Act, together with a

comparative summary covering the fiscal year ending June 30, 1914."

Mr. Sheean: Well, the instances cover the individuals, and if a train crew was on the road more than 16 hours it would be reported as five instances?

Mr. Robertson: I could not say positively, Mr. Sheean.

Mr. Sheean: What is it?

Mr. Robertson: I could not say positively, but that is the way it would appeal to me.

Mr. Sheean: Yes. I just wanted to make clear the fact that the members here would be divided by probably five, possibly six, or in the case of a light engine it is conceivable it might get down to two.

Mr. Robertson: I think that is correct.

Mr. Sheean: But, generally speaking, the numbers here would be divided by 5 in order to ascertain how many trains were on the road in excess of 16 hours. Now it is a fact, is it not, and your investigation here I think summarizes it, that 1914 shows an improvement over 1913, and the last six months reported shows an improvement in conditions over the corresponding preceding periods.

Mr. Robertson: Oh, in the Interstate Commerce Commission's report?

Mr. Sheean: Yes.

Mr. Robertson: Generally speaking, for all of the roads, I think that is true. I made no computations for the western roads.

Mr. Sheean: Now, what is shown here in this 1914 for the Wabash, of number of violations, or combined totals? It is that first one.

Mr. Robertson: It is on page 13, I think.

Mr. Sheean: It is the top number, as I get it here. The Wabash.

Mr. Robertson: Oh, you mean in the exhibit we are introducing now?

Mr. Sheean: In the exhibit you are introducing, yes, 3064.

Mr. Robertson: 3,064, I think that is correct.

Mr. Sheean: And in the preceding year the same tabulation, have you the same statistical information for the year ending 1913?

Mr. Robertson: Well, the only comparison we could make would be from our own records, because this is not in the same period.

Mr. Sheean: Well, I have here a statistical analysis by the Interstate Commerce Commission for the year ending June 30, 1913. That is in exactly the same form as yours for 1914, isn't it?

Mr. Robertson: Yes, sir.

Mr. Sheean: And, for 1913, the Interstate Commerce Commission's report shows that on the Wabash the combined totals were 9,811. That is shown in this same report of yours, isn't it?

Mr. Robertson: Yes, sir.

Mr. Sheean: As against that, 1914 shows 3,064?

Mr. Robertson: Yes, sir.

Mr. Sheean: So that that does confirm Mr. Cotter's statement of a very marked improvement on the Wabash in the very last year, does it not?

Mr. Robertson: I don't know what statements he made.

Mr. Sheean: Well, Mr. Carter referred this morning to the fact that Mr. Cotter had testified that conditions had very much improved in the last year over what they had been in the preceding years on the Wabash. And on all of the roads, Mr. Robertson, this comparative analysis, speaking generally, speaking of the roads as a whole, shows that that is the situation, doesn't it?

Mr. Robertson: I have not gone into it, Mr. Sheean, but judging from, and based on what the Wabash showing is, that would be the conclusion, yes. But I have not gone into it definitely and I couldn't say what it is.

Mr. Sheean: And that situation of improvement obtains not merely from year to year, but the six months that you have summarized here in one part of the exhibit—I don't remember just now where it is—you have a six months' period here somewhere in the exhibit?

Mr. Robertson: Yes, it is on page 15, Mr. Sheean.

Mr. Sheean: Oh, yes. From the six months ending December 31, 1914, it shows an improvement over the preceding six months.

Mr. Robertson: In the number of violations?

Mr. Sheean: Yes, do they not? Well, whatever it shows is shown there.

Mr. Robertson: I say that the railroads confessed judgment in 1913 to 1,750 cases, and in 1914 1,785 cases, or 1,785 counts, I mean.

Mr. Sheean: Yes, and in connection with this comparison that you have made as to the total number of cases, it is also true that the enforcement of the law has grown stricter and stricter, has it not, by the Interstate Commerce Commission?

Mr. Robertson: I could not say as to that.

Mr. Sheean: Well, you have cited a number of decisions here on which one thing after the other has been taken out of the law as a possible excuse.

Mr. Robertson: Yes, sir.

Mr. Sheean: And in that way, and judging from the compilation prepared by Mr. Kent, who devotes all of his time to the enforcement of the provisions of the law, it is a reasonable deduction, isn't it, from your knowledge of the situation, that the Interstate Commerce Commission is more and more insistent upon the strictest interpretation of the law?

Mr. Robertson: Well, the railroads have protested certain counts, or rather certain cases that the Interstate Commerce Commission has brought against them, that is, from my reading of the matter as presented here, and, of course, a number of cases have been decided against the railroads and they have had to pay a lot of money, and for that reason I suppose they are complying more strictly with the law now.

Mr. Sheean: Yes, but you will note that in the last couple of years, from this same summary of yours, that in over half of the cases that have gone to trial that the government's contention has been so extreme that the courts would not agree with them?

Mr. Robertson: Some of them the government's contentions have been overruled in—

Mr. Sheean: In about half of the contested cases?

Mr. Robertson: I could not say as to that.

Mr. Sheehan: Well, from your same summary that is pointed out, I think. Well, it is in the same page there?

Mr. Robertson: It is in there, yes.

Mr. Sheean: So that speaking generally of this whole exhibit, there has been an improvement in the conditions, less and less cases in which men are on the road as long as 16 hours, as

shown progressively through these reports, especially during the two year period?

Mr. Robertson: A statistical analysis as furnished by the railroads shows for the Wabash less violations in 1914 than in 1913. Further than that I have not gone into it.

Mr. Sheean: Well, you have for the entire year for all the roads, and for the fiscal year 1913 as compared with 1914?

Mr. Robertson: Yes, they are all in here.

Mr. Sheean: That is all.

Mr. Burgess: Mr. Robertson, on one or two occasions reference has been made to Mr. Willard. I note on page 12 Mr. Willard replying to a question by Mr. Esch states among other things the following:

“We consider it on the Burlington good practice to so load an engine that when on a uniform low grade it will make a speed of 12 to 20 miles an hour.”

And near the bottom of the page he again states:

“We think the train is getting along in an economical way if it is so loaded that it will run from 12 to 18 miles an hour after it is started and between stations.”

Then again in answer to a question by Mr. Mann, Mr. Willard stated:

“The actual running rate—when it is in motion. We find also on a single-track railroad a train loaded so that it will make between 15 and 18 miles an hour between stations, after deducting necessary delays for taking on coal and water and meeting trains, a uniform rate from start to finish of 10 miles an hour will be shown, so that 15 hours would be consumed from start to finish for a 150-mile trip.”

Do you not think that that is the best confirmation of the employes' contention that the trains were loaded so that they could not average over a speed of ten miles per hour?

Mr. Robertson: That, taken into connection with Mr. Gruber's letter, which also appears here. Yes, sir, that would confirm that, in my opinion.

Mr. Burgess: And it is for that reason that the engineers and firemen believe that they are clearly entitled to a proportion of the revenue produced by increased trainloads, is that right?

Mr. Robertson: I understand that is the contention of the men; yes, sir.

Mr. Burgess: That is all.

Mr. Sheean: And all of this trainloading and conditions about loading up to the car limit existed on the Burlington in January, 1907, when this information was being given?

Mr. Robertson: Yes, sir.

Mr. Sheean: So that whatever compensation has been given to engineers and firemen since 1907 because of the increased trainloading and the delay, if any, resulting therefrom, if any increase has been given since that time on that ground it is found in the existing schedules.

Mr. Robertson: I could not say as to that. I would say that if the trains were loaded to their capacity at that time, it is fair to say that the plan has not been abandoned on the C. B. & Q., and whatever the increase in the tractive power, or the size of the locomotive, has been since that time, that that would show quite an increase in tonnage of the train.

For instance, the average tonnage of trains on the C. B. & Q. Railroad today is 484 tons. In 1890, it was 195 tons; an increase since that time of 211 per cent.

Mr. Sheean: But in 1907 here, in this very report that Mr. Burgess referred to, Mr. Willard stated:

"The standard Burlington engine will haul, on a three-tenths grade, generally, 3,000 gross tons, including weight of cars."

In describing the operation of the Burlington, part of which Mr. Burgess read.

Mr. Robertson: Well, the tonnage on the Burlington has increased since 1909 over 25 per cent, the average train load.

Mr. Sheean: Well, what, if any, information have you as to any change since December 24, 1910, in that respect?

Mr. Robertson: I have no information on that particular year, Mr. Sheean.

Mr. Sheean: And no information as to changed operating conditions, or the method or manner of operation as described by Mr. Willard in 1907?

Mr. Robertson: Any more than what I have just said, that if the same principle is adhered to in the manner of loading the trains that was at that time, it would only be in proportion to the increase in the size of the locomotives, whatever that is. I don't know what it would be.

Mr. Sheean: As to the dragging over the road, and as to the length of time required by loading engines to their capacity, and as to the hours of service of men, there would be no change because of the change in the size of the engines? If they were loaded to capacity then, the loading to capacity now would make no difference in regard to any of these other factors?

Mr. Robertson: Oh, yes, I think it would, because the loading to capacity of an engine that would only haul ten cars, makes a great deal of difference compared with the loading to capacity of an engine that hauls forty cars.

Mr. Sheean: That is in productive efficiency?

Mr. Robertson: In productive efficiency and in prolonging the hours of the men in service. For example, you take a locomotive that hauls, we will say, forty cars, and loaded to its capacity, and then install locomotives on the same railroads that will haul eighty cars, the difference in the amount of time that it requires a man to handle an eighty car train over the same territory, making the same movement in and out of sidetracks, getting out of the way of trains, etc., is much increased over that of a train of eighty cars.

Mr. Sheean: That is, in starting and stopping, and getting off on side tracks?

Mr. Robertson: Handling it from every angle you can conceive of.

Mr. Sheean: Well, a train loaded to capacity, whether it be forty cars or eighty cars, outside of the question of passing or getting onto a siding, is there any difference?

Mr. Robertson: Yes, considerable difference.

Mr. Sheean: In what way?

Mr. Robertson: Well, if a railroad had sidings that held—

Mr. Sheean: No, I am talking about irrespective of sidings; that they start out on straight away run, two engines, each loaded to its capacity; does it make any difference what the capacity of the engine is?

Mr. Robertson: In the handling of the train?

Mr. Sheean: Yes, sir.

Mr. Robertson: Yes, sir, if the capacity of a train that hauls forty cars is substituted for the—I mean an engine—is substituted—or like an engine that hauls eighty cars is substituted for an engine that holds forty cars, the difference in the

handling of the eighty cars would be very much greater than the handling of a forty car train.

Mr. Sheean: On a straight run?

Mr. Robertson: Yes. Anywhere.

Mr. Sheean: That is all.

Mr. Burgess: Mr. Robertson, is it not a fact that these two organizations have been striving for many years prior to 1907 and subsequent to 1907, to obtain a fair rate, based on the work performed, for the engineer and fireman?

Mr. Robertson: Yes, sir.

Mr. Burgess: So that regardless of any settlement that might be made within these periods, the fact remains that the men comprising these two organizations do not believe they are fairly compensated for the service performed?

Mr. Robertson: That is my understanding; yes, sir.

Mr. Burgess: And it was the hope that this Board would equitably consider the question that brought this arbitration hearing today. Is that right?

Mr. Robertson: Yes, sir.

RE-DIRECT EXAMINATION.

Mr. Carter: Mr. Robertson, counsel for the railroads called your attention to table 4 in this report of the Interstate Commerce Commission, and asked you if the total for 1914 was about half of the total for 1913, would that indicate that 1913 showed about twice the violation, or excess services, whatever you like to call it, as 1914.

Turn to page 25. Look at the bottom of the first two columns. Look at the first two columns.

Mr. Robertson: Oh, I see it; yes, sir.

Mr. Carter: Now, would that indicate that 1914 was not half as bad as 1913?

Mr. Robertson: No, it would not.

Mr. Carter: What would it indicate, then? One is 261,000 and the other is 131,000, is it not?

Mr. Robertson: Yes, sir.

Mr. Carter: Well, is not that nearly half, or about half?

Mr. Robertson: Pretty close to it; yes, sir.

Mr. Carter: Now, your insert here was based on 1914.

Was it because you felt sorry for the railroads you did not take 1913, and make it twice as bad?

Mr. Robertson: No, sir. I took 1914 because it was up to date.

Mr. Carter: And that is the best year that was shown, was it not, by the railroads?

Mr. Robertson: Yes, sir.

Mr. Carter: And if you could have got the same information for 1913, it would have been a horrible example, would it not?

Mr. Robertson: It would have looked worse than this does, from that angle.

Mr. Carter: Now, Mr. Robertson, turn to page 12 of your exhibit 88. What does that purport to show, on page 12? The last column there.

Mr. Robertson: Percentage of engineers and firemen, dispatchers, operators, conductors, brakemen, yardmen and tower men that were on trips or on duty over sixteen hours.

Mr. Carter: I am looking at this table G, showing the continuous hours on duty for the month of November, 1906.

Mr. Robertson: Yes, sir.

Mr. Carter: Now, the next to the last column says, "Number of trips or days on duty over sixteen hours."

Mr. Robertson: Yes, sir.

Mr. Carter: Per cent of total for engineers .4 of one per cent. Is that right?

Mr. Robertson: Yes, sir.

Mr. Carter: For the firemen 0.4 per cent. That is for November, 1906. What do the railroads report on page 12 for the total trains that exceeded the 16 hour limit?

Mr. Robertson: 5,000,000—

Mr. Carter: No. 0.59.

Mr. Robertson: Oh, the percentage, 0.59, yes.

Mr. Carter: If Mr. Park showed that in November, 1906, there were only 0.4 per cent of the train crews that exceeded the sixteen hours of service, and the railroads in their Exhibit 12 show that for the year 1914 nearly 0.6 exceeded the Hours of Service law—exceeded sixteen hours, would it indicate that it was getting better very fast?

Mr. Robertson: That would indicate it was getting worse.

Mr. Carter: Now, take that 0.59 of the trains that exceeded the sixteen hour limit in 1914, and what do you find the number of trains that were tied up on account of the sixteen hour law in 1914?

Mr. Robertson: In percentage it was 0.6 of one per cent.

Mr. Carter: What is the sum of those two percentages?

Mr. Robertson: 1.19.

Mr. Carter: Therefore, if we take the report of the railroads for 1914, and combine the trains that exceeded the 16 hour limit with the trains that were tied up on account of the Sixteen Hour Law, but did not exceed the sixteen hour limit, you find a percentage of 1.19, do you?

Mr. Robertson: Yes, sir.

Mr. Carter: And turning back to Mr. Park's statement furnished to Congress in 1906, what percent of the trains there exceeded the sixteen hours?

Mr. Robertson: Four per cent.

Mr. Carter: Would that indicate that that is really two and a half times worse now than in 1906?

Mr. Robertson: Yes, sir. For the number of trains.

Mr. Carter: That is all.

Mr. Park: That is, you are comparing one road against all of them?

Mr. Carter: Yes, sir. I think, Mr. Park, it is stated in your statement that yours was the only road that kept track of those things.

Mr. Robertson: The only road that had it.

Mr. Carter: The only road that had information upon the subject. In your statement I think you said that, and you filed this as a report of certain tests that you had made during the month of November.

Mr. Park: Then why don't you take the Union Pacific Report there?

Mr. Sheean: Shown on Exhibit 12.

Mr. Carter: I did not take the Union Pacific Report. I just wanted to show that—Exhibit 12,—all of the railroads are much worse today than the Union Pacific was that time.

Mr. Sheean: Yes. Well, now, Mr. Robertson, you have before you this No. 12 and you are comparing what the Union Pacific did in 1906. Now, what did the Union Pacific do, as

shown on Exhibit No. 12, for the entire year ended December 31, 1913?

Mr. Robertson: They had 127 crews exceed the sixteen hours, and tied up 725, to avoid it.

Mr. Sheean: Out of how many trains?

Mr. Robertson: Out of 190,739. I believe that is correct.

Mr. Sheean: And what in a percentage basis—how far out would that go in your percentage basis?

Mr. Robertson: That would be 0.4 per cent, .44.

Mr. Sheean: And of this total here, of 0.59 per cent, I just wish you would carry that out. Quite sure of that being—

Mr. Robertson: It is .44. It is practically .44, in place of 0.4.

Mr. Sheean: That is, you are comparing—

Mr. Robertson: 725 and 127.

Mr. Sheean: That is, where they complied with the law by tying up the men at the expiration of sixteen hours, you are counting that just the same as though they had violated the law?

Mr. Robertson: Well, yes.

Mr. Sheean: And what is the percentage of 127 trains that were in fact on the road sixteen hours or more, compared with the 190,000 trains that ran?

Mr. Robertson: Well, it is less than one-hundredth.

Mr. Sheean: Less than one-hundredth. Now, then, in this total of the 34,000 trains that were on the road more than sixteen hours, how many of that 34,000 were in Canadian territory, where there is no limit?

Mr. Robertson: I couldn't say.

Mr. Sheean: Oh, yes, you can; if you will look at Exhibit No. 12 you can.

Mr. Robertson: I was not following your question very closely.

Mr. Sheean: Of the 34,800 trains which were on the road in this territory more than sixteen hours, how many of those were in Canadian territory, where there is no Sixteen Hour Law, the two roads, the Canadian Pacific and the Canadian Northern? Practically 20,000 out of 34,000 trains, is it not?

Mr. Carter: How many trains do you see there at the bottom, two million trains?

Mr. Robertson: 5,949,635.

Mr. Sheean: Of the 34,888 trains which were on the road more than sixteen hours, pretty nearly 20,000 out of that entire territory were on the two Canadian roads?

Mr. Robertson: Yes, sir, that is right.

Mr. Sheean: So that the comparison that you made of the Union Pacific, was comparing it with all the roads, including the two Canadian roads, which together have more or pretty nearly two-thirds of all the cases in this Western movement?

Mr. Robertson: When I talk of the .59 and the .6 of one per cent, Mr. Sheean, as shown on Railroads' Exhibit No. 12, and compared it with the Union Pacific, that is what we did, but when you talk of 127 and 725 crews which were tied up to avoid the Sixteen Hour Law—

Mr. Park: When this statement was furnished to the Committee on Interstate Commerce, this law was not in effect?

Mr. Robertson: No, sir.

Mr. Park: And it indicates that—I was specializing on the hours of service at that time, keeping check of it, following it up.

Mr. Robertson: Yes, sir.

Mr. Park: And there has been no material change since.

Mr. Robertson: Well, there has been quite a material change.

Mr. Park: As to the Union Pacific?

Mr. Robertson: Yes, sir, as to the Union Pacific, if we are to consider the causes you give for exceeding the Sixteen Hour Law in your document. About 75 per cent of trains you claim were exceeding the Sixteen Hour Law because of meeting and passing trains, doing local work and switching.

Mr. Park: And the railroads have been double-tracked since that time, terminals changed, and automatic signals installed, and all of the refinements by which trains are enabled to get over the road better than they did at that time.

Mr. Robertson: I couldn't say as to that. That may be true, Mr. Park; I couldn't say.

Mr. Carter: Mr. Robertson, taking up the question of counsel for the railroads, he seemed to think that the Canadian Pacific and the Canadian Northern would change results greatly. I find here that there are 242,000 trains run on the Canadian Pacific and Canadian Northern out of how many trains run

altogether in freight service? The middle column 3,671,886; the difference—

Mr. Robertson: Yes, sir; that is right.

Mr. Carter: The difference would be 2,429,242, just 10 per cent of 2,429.

Mr. Robertson: Yes, sir.

Mr. Carter: By turning to sheet 2 of Railroad Exhibit No. 1 we find the mileage credited to the Canadian Northern and Canadian Pacific, as 7.9 per cent, that practically 8 per cent of the railroads contributed 10 per cent of the tie-ups; it is not such an awful reflection on Canada, after all, is it?

Mr. Robertson: No, sir.

Mr. Sheean: Don't they contribute about two-thirds of the tie-ups, 20,000 cases out of 34,000?

Mr. Carter: I am taking freight service.

Mr. Robertson: Freight service?

Mr. Sheean: Yes, but in column 5 you see that the Canadian Northern—

Mr. Carter: I think column 5 will make a better showing. I will give it to you.

Mr. Sheean: All right, take it.

Mr. Carter: Now, Mr. Robertson, you don't deny that the Union Pacific might make a splendid showing now, do you?

Mr. Robertson: No, sir.

Mr. Carter: But according to the Railroads' Statement, Exhibit No. 12, there are more trains now exceed the Sixteen Hour Law and are tied up under the Sixteen Hour Law than were shown as exceeding the Sixteen Hour Law in 1906—sixteen hour limit?

Mr. Robertson: The percentage is practically the same.

Mr. Carter: Well, I am combining the two.

Mr. Robertson: There is more.

Mr. Carter: The trains that exceeded the sixteen hour limit, and the trains that were tied up on the verge of exceeding sixteen hours?

Mr. Robertson: Yes, there are more; .4 of one per cent as against 1.19.

Mr. Carter: Now, if the Union Pacific can improve its condition, do you think that the other roads could improve their conditions, too?

Mr. Robertson: Yes, sir.

Mr. Carter: Do you think, Mr. Robertson, that if this Board paid engineers and firemen continuous time for being tied up, or time and one-half when trains were loaded down so the speed was less than ten miles an hour, it might tend to cure the evil and help the railroads?

Mr. Robertson: It might, yes, sir.

Mr. Carter: On the other hand, according to your computations, the railroads could not afford to set out two or three cars in 1901 and avoid payment of this continuous service because of the economic loss of setting out the cars?

Mr. Robertson: That is correct.

Mr. Carter: That is all.

The Chairman: Call your next witness.

T. V. BARB was called as a witness in rebuttal, and having been duly sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Stone: Mr. Barb, you have been associated with Mr. Lauck in the preparation of his exhibits, have you not?

Mr. Barb: Yes, sir.

Mr. Stone: How long has your experience and training been in this class of work?

Mr. Barb: About four years and a half.

Mr. Stone: Recently you have had charge of the transportation of information from, and the checking of the records of the five Western Railroads which we selected, have you not?

Mr. Barb: Yes, sir.

Mr. Stone: How long have you been engaged in this work?

Mr. Barb: Since February, 1911.

Mr. Stone: What have you accomplished, so far?

Mr. Barb: We have checked the payrolls, made transcriptions from the train sheets for two divisions of the Burlington, three divisions of the Great Northern, and all of the Omaha.

Mr. Stone: Are you still engaged in this work?

Mr. Barb: Yes, sir.

Mr. Stone: From this data which you have secured from the records of the various companies, you have, however, compiled the exhibit which you are now presenting, have you?

Mr. Barb: Yes, sir.

Mr. Stone: Mr. Chairman, we desire to present Exhibit S9, as prepared under the supervision of myself, and as presented by the witness Mr. Barb, who has had charge of the——

(The document so offered and identified was received in evidence, and thereupon marked "Employees' Exhibit No. S9, March 17, 1915.")

Mr. Stone: Mr. Barb, you are not an expert on operating conditions or schedules, are you?

Mr. Barb: No, sir.

Mr. Stone: In preparing this exhibit, when questions growing out of schedules or operating conditions arose, how have you handled them?

Mr. Barb: I had the advice of the Chairmen of the different roads.

Mr. Stone: That is, the members of the two organizations?

Mr. Barb: Of the two organizations; yes, sir.

Mr. Stone: As I understand it, then, you have had associated with you our General Chairmen for each road, and they have advised you as to the operating conditions and the interpretations of the schedules?

Mr. Barb: Yes, sir.

Mr. Stone: You don't claim personally to know anything about these matters?

Mr. Barb: No.

Mr. Stone: Just what is this exhibit designed to show?

Mr. Barb: The average speed per hour and the time on the road per trip.

Mr. Stone: I wish you would explain how it has been prepared.

Mr. Barb: The basic material has been taken from the train sheets, despatchers' train sheets for each trip, showing the class of service, the points to and from which the run is made, the tonnage in; the tonnage out; the crews out; the time departed; the time of arrival; and the total running time on the road; together with the number of the engine and the name of the engineer.

Mr. Stone: You have made summaries for the Great Northern and the C. B. & Q. and the Omaha Roads, have you not?

Mr. Barb: Yes, sir.

Mr. Stone: In addition to this, you have submitted detailed supporting data, as taken from the records of the Great Northern, have you?

Mr. Barb: Yes, sir.

Mr. Stone: Are you submitting at the present time detailed and supporting data for the C. B. & Q. and the Omaha Roads?

Mr. Barb: No, sir, I am not. That material has been held up by the printer, and will not be here until tonight or tomorrow morning, and if it is agreeable at that time, I can file copies with the Secretary of the Board.

Mr. Stone: If we do not get it in time, you desire to file these supporting data in detail, and supporting data with the Board for the other roads?

Mr. Barb: Yes, sir.

Mr. Stone: Please take up the summary for the Great Northern and go through it, pointing out in general what it shows.

Mr. Barb: Referring to page one of the exhibit, we find in the way freight service, Northern Division, a run from Cass Lake to Redland, a distance of 105 miles, showing an average for 27 trips of $8\frac{1}{2}$ miles an hour, and 12.3 hours on the road.

Mr. Byram: Mr. Barb, is that from the time the train starts until it gets in?

Mr. Barb: Yes.

Mr. Byram: It does not include any time at the terminal station, either way?

Mr. Barb: That is, at either end?

Mr. Byram: At either end.

Mr. Barb: No.

Mr. Byram: From the time it starts at its initial terminal until it arrives at its distant terminal?

Mr. Barb: Yes, sir.

Mr. Stone: Further over, Mr. Barb, you give that in detail, don't you? You give every run, and the tonnage, and all that goes with it.

Mr. Barb: This is simply a summary.

Mr. Stone: This is simply a summary on the first page?

Mr. Barb: Yes, sir.

Mr. Stone: You also go on with this first page?

Mr. Barb: In through freight service, Northern Division, Cass Lake to Redland, a distance of 105 miles, an average of 66 trips, shows an average of 12.8 miles per hour, and 8.2 hours in getting over the road.

From Redland to Cass Lake, the same distance, an average of 67 trips shows 8.4 miles per hour, and 12.5 hours per trip.

Mr. Stone: That is in through freight service?

Mr. Barb: That is in through freight.

Mr. Stone: So it is evident the return trip on that train from Redland to Cass Lake, is much longer than it is in the opposite direction on the same division.

Mr. Robertson: Yes, sir.

On the Willmar Division, the way freight service from Clear Water Junction to Willmar, a distance of 90 miles, an average of 27 trips made during the month of October shows 6.8 miles per hour, and 13.1 hours getting over the road.

Mr. Stone: That is on a 90 mile division?

Mr. Robertson: Yes, sir. As a matter of fact, that is on the time card as 8.6 miles per hour, and it is estimated or averaged that the train would make that, or should make that, in ten hours.

From Willmar to Breckinridge, 26 trips, shows 6.6 miles per hour, 16.9 hours per trip of 112 miles.

Mr. Stone: That is in way freight service?

Mr. Barb: That is in way-freight service, still in Willmar.

Mr. Stone: That is the return on the same division, as you understand it.

Mr. Barb: Yes, sir; 24 trips shows an average of 5.6 miles per hour, 19.9 miles per trip.

Then from Willmar to Clear Water Junction—that is Minneapolis—that is the yard at Minneapolis—27 trips shows 6.7 miles per hour, 13.5 hours per trip of 90 miles.

In through freight service from Como to Willmar, an average of 151 trips gives 11.2 miles per hour, 12.9 hours getting over the road of 99 miles.

Through freight service, Breckinridge to Willmar, an average of 192 trips gives 11.2 miles per hour, and 10 hours getting over the road of 112 miles.

Through freight service, Willmar to Como, an average of

177 trips, shows 10.3 miles per hour, 9.6 hours per trip of 99 miles.

Coming to Kalispell Division, way-freight service, Troy to Whitefish, an average of 20 trips, shows 8.3 miles per hour, 16.3 hours per trip of 135 miles.

In the way-freight service, Whitefish to Cutbank, 23 trips shows an average of 5.7 miles per hour, 22.7 hours per trip of 129 miles.

Cutbank to Whitefish, 28 trips shows an average of 7.2 miles per hour, 17.7 hours per trip of 129 miles.

Whitefish to Troy, a distance of 135 miles, an average of 22 trips shows 8.3 miles per hour and 15.4 hours per trip.

Through freight service, Whitefish to Troy, an average of 88 trips shows 11.3 miles per hour, 11.9 hours per trip of 135 miles.

Through freight, Troy to Whitefish, shows an average for 94 trips of 10.6 miles per hour, 12.8 hours per trip.

In through freight, Whitefish to Cutbank, an average of 114 trips shows 9.5 miles per hour, 12.9 hours per trip of 129 miles.

The through freight run, Cutbank to Whitefish, an average of 109 trips shows 10 miles per hour, 12.9 hours per trip of 129 miles.

Mr. Stone: Now, what is the summary on the Burlington, on page 2?

Mr. Barb: On page 2, the Burlington, Beardstown Division, the run from Beardstown to Rio in way-freight service, 26 trips during the month, shows 8.5 miles an hour and 11 hours getting over the road 94 miles.

That return trip, Rio to Beardstown, shows an average of 26 trips, 7.9 miles per hour, and 12.3 hours in getting over the road.

Beardstown to East St. Louis in the way-freight service, shows 9.6 miles per hour, 11.8 hours per trip.

Mr. Stone: Mr. Barb, are you sure about that 115 miles division? Is that what their train sheet shows? I think it was 111 miles.

Mr. Barb: I think you are right there. Back to East St. Louis is 111 miles.

Mr. Stone: To East St. Louis is 111 miles?

Mr. Barb: Yes, sir.

Mr. Stone: And it is two miles over into St. Louis by the time card. Is that the way you made the mistake?

Mr. Barb: Yes, I suppose so.

Mr. Byram: Wasn't the distance shown on the train sheet?

Mr. Stone: 113 miles, but I think that is to St. Louis proper, Mr. Byram. I think it is only 111 miles to East St. Louis.

Mr. Byram: The distance is always shown on the train sheet. I thought he might have gotten the figure correctly from the train sheet.

Mr. Stone: Well, he did. That is where he got it from.

Mr. Byram: The train sheet shows how many miles it is from each terminal and how many miles between each station.

Mr. Barb: Yes.

Mr. Byram: So it ought to be easy to get it correctly that way?

Mr. Barb: The way-freight runs from Beardstown to Litchfield, average of 27 trips, 7.0 miles per hour, 11.3 per trip. The distance is 79 miles. Litchfield to Beardstown, average of 27 trips, 7.5 miles per hour, 10.5 hours per trip, 79 miles. Through freight Centralia to Beardstown, an average of 162 trips shows 10.6 miles per hour, 12.9 hours per trip, distance 136 miles.

Mr. Byram: Mr. Barb, these are all way-freight trips but one, aren't they?

Mr. Barb: But one, yes, sir.

Mr. Byram: And the only through freight trip you say shows an average speed of 10.6 miles per hour?

Mr Barb: Yes, sir.

Mr. Byram: Did you tabulate or take off information for any other parts of the Burlington Railroad?

Mr. Barb: Do you mean other than this division?

Mr. Byram: Yes, sir.

Mr. Barb: Yes, sir; we have the Aurora Division.

Mr. Byram: Did you find anything there that could correspond with these figures?

Mr. Barb: Well, as a matter of fact we did not get to that.

Mr. Byram: How did you happen to select these particular divisions? You took the Aurora Division first, didn't you?

Mr. Barb: Yes, we took the Aurora Division first.

Mr. Byram: How did it happen, then, that you did not take

the Aurora Division, but the Beardstown Division, which you tabulated afterwards?

Mr. Barb: On the Beardstown Division we had the train sheet data. We did not take that for the Aurora Division.

Mr. Byram: What did you take for the Aurora Division?

Mr. Barb: We checked the time slips of the men, the pay-rolls.

Mr. Stone: I think I can make that explanation, Mr. Chairman. The instructions were to the committee who were working on these train sheets: First, I wanted them to run through the way freights for the entire system. Next, I wanted them to take up the heaviest tonnage division that they could find, and where I thought perhaps the longest hours would be, and see what they found there. And there has been so much of it, and the time has been so short that we have not had time to go into it in detail as we would like to. I wish it were only possible here to make it up by each division for the entire system of this road.

Mr. Byram: Well, Mr. Stone, this represents the worst condition that you found on the Burlington?

Mr. Stone: No, I wouldn't say that.

Mr. Byram: You said your instructions to the committee were to find the division that had the heaviest tonnage, where the conditions would be most likely to be most unfavorable.

Mr. Stone: I told them to find the division that had the heaviest tonnage. I don't know whether this is the heaviest tonnage division or not.

Mr. Byram: Yes, sir, it is.

Mr. Stone: I naturally supposed that the Beardstown division, where the coal was, would be the heaviest division.

Mr. Byram: Yes, it is. That is, Beardstown is not as a whole, but from Centralia to Beardstown is the heaviest tonnage on the Burlington where the through freight is shown. That is the heaviest tonnage we have anywhere.

Mr. Stone: Well, Beardstown to Centralia, is that the heaviest you have?

Mr. Byram: No, the other way, the way you have it here, Centralia to Beardstown, the way the coal moves. The cars go empty the other way.

Mr. Stone: What did you find on the Omaha Railway?

Mr. Barb: On the Omaha, on the Eastern Division, way

freight, Elroy yards to Altoona, an average of 27 trips shows 9.2 miles per hour and 11.5 hours per trip of 105 miles. Way freight service Altoona to East St. Paul, 27 trips, shows 6.9 miles per hour, 12.6 hours per trip of 87 miles. Way freight service, East St. Paul to Altoona, number of trips 27—

Mr. Stone: I don't think I would bother reading all that. I would go right down and show the average miles per hour and the average miles per trip. Just read the column right down so they can get a general idea of the average mileage and the average hours, instead of reading it in detail.

Mr. Barb: Well, running down the column for the miles per hour we find: 6.7, 8.2, 8.8, 8.0, 8.3, 7.8, 6.6, 4.7, 6.3, 6.3, 7.9, 10.5, 6.5, 4.3, 6.4, 13.0, 14.0, 10.7, 8.9, 9.7, 10.5, 7.4, 8.8, 6.8, 8.4, 7.3, 9.7, 6.7, 8.3, 9.6 and 9.0. The average hours per trip run 11.5, 12.6, 12.9, 12.15, 11.2, 12.1, 10.5, 12.6, 12.8, 12.1, 13.5—

Mr. Stone: There, Mr. Barb. And, with but two exceptions, all of those divisions are less than 100 miles in length?

Mr. Barb: Yes, all those.

Mr. Stone: Down to there?

Mr. Barb: Yes. 9.9.

Mr. Stone: That is on a 62 mile division?

Mr. Barb: That is on a 62 mile division, yes, sir. 9.1 on 72 miles. 12.7 on 134 miles. 13.6 on 89 miles. 13.1 on 57 miles. 12.7 on 82 miles. 12.2, 10.4, 13.6, 13.1, 12.1, 11.2, 12.6, 10.6, 12.3, 10.0, 13.2, 8.7, 12.7, 11.7, 8.8, 11.3.

Mr. Stone: And the result of it is that runs of an average time on duty of less than 10 hours are the exceptions, and not the rule?

Mr. Barb: Decidedly so, yes, sir.

Mr. Stone: But 11 and 12 hours is quite common?

Mr. Barb: Yes, sir.

Mr. Stone: And 13 not unusual?

Mr. Barb: Yes, sir.

Mr. Stone: Now, take up your Great Northern and see how these fellows manage to stay on duty so long.

Mr. Byram: Just a minute, Mr. Barb, before you leave this.

Mr. Barb: Sure.

Mr. Byram: In this statement here it says that these way freight trains make small rate per hour. It is generally true

that they have a short mileage to run, isn't it, also? They generally run less than 100 miles?

Mr. Barb: Well, on the Omaha?

Mr. Byram: Way freight, yes. Usually they are less than 100 miles?

Mr. Barb: Yes, on the Omaha they are less.

Mr. Byram: Do you know anything about the schedules? Do you know whether these runs, a day's pay, whether they run 100 miles or less?

Mr. Barb: I am not acquainted with the schedule.

Mr. Byram: Then these way freight runs are usually paid on the hourly basis, apparently?

Mr. Barb: It would seem so; yes.

Mr. Byram: And the crews work anywhere from 10 to 12 or 13 hours per day?

Mr. Barb: Well, from this I couldn't tell how long they work. This is only the running time.

Mr. Byram: All right. They are on the road, then?

Mr. Barb: Yes.

Mr. Byram: Ten to thirteen hours a day?

Mr. Barb: Yes.

Mr. Byram: Although they run less than 100 miles all the way through, don't they?

Mr. Barb: Yes, sir; exactly.

Mr. Stone: Pardon me, Mr. Byram.

Mr. Byram: I am through.

Mr. Stone: Mr. Barb, on that Eastern Division it looks like the time freight is on an hourly basis, too, by the averages. Or the through freights. They are the 11.2, 12.1, 10.5, 12.6, and none of those divisions are over 100 miles.

Mr. Barb: No. Well, 8.8 is the highest speed attained on a through freight in the average.

Mr. Sheean: You don't bring them back the other direction there, do you?

Mr. Stone: How is that, Mr. Sheean?

Mr. Sheean: You take the through freight in one direction there?

Mr. Stone: No, I took four of them, from Altoona to Minneapolis and Minneapolis to Altoona.

Mr. Sheean: But on that freight at the bottom, which one did you refer to?

Mr. Barb: That is the Eastern Division.

Mr. Sheean: Altoona to Minneapolis, and Minneapolis to Altoona?

Mr. Barb: Yes.

Mr. Sheean: Yes.

Mr. Stone: East St. Paul to Altoona, Minneapolis to Altoona. Now, you have got Minneapolis twice in there, have you not?

Mr. Barb: Yes.

Mr. Sheean: I don't want to cross-examine, Mr. Stone, but I want to ask this one question about this page 1. You have taken, following the general suggestion of Mr. Stone,—and there are 1282 trips shown here?

Mr. Barb: About that, yes.

Mr. Sheean: And those are selected on that road, on the Great Northern, 1282 trips out of a total of about 10,000 trips shown on the train sheets that you examined?

Mr. Stone: No.

Mr. Barb: Well, no.

Mr. Sheean: Well, the train sheets for that month, as shown by our exhibit?

Mr. Stone: No, he did not examine all the train sheets for that month.

Mr. Barb: No, sir.

Mr. Sheean: No, but our exhibit covering that month shows that there were about 10,000 trains in through and local freight service, operating on the Great Northern System?

Mr. Park: Perhaps. I don't know what those figures are.

Mr. Stone: And he has only been able, in the short time at his disposal, to check these four divisions shown on the Great Northern?

Mr. Sheean: Well, these are not all the trains on those divisions, by any means.

Mr. Stone: I should hope not.

Mr. Sheean: Well, not either in through or way freight, on those particular divisions, are they?

Mr. Barb: All the trips in way freight service, in that direction, for that month, are given.

Mr. Stone: But I imagine it would taste good to that fellow on the Kalispell Division there, between Whitefish and Cutbank, to read what the average shows in the Managers' Exhibit, that he went over the road in less than ten hours; that for twenty-three trips that was his average. Anything further on this, Mr. Sheean?

Mr. Sheean: No, that was all.

Mr. Stone: Turn over to the Great Northern, Mr. Barb, on page 7. Now, I understand that these hours as shown are the hours between terminals. It would be much greater if you added the time before leaving and the initial and final terminal delay, would it not?

Mr. Barb: Yes, sir; this is the time shown on the despatcher's train sheet.

Mr. Stone: From the time the train departed until the time the train arrived?

Mr. Barb: Yes, sir.

Mr. Stone: So you can safely add at least three hours to that for every trip, if you want to get the actual time a man served—two hours anyway.

Mr. Barb: Well, yes. It would vary in a good many cases. He does considerable switching before leaving or after taking his train in, in many cases. That time is not shown here at all.

Mr. Stone: Now, take up this page 7. I see here you give the number of the train, where from and where to, and the tonnage, number of cars, time departed, arrived at destination, the name of the engineer and the engine number.

Mr. Barb: Yes, sir.

Mr. Stone: So there will be no trouble to check it up, if there is any question about it?

Mr. Barb: No; it can be identified very easily on the train sheet.

Mr. Stone: And if I get it correctly, all shown on this page 7 here, the average miles per hour were 8.5.

Mr. Barb: Yes, sir.

Mr. Stone: And the average hours per trip were 12.3?

Mr. Barb: Yes, sir.

Mr. Stone: I note there you have several—one or two tie-

ups. When a crew is tied up out on the road, between terminals, did you deduct the time?

Mr. Barb: Yes, sir.

Mr. Stone: And you simply computed the running time between terminals?

Mr. Barb: That is right.

Mr. Stone: Deducting the time for rest?

Mr. Barb: That is right; yes, sir.

Mr. Stone: In none of this exhibit is there any allowance made for the time the crew was resting?

Mr. Barb: That is all deducted out.

Mr. Stone: All time, whether tied up for rest, or breakdown, or whatever the cause was, whenever there was any time of any length consumed, it was deducted?

Mr. Byram: What is meant by "regular trains," on pages 8 and 9 of this exhibit?

Mr. Barb: That is a typographical error there. It should not be "regular trains." It is simply trains west.

The Chairman: What did you say it should be?

Mr. Barb: Simply trains west.

Mr. Byram: It don't say what kind of trains?

Mr. Barb: Well, the train number and the class of service at the left will show whether it is an extra.

Mr. Byram: I see some of them are "T. F." and some are "F." What is the difference between the two?

Mr. Barb: They are all through freight.

Mr. Byram: That is all.

Mr. Stone: I guess it was got together so fast that you did not get a chance to proof read it hardly, did you?

Mr. Byram: We will have him proof read it now.

Mr. Stone: Only got it this morning at 10 o'clock. All right, Mr. Barb, go ahead.

Mr. Barb: On page 7, we have a way freight run of 105 miles. Glancing down the column time of run, we see 11 hours and 55 minutes; 10 hours and 35 minutes; 11 hours and 10 minutes; 14 hours and 30 minutes; 13 hours and 35 minutes.

Mr. Stone: There is no use reading all of that, Mr. Barb. Just the average trips—average hours per trip.

Mr. Barb: The average hours for this run shown is 12.3 hours per trip and 8.5 miles an hour.

Mr. Stone: Now, take up your next page; and you don't get the average on that, until you get over to page 10, do you?

Mr. Barb: Well, that is all the through freight, either time card freight or extra freight.

Mr. Stone: They made pretty good time there?

Mr. Barb: 12.8, yes, sir.

Mr. Stone: Well, take up your next division, beginning on page 11. The Northern Division, is it?

Mr. Barb: Well, all of this first is Northern Division, Mr. Stone.

Mr. Stone: I see. This is trains east?

Mr. Barb: Yes, sir.

Mr. Stone: They seem to be a longer time, coming east, than they do going west.

Mr. Barb: They show an average of 8.4 miles per hour and 12.5 hours getting over 105 miles.

Mr. Stone: Well, now, taking up the Willmar Division.

Mr. Barb: On the Willmar way freight runs, the way freight run from Clear Water Junction to Willmar, 90 miles, shows an average of 6.8 miles per hour, 13.1 hours on the road.

Mr. Stone: Per trip?

Mr. Barb: Per trip; yes, sir.

Mr. Stone: Well, what does it show, coming east on that same division—the next page, page 15?

Mr. Barb: Well, it is a different run. That is way freight, Breckenridge to Willmar.

Mr. Stone: Well, it is a different distance.

Mr. Barb: Yes, sir.

Mr. Stone: Well, what does it show?

Mr. Barb: That shows an average miles per hour of 5.6; average hours per trip of 19.9.

Mr. Stone: How could they be 19.9 hours on the trip, under the Federal law?

Mr. Barb: Well, the notes are carried on that on page 16; tied up for rest. Well, generally at Morris, they are relieved at Morris and the time at Morris, 8 or 10 hours, whatever it happened to be, is deducted.

Mr. Stone: Well, on your reference on 16, for the table shown on pages 14 and 15—take, for example, that No. 1. Do I understand that he tied up twice between terminals?

Mr. Barb: Yes, sir; that is right. He arrived at Morris at 4:15 P. M.; he left at 6:20 A. M., getting into Benson at 11:15 A. M., and left at 5:45 P. M. Evidently had engine trouble there, because he changed his engines.

Mr. Stone: But is it quite common to tie up, going over that division, from the looks of these foot notes?

Mr. Barb: Yes, almost every trip is a tie-up.

Mr. Stone: And the average hours that you show, per trip, are 19.9 hours?

Mr. Barb: Yes, sir; that covers an average of 67 trips made over that stretch.

Mr. Stone: Sixty-seven trips. So it was not just one trip?

Mr. Barb: Sixty-seven trips.

Mr. Stone: Sixty-seven trips in that month. Lacked one-tenth of being 20 hours. Well, what do we find on page 17? What is your average there?

Mr. Barb: There, the run is 112 miles. We have 6.6 miles per hour and 16.9 hours per trip.

Mr. Stone: I see by the footnotes on page 18, that you had a great number of tie-ups under the law, on that division?

Mr. Barb: Yes, sir.

Mr. Stone: Well, if this is a fair indication of the business in October, 1913, and it is much better than it used to be, what do you suppose it was a few years ago?

Mr. Barb: I have no idea what it could have been then.

Mr. Stone: And page 19 is——

Mr. Barb: That is way freight.

Mr. Stone: Same division, trains east.

Mr. Barb: Trains east. Willmar to Clear Water Junction, they show an average speed of 6.7 miles and average time of 13½ hours for getting over 90 miles?

Mr. Stone: What is the distance?

Mr. Barb: Ninety miles.

Mr. Stone: Pages 20, 21, 22, 23 and 24 are the same divisions continued?

Mr. Barb: All extra or time card freights.

Mr. Stone: Extra or time freights.

Mr. Barb: Yes, sir.

Mr. Stone: No way freights in those?

Mr. Barb: No, sir.

Mr. Stone: Then it is safe to assume this is through freight service?

Mr. Barb: All through freight.

Mr. Stone: And the average for all these—

Mr. Barb: Is 7.6 miles per hour.

Mr. Stone: And from the looks of this foot note on page 25, it would look like they had some one tied up every day?

Mr. Barb: Well, all of those foot notes do not refer to tie-ups. They are mostly double headers. Those trains are pretty heavy, running over that stretch, and they are mostly double headers.

Mr. Stone: And what have you on pages 26 and 27?

Mr. Barb: Pages 26, 27, 28, 29, 30 and part of 31 show the through freight runs from Breckinridge to Willmar, a distance of 112 miles; give an average speed of 11.2 miles, average time of 10 hours.

Mr. Stone: That is evidently the best division you have shown?

Mr. Barb: Yes, sir.

Mr. Stone: They did have a number of tie-ups on that division?

Mr. Barb: Yes, sir.

Mr. Stone: And what have you on page 32?

Mr. Barb: We have a run, Willmar to Como—pages 32, 33, 34, 35 and 36. They show an average speed of 10.3 miles and 9.6 hours per trip of 99 miles.

Mr. Stone: Now, turn over to page 38 and get out in the mountain territory on the Kalispell Division.

Mr. Barb: Way freight run, Troy to Whitefish, a distance of 135 miles, shows **an average speed of 8.3 miles** and an average time of 16.3 hours.

Mr. Stone: And it is very evident that they tie-up quite a number of times, between terminals, by the foot note on page 39.

Mr. Barb: A good many times, yes, sir.

Mr. Stone: Page 40 is the same way freights between Whitefish and Cutbank.

Mr. Barb: Yes.

Mr. Stone: That is where the hours do get on.

Mr. Barb: A distance of 129 miles, shows an average speed of 5.7 miles and average time of 22.7 hours.

Mr. Stone: That is for how many trips?

Mr. Barb: That is for 27 trips.

Mr. Stone: So it was not one trip that the time averaged 22.7, but it is the average of 27 trips.

Mr. Barb: Yes, sir; you will note that on the third, for instance, we ran into the fifth—5 o'clock in the afternoon of the fifth before he got into Cutbank. The actual time for leaving Whitefish, until he arrived at Cutbank, was 51 hours. We show 23 hours deduction there, for rest, and whatever that time may have been consumed, giving 27 hours and 47 minutes running time.

Mr. Stone: Fifty-one hours on each division?

Mr. Barb: 129 miles.

Mr. Sheean: That was with 10 loaded and 2 empty cars?

Mr. Barb: No, he started out with 2 loaded and 90 empties.

Mr. Sheean: I was referring to the first one on the list. Perhaps you are talking about some other one.

Mr. Barb: I was talking of the one on the third.

Mr. Sheean: The first one in that month, starting out from Whitefish with 10 loaded and 2 empty cars, arriving at Essex at 5 P. M. on the first. Now, what distance is that, do you remember—getting to Essex at 5 P. M.?

Mr. Barb: I don't know. We have the time cards here.

Mr. Stone: About 58 miles—something like that.

Mr. Sheean: Then left Essex at 8.55 the next morning, and tied up at Browning at 8.55 P. M. How far is it from Essex to Browning?

Mr. Stone: Fifty miles.

Mr. Sheean: And then on the third, from 8.49 A. M. to get in the rest of the distance?

Mr. Barb: Yes, sir.

Mr. Sheean: Well, now, that was due to work en route, evidently, was it not, rather than tonnage?

Mr. Barb: In way freight service, probably—yes, sir.

Mr. Sheean: That man, in starting out on that particular trip, with 10 loaded cars and 2 empty cars—what is the leaving time there? I don't get that.

Mr. Barb: Ten o'clock.

Mr. Sheean: Left at 10 o'clock in the morning. Well, he tied up at 5 in the afternoon, at Essex, and then stayed at Essex until 8:55 the next morning.

Mr. Barb: Yes, sir.

Mr. Sheean: And went on from 8:55 in the morning, until 8:55 in the evening, covering 50 miles in the meantime?

Mr. Barb: Yes, sir.

Mr. Sheean: Page 40, a foot note, Mr. Burgess. I was just trying to see if I followed it.

Mr. Stone: It is a fact, Mr. Sheean, it is quite common for them to tie up at Essex, because that is about the only available place they can tie up. They can care for the engine.

It is quite common for them to be two days making the trip.

Mr. Sheean: While that is shown as time on the run of 20 hours and 41 minutes, it would seem that the way that he was making the run was starting out at 10:30 in the morning and running until 5, and then tying up and leaving there the next morning at 9; then tying up again at some other point that night, and then going on the third day on his trip. That is the way those 20 hours on the run are split up.

Mr. Stone: If we did not deduct out the rest time, it would have been 51 or 52 hours.

Mr. Sheean: How many days' pay did he get on that?

Mr. Stone: He ought to have been paid for a whole month. I don't know what he got. I suppose he was paid for three days probably.

Mr. Sheean: That is split up on three days. The total time in making this short run was 20 hours and 41 minutes, but that total time of 20 hours and 41 minutes was split up into three days, for which he received three days' pay.

Mr. Stone: That is the train sheet time.

Mr. Sheean: That is three days, something less than a 7 hour day, each time, if you average the three.

Mr. Barb: Well, now, that is only his running time. How much time he put in, switching at Whitefish, at Essex, or at Browning, or at Cut Bank, we couldn't determine from the train sheet.

Mr. Sheean: Well, if he did any switching there he was paid extra for it, was he not?

Mr. Barb: Well, whatever the agreement is. I don't know what the schedule is.

Mr. Stone: Only a few roads that do pay initial terminal delay, but if you would read the company's exhibit over there, where his average speed was so much, it tasted good to that fellow after he got in on the morning of the third day.

Mr. Sheean: I should think on this sort of a run, Mr. Stone, from 10:30 in the morning until 5 in the afternoon, making 50 miles, then starting out the next morning at 9 o'clock, then on the third morning, starting out at 8:49 again and drawing three days' pay for it—

Mr. Stone: He only had to rent a bed three times on that one trip; that was all, and he bought about nine meals away from home on that trip. The train is carded right through from Whitefish to Cutbank, leaving at 6 A. M. and due to arrive at 6 P. M.; not weekly, but every day. All right, Mr. Barb; go ahead.

Mr. Barb: On the 22nd, we have another case of three tie-ups consuming in all, 51 hours and 15 minutes, but a deduction is made of 23½ hours, showing him 27 hours and 45 minutes on the road.

Mr. Stone: In how many hours—53½ hours between terminals?

Mr. Barb: 51 hours between terminals.

Mr. Sheean: Is that the run shown on this foot note? What is that foot note?

Mr. Barb: Footnote No. 19.

Mr. Sheean: Well, that was split up into three different days, for which he drew three days' pay too, didn't he, the same as shown by this foot note?

Mr. Stone: Yes.

Mr. Barb: Practically.

Mr. Stone: With but few exceptions, they tied up every trip on this run, did they not—almost every trip?

Mr. Barb: Almost every trip, yes, sir.

Mr. Stone: All right. Go on to the next one. I want to get through, Mr. Barb, if I possibly can.

Mr. Barb: On the run from Cutbank to Whitefish, in way freight service, we find the conditions practically the same—not quite as many tie-ups.

Mr. Stone: But the average hours per trip is 17.7 hours.

Mr. Barb: Yes, sir; for 129 miles.

Mr. Stone: Twenty-seven trips?

Mr. Barb: Twenty-seven trips.

Mr. Stone: And it was quite common to tie up and be three days going over the road for several of them?

Mr. Barb: Yes, sir.

Mr. Stone: What is the length of this division?

Mr. Barb: One hundred and twenty-nine miles.

Mr. Stone: It is carded right through on the card. Supposed to make it in one day?

Mr. Barb: Supposed to, yes, sir.

Mr. Stone: All right. Go ahead. Page 44.

Mr. Barb: Page 44, we have the way freight run, Whitefish to Troy.

Mr. Stone: Is it way freight or through freight?

Mr. Barb: On 44 is way freight. It shows an average speed of 8.3 miles and average time of 15.4 miles, over 135 miles.

Mr. Stone: They tied up almost every trip—a large majority of the trips, at least?

Mr. Barb: At least half of them.

Mr. Stone: And you have a few places where they tied up for the three days?

Mr. Barb: Yes, sir.

Mr. Stone: All right. Pass on.

Mr. Barb: On 46, 47 and 48 we have the through freight runs from Whitefish to Troy, showing an average speed of 11.3 miles, and an average time of 11.9 hours, over 135 miles.

Mr. Stone: And yet there were numerous cases where they tied up, during the month of October?

Mr. Barb: Many cases, yes, sir.

Mr. Stone: And quite a number of cases, even in the through freight service?

Mr. Barb: Page 50 shows the through freight run, from Troy to Whitefish—pages 50, 51 and 52, giving an average speed of 10.6 miles and average time of 12.8 hours, over 135 miles.

Mr. Stone: And the footnote on page 53, which shows there were many tie-ups on that division.

Mr. Barb: Yes, sir.

Mr. Stone: All right. Take up your next one.

Mr. Barb: Pages 54, 55, 56 and 57 show the through freight run from Whitefish to Cutbank. That gives an average of 9.5 miles an hour and 12.9 hours per trip of 129 miles.

Mr. Stone: And it still shows numerous tie-ups on page 58, footnote?

Mr. Barb: Yes, sir.

Mr. Sheean: The tonnage on this division seems to run all the way from 1,200 to 2,300 at different times through the month. 1,250, not infrequently, and at other times 2,300, on different days. Is that pretty general on these different districts—variations in tonnage of that sort?

Mr. Barb: It seems to be, yes, sir.

Mr. Stone: This tonnage is taken direct from the train sheet itself?

Mr. Barb: Yes, sir.

Mr. Stone: You don't know what the tonnage rating of that type of engine is, do you?

Mr. Barb: No, I do not. I think the average tonnage—

Mr. Stone: The average tonnage runs pretty close, Mr. Sheean, on pages 56 and 57.

Mr. Sheean: I was looking at 54 at the time, Mr. Stone. There seem to be clear down to 1,250 and then up to 2,400.

Mr. Stone: Only a few below 2,000. Most of them are about 2,000 tons. The large majority is above 2,000.

Mr. Sheean: Possibly.

Mr. Stone: All right. Go ahead.

Mr. Barb: Pages 59, 60, 61 and 62 show the through freight runs from Cutbank to Whitefish, giving an average of 10 miles per hour and 12.9 hours per trip of 129 miles.

Mr. Stone: And there are quite a number of tie-ups on that division?

Mr. Barb: A good many.

Mr. Stone: Now, it is very evident that there are a few trains that are long hours and that are tied up between terminals down in the States as well as in Canada, is it not? These are all in the States.

Mr. Barb: Yes, sir.

Mr. Stone: You show none of the Great Northern lines in Canada?

Mr. Barb: None at all; no, sir.

Mr. Stone: That is all.

CROSS EXAMINATION.

Mr. Sheean: On this summary on the Great Northern, I think you said that where you showed the way freight, you showed all the way freights in that month on that particular run?

Mr. Barb: Yes.

Mr. Stone: Showed it in both directions, in each case?

Mr. Barb: Well, the direction is given here. The Northern Division, Cass Lake to Redland.

Mr. Sheean: Then you don't show anything from Redland to Cass Lake?

Mr. Barb: No, that has not been prepared. I can give you those figures.

Mr. Sheean: I was wondering whether you can tell us in a general way whether they get back any faster?

Mr. Barb: They get back at the rate of 7.3 miles per hour, an average of 14.4 hours per trip.

Mr. Sheean: On that Redland-Cass Lake return?

Mr. Barb: Yes, sir; 8.5 against 12.3.

Mr. Sheean: Now, on the next run on the Northern Division, you take the through freight from Cass Lake to Redland?

Mr. Barb: Yes, sir.

Mr. Sheean: And Redland to Cass Lake. Do you show all the through freight trains for that month?

Mr. Barb: Yes, sir.

Mr. Sheean: Then that is the only through freight run that you show on the entire Northern Division of the Great Northern Railroad?

Mr. Barb: Yes; that is the principal main line run, as I understood it.

Mr. Sheean: Then, on the Willmar Division, you show four way freights. Those are all the way freights on that division?

Mr. Barb: That is all on the main line, yes, sir, on the run between those two points.

Mr. Sheean: Is that all on that division?

Mr. Barb: There are branch lines that are not shown.

Mr. Sheean: No branch lines anywhere?

Mr. Barb: No branch lines.

Mr. Sheean: In none of the comparisons here, have you shown any of the way freights on branch lines.

Mr. Barb: I would not say in none of them. I don't remember. But it was our object, as a rule, to take main line runs only.

Mr. Sheean: And that generally is the case throughout; no mixed trains on any service in branches at all?

Mr. Barb: No.

Mr. Sheean: Are these all of the way freights, as you understand it, on the Willmar Division?

Mr. Barb: Well, no. There are branch lines that are not shown here, but the one from Clear Water Junction to Willmar is shown complete. Every way freight made that month is shown in this table, and from Willmar to Breckinridge, same case; Breckinridge to Willmar and Willmar to Clear Water Junction.

Mr. Sheean: Those are all the main line way freights as you understand it?

Mr. Barb: Yes; they are the main line freights.

Mr. Sheean: Then, on that division, you show three through freights, Como to Willmar, Breckinridge to Willmar and Willmar to Como?

Mr. Barb: Yes, sir.

Mr. Sheean: Have you the time freights from Willmar to Breckinridge?

Mr. Barb: I think probably I have. They haven't been set up though.

Mr. Sheean: Have not set them up?

Mr. Barb: No.

Mr. Sheean: Now, out of a total of something like 4,000 way freights, you have shown 300 of them on that road?

Mr. Barb: Well, 4,000 covers the entire system.

Mr. Sheean: Yes.

Mr. Barb: Well, I have shown for the three divisions that we have checked.

Mr. Sheean: And on the exhibit introduced here and the data that is before you, if the analysis was correct, there are about 3,936 way freight trips which were made in that month, of

which you show the result as to 300 and what—something like 300 way freight trips?

Mr. Barb: Not quite that many, I guess.

Mr. Sheean: Well, the total is shown here, as to just how many trips were counted?

Mr. Barb: Yes.

Mr. Sheean: And on this Kalispell-Troy, you have a total number of twenty trips in way freight. That was all the way freight trips made in that direction, that month?

Mr. Barb: Well, no. Referring to that page you will find that there were so many tie-ups there, that the trains were annulled. For instance, the train leaving Troy would fall back on the time of the train running the next day. Consequently, when the train on the second day reached that point, it was annulled, and the train continuing would do this work, this way freight work. So in our averages, we used only complete trips.

Mr. Sheean: And which one of those trips did you take as the complete trip, the one that was annulled and men paid up to that time?

Mr. Barb: We took the man who started the first trip, the one who ran all the way through. He would leave, sometimes, as much as eight hours before the man behind him was due in there. And then, of course, he was doing all the way freight work, and he would leave nothing for the following man to take up.

Mr. Sheean: And where the train on the second day came out and went on on its own time, on the second day, you treated that as the continuous trip that started on the day before?

Mr. Barb: Yes. The crew in most cases carried that same train through. We would follow that crew right on through the trip.

Mr. Sheean: Let me see if I follow you on that. Leaving this particular point, where is this, Kalispell?

Mr. Barb: Yes, Troy, and Whitefish.

Mr. Sheean: I start out this morning, and there is an intermediate point. Where is this intermediate point on that run?

Mr. Barb: Well, Rexford.

Mr. Sheean: Rexford.

Mr. Barb: That is one of the intermediate points?

Mr. Sheean: Well, I start out this morning and get out to

Rexford at 5 o'clock this afternoon, and tie up. You start out tomorrow morning and overtake me at Rexford?

Mr. Barb: Well, I might overtake you there.

Mr. Sheean: Well, then that was the case that you speak of here, the train annulled from Rexford on, was it?

Mr. Barb: Yes, sir, the second train, in that case.

Mr. Sheean: Yes. Then you ignore my trip out there, and count the trip simply of you starting out today, carrying through to the terminal?

Mr. Barb: In making our averages, yes.

Mr. Sheean: And being completely on duty during all of that time?

Mr. Barb: Well, except for deductions for rest, for tie-ups, break-downs, or something of that sort.

Mr. Sheean: Yes.

Mr. Stone: But, Mr. Sheean, the run is started right through from Troy to the other points?

Mr. Barb: Yes.

Mr. Stone: Rexford is not a division point at all. It is just a station half way over the division. The train is carded right through from one point to the other, and the card time is five hours.

Mr. Sheean: I was wondering how he got the number of twenty. Is that also how you got 23 from Whitefish to Outbank?

Mr. Barb: Yes, we counted only the complete trips, giving us the full mileage in making up that average.

Mr. Sheean: And the mileage between the terminals was divided by the total time on duty?

Mr. Barb: Exactly.

Mr. Sheean: Even though split up by three different days, and three days' pay allowed for it?

Mr. Barb: The total time running, as shown by the time sheets.

Mr. Sheean: Well, now, as the net result of this selected number of way freight runs, they are practically all paid on the hourly basis, aren't they?

Mr. Barb: Well, this would seem to show that, yes, sir.

Mr. Sheehan: And on the time freights, you have one, two, three, four, at the bottom, all of the time freights except one,

which is on the speed basis, and averaged 9.5 miles an hour, all of them are ten miles an hour or better, on the Kalispell Division?

Mr. Barb: Yes.

Mr. Sheean: Let me see, you found just one through freight, Como to Willmar, that was less than ten miles—and also Redland to Cass Lake, those two that were less than ten miles an hour through the month, in through freight? Averaged that through the month, I mean?

Mr. Barb: Yes, that is what is shown here.

Mr. Sheean: And on that Redland to Cass Lake, the return run from Cass Lake to Redland was made at an average speed of nearly thirteen miles an hour in the other direction, over the same division?

Mr. Barb: Yes.

Mr. Sheean: So that the net result of all this is that practically all of the way freights are on a basis of less than ten miles per hour?

Mr. Barb: Yes.

Mr. Sheean: And practically all of the through freights are on a basis greater than ten miles an hour?

Mr. Barb: Well, I don't know. That would have to be checked up.

Mr. Sheean: Well, put it all except two, then. The only through freights that you show here on the Northern Division are between Cass Lake and Redland, and Redland and Cass Lake, are they not?

Mr. Barb: Yes, sir.

Mr. Sheean: In one direction you show the average speed is 8.4 miles and on the opposite direction, over the same division, 12.8 miles.

Mr. Barb: Yes, sir.

Mr. Sheean: So that you have the through freight in one direction there, below 10 miles an hour?

Mr. Barb: Yes, sir.

Mr. Sheean: Then you have the run between Como and Willmar, less than 10 miles an hour?

Mr. Barb: Yes, sir.

Mr. Sheean: While from Willmar to Como it is 10.3 miles per hour.

Mr. Barb: 10.3; yes, sir.

Mr. Sheean: Then all of the through freights shown on the Kalispell Division, except one, are above 10 miles per hour, out of the four shown here?

Mr. Barb: Well, that runs in four runs.

Mr. Sheean: Well, they are the only four runs you show on that division, through freight, aren't they?

Mr. Barb: Yes.

Mr. Sheean: Well, put it this way: three out of the four runs which you show in through freight on the Kalispell Division are at a speed basis greater than ten miles per hour, and the one which is below ten miles per hour averaged in that month 9.5 miles per hour?

Mr. Stone: What page are you on, Mr. Sheean?

Mr. Sheean: Page 1.

Mr. Barb: That is page 1 of the Exhibit.

Mr. Sheean: The summary of it all. On the Willmar Division you show three through freight runs. That is correct, isn't it?

Mr. Barb: That is right; yes, sir.

Mr. Sheean: And two of those through freight runs are on a speed greater than ten miles an hour?

Mr. Barb: Yes, sir.

Mr. Sheean: On the Northern Division you show two through freight runs?

Mr. Barb: Yes.

Mr. Sheean: Between the same two points?

Mr. Barb: Yes.

Mr. Sheean: In one direction it averaged 8.4, and coming back in the other direction it averaged 3.8.

Mr. Stone: How do you get two freight runs when there are 66 trips one way and 67 the other?

Mr. Sheean: Well, between two points, is what I mean.

Mr. Stone: Oh, well, that is different, between two freight runs.

Mr. Sheean: Well, put it in that way. Between two points, the only ones that are shown on the Northern Division are between Cass Lake and Redland, and Redland and Cass Lake.

Mr. Stone: But there are sixty-seven trains shown one way and sixty-six the other?

Mr. Sheean: Yes, and averaging, or taking those 133 trains, the average speed of all those trains was over ten miles an hour, was it not?

Mr. Stone: No.

Mr. Sheean: On that freight district?

Mr. Stone: No.

Mr. Sheean: Oh, well, let us see whether it was or not.

Mr. Stone: No.

Mr. Sheean: Well, let us see. Let us ask Mr. Barb whether it was or not. 133 trains there shown on that division? Was their average speed greater than ten miles per hour?

Mr. Stone: In one way they were.

Mr. Sheean: In both ways. Take the 133 trains, 66 in one direction and 67 in the other, and did those 133 trains on that district average a speed better than ten miles an hour, in that month?

Mr. Stone: Sixty-six of those averaged 8.4. How could they average a speed better than 10 miles?

Mr. Sheean: I asked about the average of 133.

Mr. Stone: No, you want to make an average of averages, which does not mean anything.

Mr. Sheean: No, I do not at all. You have the total time of the sixty-six trains, that is given you by multiplying by 12.8.

Mr. Barb: Yes, that would give you the total of it.

Mr. Sheean: And you take the total of the other by multiplying the 67 by 8.4.

Mr. Barb: Yes.

Mr. Sheean: And then if you divide the total time of all of those trains by the 133 trains there involved, you get the average speed of the trains in just the same way that you get it for the 66 and 67, don't you?

Mr. Barb: Yes, you would get it, but it would be an average under different conditions. It would not be a strict comparison.

Mr. Sheean: Well, the man who goes up today comes back again?

Mr. Barb: Yes.

Mr. Sheean: Well, let us see if we can pass this one page there. On the Northern Division of the Great Northern, through

that month, all of the through freight trains which you show are 133 in number?

Mr. Barb: Yes, sir.

Mr. Sheean: Those 133 trains, 66 of which run in one direction and 67 in the other, averaged a speed of 10.5 miles per hour, of which 66 in one direction averaged 12.8 and 67 in the other averaged 8.4?

Mr. Barb: 8.4.

Mr. Sheean: Yes. All of the through freights which you show on the Willmar Division, through freight trains on the Willmar Division except on the run between Como and Willmar were at a speed greater than ten miles an hour?

Mr. Barb: Yes.

Mr. Stone: Except 151 between Como and Willmar?

Mr. Barb: Yes, those trips.

Mr. Sheean: Yes, and those in the opposite direction, the 177 coming back over the same division were 10.3 miles per hour. That is correct, isn't it?

Mr. Barb: That is right, yes, sir.

Mr. Sheean: And all of the trains in through freight in the Kalispell Division, except the ones running between Whitefish and Cutbank averaged ten miles an hour or better. Those running between Whitefish and Cutbank averaged 9.5 miles for that month.

Mr. Barb: Yes, sir.

Mr. Sheean: Now, as to the Burlington. You show only 162 trains in through freight service, on the entire Burlington system?

Mr. Barb: Yes, sir. Well, that is the one run on the Beardstown Division.

Mr. Sheean: That is the one run on the Beardstown Division?

Mr. Barb: Yes.

Mr. Sheean: And that, as shown by Exhibit 10 here, shows that 162 trains are taken out of a total of 13,154 through freight trains on that system, isn't that right?

Mr. Barb: I don't know how many there are on the system.

Mr. Sheean: And even on those 162 trains in through

freight service, the average speed was greater than ten miles an hour.

Mr. Barb: 10.6 is what they show.

Mr. Sheean: Now, in way freight service, so long as the payment in through freight service is on the hourly basis, just how much less than ten miles per hour the speed is, would make no difference in the compensation of the men, would it.

Mr. Barb: Not so long as they are on an hourly basis.

Mr. Sheean: So long as they are on an hourly basis, whether they made eight miles an hour, or six miles an hour, or five miles an hour, would make no difference in their compensation?

Mr. Barb: No.

The Chairman: How much longer will it take you, Mr. Sheean?

Mr. Sheean: I will be through in a very few minutes. Just a minute or two.

The Chairman: Do you think you can get through without running into overtime.

Mr. Sheean: Yes, I think so, by putting it up on a very high speed basis.

Mr. Stone: I have got a couple of statements I desire to read in before we close our side of the case, so it does not look like we were going to be able to finish tonight.

Mr. Sheean: Was this the only exhibit you had?

Mr. Stone: When you get through with the cross-examination I have got a statement that I would like to present. I can do it in ten minutes in the morning.

Mr. Sheean: Now, as to the Omaha Road, I just wanted to ask the same questions there, practically. The total number that you show here as only in through freight service, is a very small number of through freight runs on that system, is it not?

Mr. Barb: Well, that shows the number of through freights between points given.

Mr. Sheean: Between the given points?

Mr. Barb: They are main line points, as I understand it.

Mr. Sheean: And between Elroy and Altoona, you show way freight runs there. Do you show any through freight runs there?

Mr. Barb: From Elroy to Altoona, no, we have no through freight runs there.

Mr. Sheean: Although you show a way freight on that same part of the system?

Mr. Barb: Yes, sir.

Mr. Sheean: And on the Eastern Division do you show any through freights at all?

Mr. Barb: We show between Altoona and Minneapolis, Minneapolis and Altoona, East St. Paul and Altoona, and Minneapolis and Altoona.

Mr. Sheean: And not between Altoona and Elroy?

Mr. Barb: No.

Mr. Sheean: That is all.

(Witnessed excused.)

Mr. Stone: Now, Mr. Chairman, if I can have five minutes of your patience, we will finish up our side.

The Chairman: All right.

Mr. Stone: Early in the proceedings, in discussing the publicity committees on the Southern Pacific, I made some statements that counsel for the railroads took exception to, and suggested instead of talking about it, that I had better read a few of these statements. So I am going to accommodate him.

I made the statements, as I recall it now, that in fixing the responsibility, the company always selected some of the citizens living in the vicinity of the accident. The members of this jury are seldom railroad men, but are taken from all walks of life, saloon men, ranch men, postmasters, doctors, farmers and mechanics, all of whom usually admit they know nothing, generally speaking, of railroading, or the movement of cars, and it would be unreasonable to suppose that they did. I have checked over a few of the cases.

The first case I want to call your attention to is the case of Engineer Bohart. This was the case of a derailment just east of the east switch at Noonan, Texas, and the following questions and answers were returned over the signature of L. A. Koontz, Medical Doctor.

Engineer Bohart, I might add, was discharged after this wreck, and was off three months before we succeeded in getting him reinstated.

“Q. In your opinion what caused the derailment?

"A. I cannot say positive what was the cause.

"Q. Did you form your opinion as to the cause of the wreck offhand, or was it suggested to you that it might have been high speed?

"A. It was suggested to us that it was high speed.

"Q. If suggested, by whom?

"A. None.

"Q. Do you think it was fair to the employes concerned to pass judgment and not have them before you to show their reasons also to have them before you to question them as to what caused the derailment where their interests are involved?

"A. I think both parties should be represented.

"Q. Do you think their testimony would have had any weight in forming your conclusion, if the testimony they gave was logical?

"A. Yes.

"Q. Would you consider your experience and qualifications such that you could form a correct conclusion of what caused the derailment?

"A. I would not."

In this same particular case, the following questions and answers were returned over the signature of George Chistilles.

"Q. In your opinion what caused the derailment?

"A. I cannot form any opinion.

"Q. Did you form your opinion as to the cause of the wreck offhand, or was it suggested to you that it must have been high speed?

"A. It was suggested that it was high speed.

"Q. If suggested, by whom?

"A. I did not know the men, but supposed they were the company's officials.

"Remarks: I never did any railroading. I was never in a wreck; I never viewed a wreck closely before."

The next case is that of Dave Nave, given 30 demerit marks. The following questions and answers are returned over the signature of Joe J. Saunter, a member of the Citizens' Committee. This was a derailment case at D'Hanis, Texas.

"Q. In your opinion, what caused this derailment?

"A. I think the rails for the engine were too light, or the rails spread.

“Q. Did you form your opinion as to the cause of the wreck off-hand, or was it suggested to you that it must have been high speed?

“A. It was suggested that it was high speed.

“Q. If suggested, by whom?

“A. Company officials.

“Remarks: The investigation was held about two days after derailment.”

In this same case we quote as follows, from the question blank returned by Alf. Zinsmeyer.

“Q. In your opinion what caused this derailment?

“A. Heavy engines, and too much speed.

“Q. Did you form your opinion as to the cause of the wreck off-hand, or was it suggested to you that it must have been high speed?

“A. Yes.

“Q. If suggested, by whom?

“A. Some of the company officials.

“Remarks: Could not come to any definite conclusion of what caused the derailment, because everything had been cleared away when we got to the place, which was about forty-eight hours after the derailment.”

The Thomas Reece case. Discharged. This is the case of a derailment that occurred near Glidden, Texas, March 1, 1914. The engineer, Thomas Reece, was dismissed from the service. In this case also a “Board of Inquiry” was formed, and we quote from the question blanks returned over the signatures of several of the members, as follows:

“Q. In your opinion, what caused the derailment?

“A. Probably high speed or defective equipment.

“Q. Did you form your opinion that it was caused by high speed offhand, or was it suggested to you that it must have been high speed?

“A. It was suggested, first.

“Q. If so, by whom?

“A. I think Assistant Superintendent Harris.

“Q. Is it not a fact that you would not sign the first papers that were sent down to you?

“A. Yes.

(Signed) W. M. B. Brooker.”

Mr. E. L. Owen, on the same case, in answer to questions, states as follows:

“Q. In your opinion what caused the derailment?

“A. Possible high speed, or bad order cars.

“Q. Did you form your opinion that it was caused by high speed offhand, or was it suggested to you that it must have been high speed?

“A. It was suggested, and I thought it.

“Q. If so, by whom?

“A. By assistant superintendent.

“Q. Is it not a fact that you would not sign the first papers that were sent down to you to sign?

“A. Yes. (Signed) E. L. OWEN.”

From the testimony of Mr. Fisher, in the same case. This man was also a member of the Citizens' Committee. There were three of them.

“Q. In your opinion what caused the derailment?

“A. Possible high speed or bad order cars.

“Q. Did you form your opinion that it was caused by high speed, offhand, or was it suggested to you that it must have been high speed?

“A. Both.

“Q. If so, by whom?

“A. Assistant Superintendent.

“Remarks: Mr. Worthington told me the day I signed the papers, that the charges were not enough to fire men for, a few demerits would be all.”

“Q. Is it not a fact that you would not sign the first papers that were sent down to you to sign?

“A. Yes.”

(Signed) “E. F. FISHER.”

The next is the case of H. M. Wagley, discharged, and later on reinstated. This is the case of a wreck that occurred near Houston, Texas, early in October, 1913, and we quote as follows, from two members of the Board of Inquiry.

“J. W. Hawkins, deposes and says:—I signed a blank page in a book on the 3rd of October, 1913, at the instance and suggestion of H. J. Miksch, and have to say, I do not know its contents or understand its purpose. From what I learned and observed at

the time of investigation made of the wreck of extra train No. 636, on that day, that the expressed opinion made by Mr. Miksch at the wreck was unfair to the men in charge of the train. I heard the section foreman say to Mr. Miksch, that he, the section foreman, had found the broken portion of flange east of the wreck, and had brought it to where the derailment had occurred. That he, the foreman, had thrown it down there, and that it had been handled by different parties, and the foreman suggested to Mr. Miksch that this may have been the reason for oil and sand appearing on the broken piece of flange. I heard Miksch stop the foreman from telling of this, and I plainly understood that Mr. Miksch suppressed that part of the foreman's testimony. This is subscribed and sworn to before C. E. Gouleber, Notary Public in and for Tyler County, Texas, at Woodville, Texas, the 16th day of October, 1913."

Mr. J. W. Lindsey makes identically the same affidavit as the above.

I simply produced these to show that our statement was correct, that these men are sometimes approached by the company, and their opinions are shaped.

That is all, Mr. Chairman, and that closes our side of the case.

The Chairman: Well, have you anything further?

Mr. Sheean: I think that in fifteen minutes more we can probably wind it all up.

Now, in one exhibit here, No. 73, Mr. Stone, which was offered, and which was a compilation made, and scattered through a period of four months, of certain statements sent in by certain engineers, we find a number of departures as between the amount stated there, and the amount stated in the payrolls. In the case of those differences, where the amount is material, we have sent to get the pay checks, the checks that were signed by the men, or cashed by the men.

Of course, if you raise that as an issue of fact, it may take some little time to go into that, and I am not clear as to just what your statement was, that they were sent in by the men, and some of them were mere estimates, \$150, \$160, or \$170 in separate months.

Mr. Stone: The data that it was made up from I filed.

There is corroborating material here, for you to check over, if you desire.

Mr. Sheean: Well, we have simply gone to the roads where there was a difference between the amount shown on our payroll, and the amounts shown opposite the names of these men, and are ready to put in the evidence that supports the correctness of the payroll, if an issue is raised upon that proposition.

Mr. Stone: So far as the payroll is concerned, I expect that that is probably what the men got. I don't know. But I find this in figuring many of the time slips, that it is not uncommon to find that a man has been paid, and that he is short from seven to nine, or eleven or twelve, or even fifteen dollars in his pay, and I don't think the average engineer, from the stubs he is sending in to me, knows exactly what he is entitled to, oftentimes, and he simply takes the time keeper's word for it.

Mr. Sheean: Well, surely, Mr. Stone, aside from these matters that might be below ten dollars, there are some matters of material differences, running up \$150 or more, as shown in the amount in your exhibit. Now, we have the time checks of the men here, the receipts for these amounts, but if it be understood that the payroll as shown here is not contradicted, and if there be any contradiction between the amounts shown on this exhibit and yours, the payroll figures are to be accepted as correct, then we won't waste any time over that. But unless we have that full and definite understanding, if the purpose and intent of Exhibit 73 offered on behalf of the employes, was to raise the issue of fact as to whether our payroll figures for October, 1913, were absolutely correct, then we wish to put in the corroborating evidence of the pay checks.

Mr. Stone: Well, Mr. Chairman, if he wants me to say that his payroll for 1913 is absolutely correct, I am not going to say it, because I don't believe it is. And unfortunately, they only furnished us with two copies, so only two clerks can work at it at the time, and we have not been able to check a book bigger than Webster's Dictionary. But what little checking we did do, we find that our men claim that they do not get this money in many cases.

Mr. Sheean: Well, then, we cannot finish it tonight.

Mr. Stone: And we also find the admission from a few of the men who have taken it up with the officials, that they have carried time over from the other month, and forgot to correct it. We have several such cases with different roads. And that is an error that is likely to creep in any time. I do not think it is intentional, I think it is made in hasty compiling, perhaps.

Mr. Shecan: Well, we will introduce an exhibit then in the morning, showing just where they do differ.

Mr. Stone: All right.

The Chairman: We will adjourn until tomorrow morning at 10 o'clock.

(Whereupon, at 5:20 o'clock P. M., March 17, 1915, an adjournment was taken to March 18, 1915, at 10 o'clock A. M.)

IN THE MATTER OF THE
 ARBITRATION
between the
 WESTERN RAILWAYS
and
 BROTHERHOOD OF LOCOMOTIVE
 ENGINEERS
and
 BROTHERHOOD OF LOCOMOTIVE FIRE-
 MEN AND ENGINEMEN
under the Act approved July 15, 1913, by agree-
ment dated August 3, 1914.

Chicago, Illinois, March 18, 1915.

Met pursuant to adjournment at 10:10 o'clock A. M.

Present: Arbitrators and parties as before.

J. H. KEEFE was called as a witness in sur-rebuttal, and having been previously sworn, testified as follows:

DIRECT EXAMINATION.

Mr. Sheean: Mr. Keefe, in Exhibit No. 73, introduced by the Engineers and Firemen, certain differences appear in the amounts paid locomotive engineers, as shown in Exhibits 26 and 27 introduced by the Railroad Companies. Have you caused to be compiled information as to what has brought about such differences, where there is more than \$10 in amount.

Mr. Keefe: Yes, sir, insofar as we were able to do in the limited amount of time at our disposal. There are a few cases in which we have not received replies to our inquiries, but generally speaking, we have secured an explanation indicating the cause of the discrepancies.

Mr. Sheean: And have you caused to be prepared as an exhibit a reproduction of all of the names shown in this part of Exhibit No. 73, with the names and amounts as shown in Exhibit 73?

Mr. Keefe: We had the earnings in October, or those whose names were shown in October.

Mr. Sheean: And opposite the same names the amounts as shown on Exhibits 26 and 27?

Mr. Keefe: Yes.

Mr. Sheean: With a column showing the differences, and in column headed "Remarks" the explanation of what brings about such difference.

Mr. Keefe: Yes.

Mr. Sheean: And we offer that as Railroads' Exhibit 44.

(The document so offered and identified was received in evidence and thereupon marked "Railroads' Exhibit No. 44, March 18, 1915.")

Mr. Sheean: Now, Mr. Keefe, just to explain some of the differences that will illustrate what is found generally. On sheet No. 1, the first one is only a dollar's difference. The next one in Exhibit 73 shows \$36.58 less than is shown by the payroll?

Mr. Keefe: Yes, sir.

Mr. Sheean: That you have telegraphed the company about, and the check received by the man is under way here?

Mr. Keefe: Yes, sir, his actual pay check for October was \$118.33, and the endorsed check is en route to Chicago.

Mr. Sheean: Then I notice there \$137.33, Mr. Neiman. There are two names appearing in Exhibit 73, one as Ernest Neiman and the other as E. W. Neiman.

The Chairman: Where are those?

Mr. Sheean: Right on this first page, the 12th and 13th lines. Is there more than one Neiman, as shown on the seniority list of that railroad?

Mr. Keefe: The seniority list has been checked and there appeared only the name of one Neiman, and not being able to locate two Neimans on the payroll, we took it up by telegraphic correspondence with the General Manager of that road, and he advised us that they have only one Neiman. And that is the Ernest Neiman who drew \$140.10 in October.

Mr. Sheean: Well, now, jumping down to some where the check is actually already received. There is an \$80.00 item, I notice, shown down near the bottom, \$198.72 as against \$118.00. That carries back to what name—John Martin, is that?

Mr. Keefe: Gibson.

Mr. Sheean: Have you a check here of Mr. Gibson?

Mr. Keefe: Yes, sir; check 57983. Here (indicating) is

his original pay check, endorsed by him. It calls for the amount on the payroll, less his \$1.00 deduction. The amount of the pay check reads \$197.92, with one dollar deduction for Hospital Association.

Mr. Burgess: Pardon me, Mr. Sheean, but I wanted to ascertain these columns under the heading of Exhibit 73—greater than actual earnings and less than actual earnings. Are these figures tabulated under less than actual earnings, less for one month or for a year?

Mr. Sheean: For that one month, the month of October. In some instances, the amount as shown on the Exhibit 73, showed earnings greater than was shown in the payroll. That is, this first column 9, and in other cases there were these variations here. This one of \$80.00 may be purely typographical in adding it, being an even \$80.00, but the check itself shows—

Mr. Keefe: \$198.72 earnings.

Mr. Stone: What are we to understand, Mr. Sheean, in these lines that are left vacant in Exhibit 73, that the man was not shown in that exhibit at all?

Mr. Sheean: Which line is that?

Mr. Stone: Take, for example, on column 5, there are several blank lines there.

Mr. Keefe: You show no earnings in October at all, on your Exhibit 73, and as a matter of fact, on the payroll they did show the amount shown in column 7.

Mr. Sheean: That is, some of them, Mr. Stone, as you collected them there would have earnings for September and November, but the month of October, no earnings reported by the man.

Mr. Stone: Either reported no earnings or else it was so incomplete we did not show him—one of the two?

Mr. Sheean: Yes; where it was left blank in your Exhibit 73, this carries out what he drew in that month.

Mr. Stone: What a man draws out of the October pay ear, he earns in September.

Mr. Sheean: Well, I think that is where your exhibit, in some cases, does not make that distinction, because in some of these—for instance, you have one here, Mr. Keefe, the earnings of September, that you report as October, while the rest of them

were generally what he earned in October. Which was that one, Mr. Keefe? You called my attention to that.

Mr. Keefe: On sheet No. 6, in Exhibit 73, they show Mr. J. Thompson, on the C. M. & St. P. passenger service, that he earned in October \$140.61. We show on our payroll, that his earnings in October were only \$67.78, and the balance of the month he was off, of his own accord. In taking it up with the road, we find the earnings which you purport to show for October, was what he drew from the pay ear in October, and were really his September earnings.

Mr. Sheean: That illustrates the one thing there, where the most of them are reported as the earnings in October, but in the Exhibit 73, they have carried what they actually earned in September.

Now, did you find in some cases that they have excluded the earnings as fireman, and in other cases have included the earnings as fireman?

Mr. Keefe: Yes, that is true.

Mr. Sheean: Just illustrate that, Mr. Keefe, cases where they did and others where they did not, in some cases reporting in Exhibit 73 merely earnings as engineers, while in other cases showing both engineer and fireman.

Mr. Keefe: Harold Hollenback, the fifth name from the bottom on sheet No. 1, on the A. T. & S. F., Plains Division. Exhibit 73 shows Mr. Hollenback as having earned \$167. The October payroll shown on our Exhibit No. 26, on page 390, shows this man as earning \$156.26, and of that \$156.26 \$62.78 was earned as a fireman.

Mr. Sheean: Now, take the other.

Mr. Keefe: Although the earnings shown on Exhibit 73 are \$10.74 more than he actually earned in that month.

Mr. Sheean: Now, take the other case where the man earned both as engineer and fireman, but in Exhibit 73 they show only the earnings as engineer.

Mr. Keefe: Why on sheet No. 2, R. E. Zea, about the middle of the page, on the M. & I. Division of the C. St. P. M. & O. (the Omaha road), in through freight, gives his earnings as shown in Exhibit 73, for October as \$88.72. He was shown as being on the payroll for \$149.56, of which amount \$59.34 was as a fireman, and the \$88.92 was as an engineer.

Mr. Shecan: You have those checks?

Mr. Keefe: Yes, I have the pay checks, both as an engineer and as a fireman. Here is his check for \$88.92 as an engineer and his check for \$59.34 as a fireman.

Mr. Park: His receipt is on the back of the check?

Mr. Keefe: Yes, is endorsed on the back of the check.

Mr. Shecan: I simply want to call attention to the fact that apparently they did not understand Mr. Stone's instructions uniformly, as to some they reported their earnings both as engineers and firemen, and others as engineers alone.

Mr. Keefe: Yes, sir.

Mr. Shecan: Now, just below that on the same page there, on the South West Division, now what road is that?

Mr. Keefe: Now, that is on the Frisco Railroad, Mr. Doty, E. J. Doty, working on Red River Division of the Frisco is shown on Exhibit 73 as earning \$16.32 in October, while our pay roll showed he earned \$124.64.

An investigation of that shows that Mr. Doty earned on the Southwestern Division \$16.32, while on the Red River Division he earned \$108.32, which makes his total earnings \$124.64. I have not the original pay checks, but I have photostatic copies of the pay checks. He got three different pay checks in that month, and they all aggregate the \$124.64 as shown on our payroll.

Mr. Shecan: And that notation that you just got that information that morning, is that shown there in ink on the ones that you filed here?

Mr. Keefe: Yes, it is shown in ink. I did not get the checks though till this morning. I put the notation in ink this morning.

Mr. Shecan: And they are shown below, the same situation is in other places, where what was sent in apparently as the information on which 73 was compiled, was simply the information on one division, whereas, during the same month, they drew other pay.

Mr. Keefe: Yes, sir.

Mr. Shecan: Now, those illustrate, do they, Mr. Keefe, in a general way, just how these variations are brought about?

Mr. Keefe: Yes. The explanation given in the "Remarks" column on sheet No. 11, gives the detail of the greater portion of the cases. In every instance it shows the figures shown on our

payroll, forms 26 and 27, were accurate and correct, and that the information shown on 73 was not correct.

Mr. Shea: Well, as to these similar amounts—

Mr. Stone: You mean was that correct so far as the check the man received?

Mr. Keefe: As to his earnings for October.

Mr. Stone: That is, the check he really received, but there is not anything really to show that the check he received is the accurate check, is there? He might have earned more, or might have earned less, but that is what he really got out of the pay car.

Mr. Keefe: Mr. Stone, just a moment—

Mr. Stone: And they might owe him some more next month.

Mr. Keefe: Take Mr. Bartlett—I think that will illustrate the reason here in a minute; take G. P. Bartlett on the C. B. & Q., Brookfield Division, through freight service, sheet No. 2; you show him as earning \$165.86; Exhibit 26 shows that he earned \$179.27.

Mr. Stone: What sheet is that?

Mr. Keefe: Sheet No. 2.

Mr. Stone: It is down—

Mr. Keefe: About the third part.

Mr. Sheean: The first C. B. & Q. man, Mr. Stone, I guess the only one, just below the C. P.

Mr. Keefe: Now, we have Mr. Bartlett's pay checks for that. He got two checks, one for the first half of October, the other for the second half of October, as required. In the aggregate the amount shown, with the deduction—the pay checks just allow for the amount of the deduction. Now his earnings were \$179.27; his time here, which was in your possession—I borrowed this from the records that you had borrowed from that road—from the Burlington road, shows that his earnings, his time spent and his time here, aggregated \$179.27, and did not aggregate \$165.86. If that illustrates the point that you are trying to bring out.

Mr. Stone: We found oftentimes in checking over the stubs of the time tickets, that there would be from seven to nine or eleven dollars difference in what the man said he got in the pay car, and what the time card shows, and in those cases we didn't use those tickets. We found that quite often, and I realize that

some of our men quite often did not realize what they were entitled to.

Mr. Keefe: You know it is a common practice for engineers to be late in getting their checks in, getting them in in the latter part of the month, and they carry them over into the other month, and that applies to September and October and November, and every month. But it is all carried as omitted time for the previous month. Now, the amount of that omitted time in October was \$18,000 out of a payroll of \$7,500,000.

Mr. Sheean: Mr. Stone called your attention to page 14, of your exhibit there. I notice in the third line down, Mr. James Sudaby reports in the three months, \$160.00 even, \$150.00 in September, and \$170.00 in October. Now, I take it for granted we will all agree that that was his best recollection of about the amount, or that he must have approximated just those even amounts. They do not come out even \$160.00, and even \$150.00, and even \$170.00 in three successive months?

Mr. Stone: It might. I drew two checks in two successive months running, for \$111.11, and you say it could not happen in a thousand years, but I drew in those two months, \$111.11 each month.

Mr. Sheean: I would not be so surprised if it were \$111.11, but I would if it were even dollars, coming out \$150.00 and \$160.00 and \$170.00.

Mr. Keefe: Well, there was, I think, about five dollars difference, and the amount of earnings was about \$170.00, and I recall his pay check was \$5.00 more than what he reported there.

Mr. Sheean: Well—

Mr. Keefe: He really drew \$175.68 instead of \$170.00.

Mr. Sheean: Mr. Keefe, the figures shown in the Companies' Exhibits 26 and 27 actually balance with the payrolls for that month?

Mr. Keefe: Yes, sir.

Mr. Sheean: On all the roads?

Mr. Keefe: Yes, sir.

Mr. Stone: Had a sweet-scented time trying to get them to balance, didn't you?

Mr. Keefe: No, I was \$300.00 off balance the first time, out of a \$7,500,000 payroll. Of course, each individual road was

required to balance their payroll, before they sent it in. Of course, ours was just a compilation of the ninety-two payrolls.

Mr. Stone: Your compilation of the compilations that had already been balanced, you could not make balance at first?

Mr. Keefe: We know what the total of the payrolls were, and we know that the amount reported as the earnings for October, agreed with the payrolls.

Mr. Carter: If you came that near balancing, you did well. I have had some experience.

Mr. Sheean: The instance that you have told about here, Mr. Keefe, illustrates how these discrepancies are brought about, showing earnings as engineers and firemen, in some instances; in others, showing only earnings as engineers; sometimes showing them on one division and not the entire run, and the explanation here, where there are differences, except in these smaller amounts, are shown in this exhibit.

Mr. Keefe: Yes.

Mr. Sheean: That is all. Now, Mr. Keefe, there was shown here a day or two ago—I don't remember by just which witness—the earnings of certain yard engineers on the Milwaukee Road for the month of October, and what those yard engineers would have made, had they been working in a machine shop.

Mr. Keefe: Yes.

Mr. Sheean: Have you, since this Exhibit 83 was introduced, caused to be extended the actual earnings of those actual men, through the entire fiscal year?

Mr. Keefe: Yes, sir.

Mr. Sheean: In which this one month was shown?

Mr. Keefe: Yes, sir.

Mr. Sheean: Taking the same men that were used in this Exhibit 83, for one month, and then set opposite the possible or hypothetical earnings had they been machinists in that month?

Mr. Keefe: Yes, sir.

Mr. Sheean: And the actual earnings of those twelve men, is it?

Mr. Keefe: Ten; five engineers and five firemen.

Mr. Sheean: As shown on this Exhibit 83, are set forth on an exhibit that you have prepared?

Mr. Keefe: Yes.

Mr. Sheean: We offer that as Exhibit No. 45.

(The document so offered and identified was received in evidence and thereupon marked "Railroads' Exhibit No. 45, March 18, 1915.")

Mr. Stone: Just what is the object of this, Mr. Sheean?

Mr. Sheean: Why, to show the actual earnings of the actual men, for the entire year, to be considered in connection with the comparison made with the hypothetical men in Exhibit 83, for one month.

Mr. Stone: Do you show the earnings of the hypothetical man, for the same number of hours, for the year, also?

Mr. Sheean: No, we deal only with actual money and actual men, in our exhibits.

Mr. Stone: You concede, however, that if that individual was a machinist, he would have been physically able to work as many hours?

Mr. Sheean: In the same way that these men worked, yes. Also shows that these men who Mr. Carter said were the high men, I think, in that particular month, actually earned in other months of the year considerably more than they did in the month of October, 1913. This exhibit is self-explanatory, is it, Mr. Keefe?

Mr. Keefe: Yes, there is nothing to be added, other than as you said, that the October earnings for these men does not indicate that that is abnormal earnings for the service they have performed.

Mr. Sheean: You simply take the same men as shown in Exhibit 83, and in addition to the earnings for the month of October, obtained the actual earnings of these men for the entire year?

Mr. Keefe: Yes, sir.

Mr. Burgess: Well, Mr. Keefe, do I understand Mr. Sheean's explanation, that you did not take the same number of hours—

Mr. Keefe: These are the actual hours that he did work throughout the year.

Mr. Burgess: But do you show anything in this exhibit as to what he would have earned, had he worked the same number of hours as the engineer?

Mr. Keefe: This is the engineer. These are the earnings of the engineer and firemen, for the year.

Mr. Burgess: There is no comparison here of what the machinist would have earned, had he worked as many hours as the engineer.

Mr. Keefe: We have used no hypothetical cases in any of our exhibits. We deal with actual men and actual conditions.

Mr. Shea: Would that be hypothetical? If a man worked fourteen hours, there is nothing hypothetical about that.

Mr. Keefe: Yes, there is. No man actually did that.

Mr. Shea: If a man worked fourteen hours, or the number of hours shown in that exhibit?

Mr. Keefe: There is no machinist that worked this number of hours, and he represents no actual men.

Mr. Burgess: But if he did work that number of hours, have you an exhibit to show what he would have earned?

Mr. Keefe: I have not dealt in any figures of that character at all.

Mr. Stone: Tell me, Mr. Keefe, that first man, Fred Schultz, how did he work thirty-one days in February, 449 hours. When did they get to putting 31 days in February?

Mr. Keefe: Those were the actual number of hours.

Mr. Stone: That may be the actual number of hours he worked, but how did he work 31 days in February?

Mr. Keefe: He could not work 31 days in February, but I can get his pay check.

Mr. Stone: I think he ought to have had that much, if he worked 45 days, which really amounts to 449 hours in the switching service.

Mr. Keefe: Those are his actual earnings and his actual hours, as reported to us by the Milwaukee Railroad. I asked for the information. I presume it was a typographical mistake of the typewriter.

Mr. Shea: Well, what would he have earned if he was paid the machinists' rate for 449 hours?

Mr. Keefe: I made no compilation of that character.

Mr. Shea: This engineer really did work 449 hours in the month of February?

Mr. Keefe: He was compensated for 449 hours.

Mr. Shea: There is nothing hypothetical about that, is there?

Mr. Keefe: No; I told you we gave you the earnings of real men, as engineers and firemen.

Mr. Burgess: So then, we are to understand that if an engineer works fifteen to sixteen hours a day, or twenty hours a day, he will draw more money than if he only works ten?

Mr. Keefe: Certainly.

Mr. Burgess: But the fact remains, if he worked every one of the twenty-eight days, and worked sixteen hours a day, he could not get 449 hours.

Mr. Sheean: Mr. Hart explains the Milwaukee payroll closes the 27th of the month.

Mr. Carter: Carrying it over from the previous month.

Mr. Keefe: Yes, from the 27th of January to the 27th of February. You see the next month is the 26th for March.

Mr. Stone: He got in 30 days in January?

Mr. Keefe: No, you see the March payroll would be from the 27th of February to the 27th of March.

Mr. Carter: Thirty days from the 27th?

Mr. Stone: He only got 26 days in April and 25 in May.

Mr. Keefe: He lay off two days you will notice in the month of March, and 5 days in the month of April.

Mr. Sheean: And in March, the 26 days he worked, plus the two he laid off are the 28. Their payroll system, as Mr. Hart explained it to me, is from the 27th to the 27th.

Mr. Keefe: We only show, Mr. Stone, what he actually drew for that year.

Mr. Carter: Just pardon me. And that shows that if he had been working 8 hours a day he made 56 days during this month, of 8 hours each. In the 31 days he averaged over 14½ hours every day. But if he was on an 8 hour day, like a machinist, he would have worked 56 days during the month of February.

Mr. Burgess: Now, what, Mr. Carter, would that mean in money? Have you made that computation?

Mr. Carter: **By a machinist?**

Mr. Burgess: Yes.

Mr. Carter: I don't know, but I think it would be much more than is shown here.

Mr. Stone: Well, it shows that that man, P. Codd, the fireman worked 4,700 hours in the year, the first name, and that is equivalent to 470 days in the year.

Mr. Keefe: Those were his compensated hours, Mr. Stone.

Mr. Stone: Well, the chances are that he worked those hours. There were a great number of hours. But why shouldn't a man get \$106 a month who works 470 days in the year? That is 14 hours a day straight for the year. He had a whole lot of time for recreation, and for being home with his family, and to take in picture shows, etc.

Mr. Keefe: Those were his compensated hours, Mr. Stone, I have no doubt.

Mr. Stone: And do not include the time before he went to work or after he finished his work, so you can safely add two hours a day more than that.

Mr. Keefe: I don't suppose anybody gets paid in going to and from their work that I know of. I don't believe I get paid that way, or that anybody else does, or while they are dressing or eating their breakfast or eating their supper.

Mr. Burgess: Does it include the time of getting the engine ready?

Mr. Keefe: I don't know what the Milwaukee has as to that.

Mr. Burgess: Does it include the time it takes him to get from the point of relief after being relieved by the yard conductor?

Mr. Keefe: Well, as I recall some of the figures, these men did get extra hours. Let me have those details.

Mr. Stone: Well, take your engineer up there, the third engineer, Monahan, 4,755 hours in the year.

Mr. Carter: He lost 14 days.

Mr. Stone: No telling how many hours he could have put in if he had worked the 14 days.

Mr. Keefe: Pardon me.

Mr. Stone: Mr. Monahan, the third engineer in the list, had 4,755 hours, and laid off 14 days.

Mr. Keefe: Yes, sir.

Mr. Stone: Why, if he worked those other 14 days in that proportion, he could have gone beyond the 5,000 mark, which makes over 500 days in a year.

Mr. Keefe: Well, the conclusion that I could reach is that the service is not very onerous or very distasteful where they will work those hours in that service.

Mr. Stone: There are lots of people who do things for money. You probably saw Beachey over here on the Lake front last year when he looped the loop for money. You saw what happened to him the other day when he did the same thing in San Francisco for money.

Mr. Burgess: Mr. Keefe, if there was any doubt in the Arbitrators' minds relative to the long hours the engineers and firemen work, this will serve to confirm the fact that they do work these long hours, will it not?

Mr. Keefe: But they were compensated for those hours. That Monahan's time includes the straight time, and includes the pay for the meal hours, because in Chicago he was on a class of work where they were paid continuous time because they could not have relief, as I understand it.

Mr. Burgess: And straight time indicates the period of time from when he was ordered to report, up to the time until he was ordered to be relieved, is that right?

Mr. Keefe: From the time he commenced work until he was relieved from duty.

Mr. Burgess: So that there is no credit given for the time that he was preparing the engine before work, or delivering the engine after completing the day's work?

Mr. Keefe: In looking up some of the details of the Milwaukee we find that it is very often the case where men are paid for waiting for the engine to come in because some other crew has it, and that they are double crewed engines. And in a number of these instances, such as the case of Mr. Schultz, the gentleman that Mr. Stone mentioned, they are allowed time for overlap and delay; Mr. Schultz was allowed 12 hours and 40 minutes time in that month for overlap and delayed time waiting for the other engine to come in.

Mr. Burgess: Well, aside from the individual case of Mr. Schultz it is a fact that in a general way these computations are based on the time that he did go to work up until the time that he was relieved, isn't that right?

Mr. Keefe: Yes, not only Mr. Schultz but a number of the other men the same way, quite a number.

Mr. Burgess: Well, the fact remains that there is a period before the engine goes to the yard and after it is finished that is not shown in this report?

Mr. Keefe: I would not say, because I don't know the conditions.

Mr. Burgess: Would you deny it?

Mr. Keefe: No. I don't know the conditions.

Mr. Burgess: Very well.

Mr. Carter: Pardon me, Mr. Keefe, I find that Mr. Codd, who earned \$1,279.24, earned that at the rate of 27.2 an hour, and I am going to put him up as the champion of the world in earning \$1,279.24 at the rate of 27.2 cents an hour.

Mr. Keefe: Well, Codd received 17 hours, nearly 18 hours additional compensation for no services performed whatever, simply waiting for his engine to arrive.

Mr. Sheean: That is in one month, isn't it?

Mr. Keefe: Yes, in one month, the month of October.

Mr. Stone: Well, our engineer, Mr. Monahan, I think would crowd Mr. Codd a close second. He got in 4,755 hours, and laying off 14 days the amount of \$2,139.75, which figures at about the rate of 46 cents an hour.

Mr. Sheean: Mr. Keefe, you said a little while ago that you did not know of anybody being paid while they were eating. Isn't it true that under the meal hour rule these engineers and firemen are paid during that time?

Mr. Keefe: Well, I was referring to the morning and evening meal, before and after their work.

Mr. Sheean: Well, in this Chicago switching district then, there is an evening meal rule for the yard men, is there not, in Chicago?

Mr. Keefe: Yes, sir.

Mr. Sheean: And during the time that the yard men are taking their meals here, are these men under pay also? It shows as part of their compensated time?

Mr. Keefe: Yes.

Mr. Stone: The yard men went and took the time to eat, and they would use the nose bag for the engine crew.

Mr. Sheean: And, then, in addition to the two meal hours that show here as compensated time, is there also in the one

month there alone this time while they are waiting for the engine, this time that they draw pay for?

Mr. Keefe: Yes.

Mr. Sheean: In waiting for the engine?

Mr. Keefe: Yes, and the crew that were on the engine that they were waiting for was also receiving the compensation.

Mr. Sheean: And these hours are the compensated hours, as shown by the time slips?

Mr. Keefe: Yes.

Mr. Sheean: That is all.

Mr. Burgess: Do you know, Mr. Keefe, whether it is the fact that the courts have frequently held that if a man is held on duty, whether he is working or not, he should be compensated?

Mr. Keefe: I am not acquainted with any of the decisions of the law or the courts in that regard.

Mr. Burgess: That is all.

Mr. Sheean: Mr. Keefe, there is introduced in a graphic form here a chart prepared by Mr. Lauck, which is charted sheet 1 of the Exhibit No. 29, and showing the earnings of all the men, including the 99 cent man, per month. Have you caused a similar chart on the same plan to be made as sheets 2 and 3 of Exhibit 29?

Mr. Keefe: Yes, sir.

Mr. Sheean: And, carrying out in the same way, the same breaks as to less than \$100, and then between the various splits of earnings as to engineers above \$100, running up to the high points?

Mr. Keefe: Yes.

Mr. Sheean: And that in two sheets makes the comparison for both sheet No. 2 and sheet No. 3 of Exhibit No. 29 in just the same way that the comparison was made by Mr. Lauck as for sheet No. 1?

Mr. Keefe: Yes.

Mr. Sheean: We offer that as Exhibit No. 46.

(The document so offered and identified was received in evidence and thereupon marked "Railroads' Exhibit 26, March 18, 1915.")

Mr. Keefe: You understand that sheet No. 2 includes all extra men, regardless of their earnings?

Mr. Sheean: Yes. In sheet No. 2 they took the total number of the employees, including all extra men?

Mr. Keefe: Yes.

Mr. Sheean: No matter how little the extra men earn during the month?

Mr. Keefe: That is correct.

Mr. Sheean: And excluded only, those whose earnings were less than \$100 as engineers and less than \$70 as firemen?

Mr. Keefe: Road service.

Mr. Sheean: In road service, and \$65 in switching service, and of those below those figures who were not available for duty during the month.

Mr. Keefe: Yes.

Mr. Sheean: And you have simply completed the chart as prepared by Mr. Lauck, that is, to make the comparison as to each of the sheets of Exhibit No. 29?

Mr. Keefe: Yes.

Mr. Keefe: Yes.

Mr. Sheean: Sheets 2 and 3, as well as sheet 1?

Mr. Keefe: Yes, sir.

Mr. Sheean: That is all I wanted to ask about that.

Mr. Carter: Mr. Keefe, do the firemen earn more than the engineers, or is this an optical illusion?

Mr. Keefe: Exactly the same kind of an optical illusion as sheet No. 1 was prepared.

Mr. Carter: According to this, the firemen have a bigger sweep of black figures than the engineers. Some of the firemen earn, so far as the chart is concerned, 50 per cent more money than the engineers?

Mr. Keefe: It is just as you have described it. It is an optical illusion the way the chart was made, and is simply a reproduction of chart No. 1.

Mr. Sheean: In order to call attention to chart No. 1, and what graphic chart really means.

Mr. Keefe: Yes, sir.

Mr. Carter: You would have to read the figures, and not look at the chart, wouldn't you?

Mr. Keefe: That is the purpose of chart No. 1 also.

Mr. Sheean: But the formula by which Mr. Lauck's chart

was prepared as to chart No. 1, has been exactly followed as to charts 2 and 3?

Mr. Keefe: Yes, sir.

Mr. Carter: Mr. Lauck set the example and you followed it. We will call this an optical illusion, where firemen get more money than engineers.

Mr. Keefe: Just add that remark to chart No. 1 filed by the men.

Mr. Stone: But after it is all said and done, whether it is an optical illusion or not, those men that drew more than the governors of states, that we hear so much about, are so infinitesimally small, that you couldn't even draw a line that we could see.

Mr. Keefe: No, this is just the October earnings. We have not shown the yearly earnings at all. Exhibits 42 and 43 will give you a very good idea.

Mr. Stone: It is much higher than any other month, according to your own statement, is it not, October?

Mr. Keefe: What is much higher?

Mr. Stone: But you get down to the \$341.00 man with 0.01 of one per cent of the total number of men shown.

Mr. Keefe: Well, frankly, if you will look at your own exhibit, there were no lines drawn for men below the \$291.00.

Mr. Stone: I know it. We couldn't find any small enough to make it.

Mr. Keefe: As to the actual number of men drawing the earnings, it is shown on our Exhibit 29 in detail, and also reproduced here, showing the number of men who earned, at various graduated pay.

Mr. Stone: It is a fact, though, that it is one man out of every 250,000?

Mr. Keefe: Who drew \$341.00, that is true.

Mr. Stone: 0.01 of one per cent. Coming back to that switch engineer, I would like to ask one more question, if I might refer to it a minute. I was wondering what Mr. Monahan would have drawn if he had been a machinist, instead of an engineer. If my figures are correct—and I have gone over them hastily, I think they are,—for the same number of hours, and time and one-half for overtime, as he would have gotten after eight hours a day, he would have received \$2,907.12 as a machinist, instead

of \$2,129.75, as an engineer. The difference is \$777.37 in favor of the machinist.

Mr. Sheean: How many men are shown on this exhibit as being above \$250.00 per month, getting back to the governors who draw \$3,000.00 a year.

Mr. Stone: Is that all they get?

Mr. Sheean: There are seven governors who get \$3,000.00 a year.

Mr. Carter: It costs them more than that to be elected, does it not?

Mr. Sheean: I have never had any experience in that connection, Mr. Carter. I am not competent to answer.

Mr. Keefe: Somewhere in the neighborhood of 400 men, I would estimate. I have not taken the time to count.

Mr. Sheean: Well, it is from 134 down?

Mr. Keefe: Yes.

Mr. Sheean: Somewhere between 350 and 400 men?

Mr. Keefe: Yes.

Mr. Sheean: Running it up hastily, it seemed to be 374, as I have it here. That is all.

Mr. Sheean: And in that same connection, the sheet No. 1 as prepared by Mr. Lauck, having included the 99 cent a month man, about whom there was a good deal of controversy the other day.

Mr. Stone: Does this graphic chart here take care of the 12,000 men that you lost out in your other exhibits, who were below \$100.00, or below \$75.00?

Mr. Sheean: Sheet No. 2 takes care of all extra men, no matter how little they drew. It does not, Mr. Stone, exclude the 99 cent man about whom we had the controversy, or the talk the other day, and the question was asked as to how it could be possible that that man was only paid 99 cents, in view of the minimum day, and in that connection I want to read into the record the information as to why he received the 99 cents.

This is a telegram from Mr. G. L. Griggs, Superintendent of the Sheridan Division of the Chicago, Burlington & Quincy Railroad:

"About pay of Fireman H. C. Carson, October 20, 1913. Carson was called for 8 P. M., October 30th, for night mine run work. Worked until midnight. Was relieved for lunch and did

not return for work. He was relieved by Fireman R. Crawford, whom we paid a minimum day for time from midnight on, under conditions we should not have been compelled to pay him a minimum day when he refused to return to work without cause."

That accounts for the 99 cents.

Mr. Stone: He only got 99 cents for half a day?

Mr. Sheehan: Well, I will read it again.

Mr. Stone: No; don't need to.

Mr. Carter: Did he work half a night shift and only get 99 cents for it?

Mr. Sheehan: Four hours.

Mr. Carter: 99 cents for four hours' work as a fireman?

Mr. Sheehan: Apparently.

Mr. Carter: That is not 25 cents an hour.

Mr. Stone: What I am still at a loss to know—

Mr. Carter: Wouldn't he under the schedule be entitled to a full day's pay?

Mr. Sheehan: That is the question that was raised the other day. That is why I read this, that when he deserted his engine in the middle of the shift, I did not presume he was.

Mr. Carter: Was he sick?

Mr. Sheehan: Makes no report as to it. I will read it again:

"About pay of Fireman H. C. Carson, October 20, 1913. Carson was called for 8 P. M., October 30th, for night mine run work. Worked until midnight. Was relieved for lunch and did not return for work. He was relieved by Fireman R. Crawford, whom we paid a minimum day for time from midnight on, under conditions we should not have been compelled to pay him a minimum day when he refused to return to work without cause."

Mr. Carter: Did he say whether he was sick? He might have been like the man on the Missouri Pacific, who went in the river and drowned himself, and couldn't make his 70 miles.

Mr. Stone: Coming back to this Exhibit 46, Mr. Keefe, I would still like to know what happened to these 12,000 men?

Mr. Keefe: Of the 12,000 men that were made up of such instances as that, and also where they did not, for reasons of their own, make the minimum amounts, they were included in sheet No. 1, as I stated on the stand. That basis is not a correct or accurate one to determine the average earnings of the month for the men in service, because they did not avail themselves

of all the opportunity to earn, and for that reason, we prepared sheet No. 2 and sheet No. 3. Sheet No. 2 included the extra men, regardless of their earnings. Sheet No. 3 excluded the extra men.

Mr. Stone: This chart does not include those men?

Mr. Keefe: It does not include those men.

Mr. Stone: So there are about 12,000 men that this is not a graphic chart for?

Mr. Keefe: Those 12,000 men ought not to be properly considered, in determining what the average wage was for October, 1913.

Mr. Stone: But the fact remains that it was necessary for the railroads to have the services of those 12,000 men, in order to operate their property for that month?

Mr. Keefe: As shown in the explanations as to why—

Mr. Stone: Yes, I know.

Mr. Keefe: As to why they were not possible, sections 39, 40 and 41, inclusive, give the detail for the actual time of those 12,000 men—11,000 and some odd.

Mr. Stone: And I suppose that one of these switch engineers here, who put in 4,700 hours during the year, if he had laid off during the month of October to rest up, he would not have been shown either?

Mr. Keefe: If he did not work in October, he would not be shown.

Mr. Stone: If he did not earn \$100, he would not be shown, if he laid off.

Mr. Keefe: For reasons of his own?

Mr. Stone: Of course, it would be reasons of his own, after working 4,700 hours, if he laid off—no business to get tired.

Mr. Keefe: Mr. Monahan didn't lay off.

Mr. Stone: Very evidently he didn't, but he will lay off, and we will be sending flowers for him some of these days, after a few more years like that.

Mr. Sheehan: Mr. Keefe, you were requested, when you were on the stand before, I think by Mr. Stone, to obtain information as to the engines which have been bought since our exhibit—as to engines in service?

Mr. Keefe: Yes, sir.

Mr. Sheehan: Have you obtained that information?

Mr. Keefe: Yes; page 3775 of the record shows Mr. Stone's request.

Mr. Sheean: And the information obtained from the roads as to the engines purchased since the date shown on Exhibit 14, is compiled here as Exhibit No. 47.

Mr. Keefe: Yes.

Mr. Sheean: We offer Exhibit 47.

(The document so offered and identified was received in evidence and thereupon marked "Railroads' Exhibit No. 47, March 18, 1915.")

Mr. Sheean: This is self explanatory, Mr. Keefe—simply obtained at Mr. Stone's request?

Mr. Keefe: Yes.

Mr. Stone: Where does this start from, Mr. Keefe?

Mr. Keefe: You mean the time?

Mr. Stone: Yes.

Mr. Keefe: October, 1913, inclusive of February 15, 1915. I just want to add something in connection with this Exhibit 47. Mr. Stone, in asking for the number of engines, in addition asked to ascertain the stenciled weight on drivers as well as the builders' weight on drivers, and in every instance the weights shown as the stenciled weight, are the same as the builders'.

Mr. Carter: Do not answer the question unless you want to, but do you know of any reason why railroads should issue orders to locomotive builders, to not furnish information concerning the weights of locomotives on drivers?

Mr. Keefe: I do not know that any such orders have been issued.

Mr. Carter: Well, all locomotive builders have those orders, and when anyone writes to a locomotive builder, asking for weight on drivers of a new engine on a certain road, they reply that they have been instructed not to give the weight on drivers to anybody, except the owners, and if information is wanted, to apply to the railroad for which the locomotive is built.

Mr. Park: Do they say they have instructions from railroads?

Mr. Carter: Yes, all locomotive builders.

Mr. Stone: They would not even sell me a photograph of their engines, or furnish me one for our Eastern Arbitration?

Mr. Carter: The same here.

Mr. Stone: I offered to pay the price of it. They wouldn't even sell a photograph of the different types.

Mr. Park: Mr. Stone, don't you think perhaps that is on account of the competition, and they do not want information given to builders of other locomotives?

Mr. Stone: No; I don't think so—a standard type, like a Pacific, or Mallet, or anything like that; but I applied to the American Locomotive Works, and the Baldwin, both, and they would not do it.

Mr. Carter: Mr. Park, the American Locomotive Works would not sell me a photograph of any locomotive, during the Arbitration, but they told me that if I would send somebody else and they did not know it was to be used in the Arbitration, they might sell somebody else, and I sent somebody else and got the pictures.

Mr. Stone: I have since got a set.

Mr. Byram: You have not had any trouble in getting any information you wanted about the locomotives, in this hearing?

Mr. Stone: Not from the managers of the railroads, no. I have not tried anything especially, because I got ready for this case before I came in.

Mr. Byram: You have all of the charts and diagrams and pictures of the locomotives of roads engaged in this movement?

Mr. Stone: I think so, and the railroads furnished the blueprints of all their locomotives, with one exception, and they wanted me to take that up through Mr. Trenholm. They could not furnish it without his request.

Mr. Carter: Not Mr. Trenholm's road.

Mr. Stone: No, but he was Chairman of the Board.

Mr. Sheean: Mr. Keefe, you were trying to say something on this subject.

Mr. Keefe: Mr. Carter asked the question of me, if I knew of any of the railroads instructing their locomotive works to decline to furnish the blueprints, or information concerning locomotives. I had occasion to speak to the superintendent of motive power of our railroad on that point, and he said that no request, statement or notice was ever given to any locomotive works, to not furnish any blueprints, pictures, or information of any locomotives being built for account of the Santa Fe System.

Mr. Carter: Mr. Chairman, the reason I asked that ques-

tion is, as I remember, on the Kanawha & Michigan Railroad, a little railroad down in Ohio, that was in our Eastern Arbitration, there was a dispute, after arbitration, as to the weight of the locomotives on drivers. They had changed the weight after the Award. Our chairman's name was Keffer, and I advised Keffer to try to secure information from the builders. The builders wrote to him and told him they had positive instructions not to give out this information, and they had an awful time determining who was to get the most money out of a locomotive, on account of the weight on drivers.

Mr. Sheean: Mr. Keefe, it was suggested at the time that the shop payrolls for October, 1914, were introduced, that it might be a more comparable basis, in view of the fact that our other exhibits were for October, 1913, to have the shop payrolls for 1913. Have you, since that time, obtained the shop payrolls of the same shops, for October, 1913?

Mr. Keefe: Yes. Except I just want to correct the statement. The exhibit filed by us was for November, 1914.

Mr. Sheean: November, 1914, yes. And in order that the suggestion made during your examination might be compared with the actual earnings of actual machinists in the shop in October, 1913, might be compared with the actual earnings of actual engineers and actual firemen in October, 1913, you have assembled the same information, in the same shops.

Mr. Keefe: Yes.

Mr. Sheean: We offer that as Exhibit 48.

(The document so offered and identified was received and thereupon marked "Railroads' Exhibit No. 48, March 18, 1915.")

Mr. Sheean: That follows just the same form as the Exhibit in the same shop for November, 1914.

Mr. Keefe: Precisely the same.

Mr. Sheean: That is self explanatory is it, Mr. Keefe?

Mr. Keefe: Yes, sir.

Mr. Sheean: Do you want to cross examine about this?

Mr. Stone: You couldn't resist the temptation to strike an average, could you?

Mr. Sheean: Well, it is prepared in just the same form as the other—what is the other exhibit?

Mr. Stone: It shows up better, that is all.

Mr. Sheean: Exhibit No. 23.

Mr. Keefe: 23.

Mr. Sheean: And it was in connection with the cross examination of Exhibit 23, when you called attention to the fact that Exhibit 23 was November, 1914, while the engineers and firemen were October, 1913, that we have caused the same information to be assembled in this exhibit.

Mr. Stone: You don't claim though that each one of these men earned this amount. That is the average of all, lumped together?

Mr. Keefe: There were 472 men, who actually earned \$37,-788.47 as machinists.

Mr. Stone: So you strike an average of the days and the hours and the wages.

Mr. Keefe: No, just the wages. We show that the average amount in each of these is \$80.06. We also show in the next column the maximum amount each one of these men would have earned had they worked the full number of hours.

Mr. Stone: You mean if he had been a machine instead of being human?

Mr. Carter: I notice the shop hours for machinists are almost universally 218, and the shop hours for engineers are 385, through October. That is, while the Milwaukee maintained shop hours for machinists of 218 hours, they maintained shops hours for firemen and engineers of 385 hours. Do you know if they did that because the machinist got time and a half for overtime, that is why the shop hours were so low, while they could work an engineer as long as they wanted to, without paying time and a half, and that is why his shop hours were so high.

Mr. Keefe: I don't think anything of that kind.

Mr. Carter: Do you think, Mr. Keefe, if this Board awards time and a half for switch engine firemen after ten hours, that these long hours will disappear?

Mr. Keefe: I don't think it will have any effect at all as to the number of hours worked. It will only be a means of increasing the man's compensation.

Mr. Carter: Do you think you could provide enough engines so you could work switch engineers and firemen only 8 hours a day?

Mr. Keefe: It is not a question of the number you employ.

It is the operating conditions you are confronted with that make the long hours. It is not a question of number at all.

Mr. Carter: If you have three shifts of machinists in the Milwaukee shops, don't you think you could have three shifts of engineers?

Mr. Keefe: We have no three shifts in the Milwaukee shops at all. Those are the main shops.

Mr. Carter: Well, I am talking about the shops where they do switching out in the yard, where they do the other class of work. If, at the main shop, as I understand by Mr. DeGuire they worked three shifts of machinists out there 8 hours each, could not they also work three shifts of engineers and firemen out there on switch engines?

Mr. Keefe: Emphatically no.

Mr. Carter: Why couldn't they?

Mr. Keefe: Because the conditions are not comparable at all.

Mr. Carter: You mean to tell me that they could not have a man report at 8 o'clock, and another man at 4 o'clock, and another man at midnight, but they can have two men, one report at 7 o'clock in the morning and the other at 7 o'clock in the evening. It is possible to have two men report at certain hours, but it would be utterly impossible to have the three men.

Mr. Keefe: I probably should have used the word "impracticable." Nothing is impossible. It is impracticable.

Mr. Stone: It is improbable also, is it not?

Mr. Carter: Well, they do have an 8 hour day established, and the engineers and firemen only work 8 hours, on the N. Y. N. H. & H.

Mr. Keefe: The operating conditions on the New York, New Haven & Hartford are entirely dissimilar from what they are in the Western Territory, from my observation of them.

Mr. Carter: One is in Massachusetts, and the other is in Illinois.

Mr. Stone: If they keep the engine running every minute of every hour, regardless of whether it is two shifts or three, that is all they can get out of the engine, is it not?

Mr. Keefe: Twenty-four hours in a day is all you can get out of an engine.

Mr. Stone: And you would not want two engineers on the same engine at the same time. One engineer could operate it.

Mr. Keefe: I think so.

Mr. Stone: So it would be possible to work three shifts of 8 hours in the yard?

Mr. Keefe: From the operating conditions as I know them, it would be impracticable to do that, as I said before. It might be possible to do anything of that character, but it would be impracticable.

Mr. Stone: Why would it be impracticable, as an operating official now?

Mr. Keefe: Why, because the nature of the work that you are handling won't permit.

Mr. Stone: Well, explain in what way the work would vary so that it would be impracticable. All you expect to do is work the engine 24 hours straight anyhow, so why is it impracticable for three shifts?

Mr. Keefe: Every engine in switching service is not worked 24 hours straight at all. What I mean, working 24 hours continuously.

Mr. Stone: Well, those that are worked 24 hours continuously, why is it impracticable?

Mr. Keefe: Because you have no such hours for your men. You are passing other trains as they come in and out. Other work that has to be done is not the same at all, and to be divided up between tricks of three as compared with two, I cannot in my mind see how it is practicable.

Mr. Carter: Now, Mr. Keefe, under present practice, we have two shifts; one shift reports at 7 A. M., and the other at 7 P. M. Now, that is practicable, is it not?

Mr. Sheean: It is practicable by having, as is shown here, 18 hours of overlap on a two crewed engine where, although the engine only worked 24 hours, the company was paying the engineers for 26 hours.

Mr. Carter: Now, Mr. Sheean, on the principle that there is only one crew on the engine, and the engine works 24 hours.

Mr. Sheean: No, but Mr. Stone is talking about engines working 24 hours, and I understand the exhibit introduced showed that even where the engine was working 24 hours that

the two crews on those engines were paid more than 24 hours, under present practice, even though they are double crews.

Mr. Carter: And in this way they would save that?

Mr. Keefe: They would have three instead of two.

Mr. Sheean: They would have two overlaps instead of having one, as they do under the present practice.

Mr. Carter: Under this arrangement, they don't allow any time for eating, and they have got to have nose bags.

Mr. Sheean: I was not talking about meals. I was talking about the lapsed time that was shown here on the man you were talking about, two shifts, waiting for the other crew that had the engine to complete their work, and drawing pay for it.

Mr. Carter: Yes, Mr. Keefe, if you please, I understand you to say that it is now practicable to work two shifts, one crew coming on at 7 in the morning, and we will say the other crew coming on at 7 in the evening?

Mr. Keefe: That is not the universal practice.

Mr. Carter: Then name your hours. I will let you name them. When do crews relieve each other when they work the engine 24 hours?

Mr. Keefe: It varies at different points.

Mr. Park: Before you answer that, Mr. Keefe, did not the witnesses testify in the switching service that engines were miles away from the place at which the crew took them, doing work, some as far as Whiting, at the oil refinery, and in Kansas City away out at some of the far distant parts of the yard? Does not that make it impracticable to change the crews under those conditions?

Mr. Keefe: I think so, yes, sir.

Mr. Carter: Now, Mr. Keefe, suppose away out here at Whiting, you have an engine working 24 hours, even though it is waiting, I understand that it is practicable for one crew to go to work at 7 o'clock A. M. and another crew to go to work at 7 P. M. Now, if the men were willing to go to Whiting, one crew relieve another crew at 8 o'clock in the morning; one at 4 P. M.; and one at midnight; now will you please explain to the Board—for I know they are interested in your statement—why it is impracticable, if the men want to do it this way, for them to do it.

Mr. Keefe: I am not acquainted with your Whiting situation.

Mr. Carter: Well, take Galveston, where you are acquainted. Now, take any switch engine in the Galveston yards that runs 24 hours, now will you explain why it would be impracticable to go out to where your roundhouse is, J, is it not?

Mr. Keefe: 42nd Street yards.

Mr. Carter: Now, say at the 42nd Street yards. Under your present practice, one crew goes to work at 7 in the morning, and then is relieved by the night crew at 7 in the evening. Now will you explain why it would not be practicable for a crew to go to work at 8 o'clock in the morning, be relieved at 4 o'clock in the afternoon and be relieved by a third crew at midnight?

Mr. Keefe: That engine is not relieved every evening at 7 o'clock. It is relieved according to business conditions of the company. Sometimes it is relieved at 6 P. M.; sometimes at 7; sometimes at 8 P. M., according to the character of the work they have got. They may be taking a drag to the Galveston wharf, which is usually about 4 o'clock in the afternoon; or 3 o'clock in the afternoon, taking the cotton and stuff to the wharf for the night's work. They are en route there, and when they complete that delivery then they come back and tie up for the night, or for the day, whether it is six o'clock, 7 o'clock or 8 o'clock, whatever time it takes.

Mr. Carter: And then you insist that these men in switching service are working under such undesirable conditions that they are creatures of circumstance, and of work, and when other men are quitting their work they are probably down at the wharf. Now, under those circumstances, don't you think it is a shame that the men on those engines should draw the lowest wages paid to any class of employees? For instance, a fireman gets how much an hour?

Mr. Keefe: I don't subscribe, however, to your statement of conditions.

Mr. Carter: Now, you have said that, unlike other men, they could not have regular hours, and for that reason it is impossible to relieve them. Now, I have said if their hours are so irregular, are they not creatures of adverse circumstances?

Mr. Keefe: No, sir.

Mr. Carter: You think, then, that it is a privilege that they should be glad to have.

Mr. Keefe: I do not consider that adverse circumstances.

Mr. Carter: Don't you?

Mr. Keefe: No, sir.

Mr. Carter: Well, suppose they did. Suppose they would like to quit work like the rest of the human race, but instead of being able to quit at a time when the whistle blows, they send them to the Galveston wharf without regard to their meal hours, and the wife has the supper on the table, and you know what the wife says when the supper gets cold, and they cannot get away because, under the exigencies of the work, they have got to be down at the Galveston wharf at 6, 7, 8 or 9 o'clock at night, and that potato has got cold on the table, and he can't go to his supper like other humans,—don't you think it is a shame that he should get the lowest rate of wages that we have practically seen here, 24 cents and 25 cents an hour, that fireman?

Mr. Keefe: I don't subscribe to your picture of the conditions at all.

Mr. Stone: We didn't expect you to.

Mr. Carter: We did not expect you to, Mr. Keefe. You could not afford to.

Mr. Keefe: I am talking about conditions as they really are, and not as they are pictured by you.

Mr. Burgess: Mr. Keefe, can I ask you a question, please?

Mr. Keefe: Certainly.

Mr. Burgess: If I understood Mr. Park's question correctly, and your testimony, the only objection that you have to the 8 hour day would be the impracticability of making an arrangement of that kind. Is that right?

Mr. Keefe: Why, the transportation service, as explained by nearly every other witness here, is entirely different from the manufacturing industry. It is a different industry entirely. It has different conditions and different working arrangements.

Mr. Burgess: Well, if it could be developed that that objection could be overcome, and a proper method employed, you would then have no objection to putting the 8 hour day in effect? Is that right?

Mr. Keefe: There are too many ifs in your question.

Mr. Burgess: Well, should a plan be developed so that

these crews could be changed at the expiration of 8 hours, a plan that would meet with the approval of an operating official, would your objection then be overcome to the inauguration of the 8 hour day?

Mr. Keefe: Will you read the question, please?

(Question read as above recorded.)

Mr. Keefe: Before I could answer that question, Mr. Burgess, I would want to know what the plan is.

Mr. Park: Would it be possible to change a crew half way to Whiting if the 8 hours was up?

Mr. Keefe: That is why I wanted to know what Mr. Burgess's plan was before I answered.

Mr. Park: You would have to deadhead a man out on a street car and pay him a day for it.

Mr. Keefe: I can't understand how any plan could be universal in this territory, how any plan could be feasible at all points universally.

Mr. Burgess: Probably I did not make my question clear. The intent was not to submit any plan, but only to find out the real objection that you have to the 8 hour day. Now is it a fact that the money consideration is of any value in regard to your objection?

Mr. Keefe: Money valuations have a lot to do with the objection to it. That is one of the objections, certainly.

Mr. Burgess: That is a minor objection, though, compared to the impracticability of the operation.

Mr. Keefe: I have not said so.

Mr. Burgess: Well, would you say so?

Mr. Keefe: It is impossible to measure one against the other. They are all objections and ought all to be taken into consideration in arriving at questions of this character.

Mr. Burgess: But, when this Board considers that question, it will be reasonable to infer, if I understand your testimony correctly, that the mere money consideration is of no value?

Mr. Keefe: I have never said any thing of that character.

Mr. Burgess: Well, would you deny it?

Mr. Sheean: That is not for this Board to consider, is it? You are laying the foundation for some future board, aren't you? You have not introduced the eight hour request here, have you?

Mr. Burgess: No, but I was trying to get the witness to

answer the question whether the money consideration was of any value at all.

Mr. Keefe: I told you I never said that. All money questions are of value, and have to be taken into consideration, as well as all other conditions.

Mr. Burgess: So there are some other reasons, besides the impracticability of making the eight hour day in the switch engine service?

Mr. Keefe: Certainly.

Mr. Burgess: That is all.

Mr. Carter: Well, Mr. Keefe, would it not be more practical, from an operating standpoint, to have an eight hour day than a twelve hour day, for this reason? Under the twelve hour day we have four distinct pauses of the service, the first pause at 7 o'clock A. M., when we change crews; the second pause is at noon, when we eat dinner. The third pause is at 7 P. M. when we again change crews; and the fourth pause is at midnight, when we eat supper. Now, under the eight hour day you would only have three pauses; that is, there would be a pause to change crews at 8 o'clock A. M., a pause to change crews at 4 o'clock P. M. and a pause to change crews at midnight, without any time for meals at all. It would seem more practicable from a railroad standpoint, that they only have three pauses out of twenty-four than to have four, as at present.

Mr. Byram: What would you do, Mr. Carter, under your plan, with a man on a single trick job?

Mr. Carter: I would have it an eight hour single trick, and if there were sixteen hours work there, as shown on these exhibits that have just been presented, why, I would have two tricks.

Mr. Byram: There are many places where there is one trick, either day or night switch engines.

Mr. Carter: Yes.

Mr. Byram: What would your plan do with that man?

Mr. Carter: I would have one eight hour trick, two eight hour tricks, or three eight hour tricks.

Mr. Byram: I am not talking about sixteen hour service.

Mr. Carter: Well, on Exhibit No. 45, as it is presented here, it provides for eight hour tricks, two eight hour tricks for every man. Here is a sixteen hour service, and here is a fourteen hour service.

Mr. Byram: I am asking you what you would do in that case. Here is one engine, and all the work there is is for one engine working a ten hour trick.

Mr. Carter: I would pay him one day, and two hours overtime, and if there was enough for sixteen hours, I would work two tricks. That is done in the building business, in the printing trade, and in any other trade, except the railroad trade.

Mr. Byram: You advocate that, then, as being just as favorable to the railroads on the ten hour trick as the present system?

Mr. Carter: Not from a monetary standpoint. For instance, I would have the engineers and firemen on that service, just like a machinist. If you had a job for the machinist that cannot be done in eight hours, you use your discretion, whether you have him work two hours overtime or call in another machinist and make two tricks. It is done in the shops and done in the yards. It would cost the railroads more money.

Mr. Byram: I thought you were arguing that it would not cost as much?

Mr. Carter: It would not cost as much lost time. The mere hours would be obliterated.

Mr. Byram: Yes, but didn't I understand your argument to be on the three eight hour tricks, that it would not be as expensive to the company?

Mr. Carter: No, I said it would cost more money, but it would be more practical to have three pauses than four pauses. And I think the money is the only question between the witness and myself.

Mr. Byram: Well, then I was mistaken.

Mr. Stone: Mr. Keefe, coming back to that man who deadheads out on the street car, whom I said, if he did not go into the river with the street car before he gets there, when we get time and a half for overtime, do you think there will be any of these sixteen hour jobs for one man, or will you call in a second crew?

Mr. Keefe: I did not understand your question?

Mr. Stone: This man who deadheads out to Whiting, we will take any one of these men who deadhead out to their job, that Mr. Park says could deadhead out on a street car, and get a day and I said he would get a day unless he goes in the river before he gets out there, now, if he gets time and one-half overtime,

do you think there will be any sixteen hour jobs for a man on a switch engine, or will they call in a second crew after ten hours?

Mr. Keefe: They have ten hour days now, as I understand it. Mr. Carter was talking about twelve hours, but I understand it is ten hours in the schedule.

Mr. Stone: It is very evident from this exhibit that the ten hour day is purely theoretical. It does not exist, because there isn't any ten hour day in this here.

Mr. Keefe: Well, that is in Chicago yard, and I presume the conditions in Chicago are different from those in a lot of other places in the West. I know they are different from what they are in our part of the country. That is why a rule of general application to this Western country is not feasible.

Mr. Stone: They ought to be more regular in the Chicago yards than in some of the outlying points, don't you think?

Mr. Keefe: I don't know about the Chicago situation, but just from observation, I would say they are not.

Mr. Stone: But I would like to have you answer my question. Do you think there will be any single crews, sixteen hours straight away, without any relief, when they get time and one-half for overtime after ten hours? Do you think any individual switching crew will work straight sixteen hours after we get time and one-half for overtime, or will they call another crew after ten hours—get a fresh crew?

Mr. Keefe: In a great majority of the cases it would not be practical. There might be a few cases where it would be practical, but in the great majority of cases, I don't see that the payment of time and one-half for overtime, will prevent the working of the engines as business requires it.

Mr. Stone: It is very evident, according to the payroll of the machinists, that that will be the case. I cannot see from my point of view here, where it would not be the case with the enginemen.

Mr. Keefe: It is an entirely different point of view. That is more of a manufacturing work than transportation.

Mr. Stone: In your Exhibit 48, how many machinists do you show that work fourteen hours in any single day?

Mr. Keefe: I don't know.

Mr. Stone: Do you know of one?

Mr. Keefe: I understand the work in the Milwaukee shops

is just straight eight hours for five days in the week, and only work one shift, and have no overtime, because the business requirements do not necessitate it. They work five eight-hour tricks, that is, eight hours per day for five days a week.

Mr. Stone: What do they do at the Western Avenue shops, where they do the switching right out alongside of them?

Mr. Keefe: I don't know, except what one of your witnesses testified as to work there.

Mr. Stone: Eight hour shift?

Mr. Keefe: In the roundhouse for running repairs, yes, sir. That is entirely different from the main shop work.

Mr. Stone: That is all.

Mr. Sheean: Mr. Keefe, have you found anywhere in machinists' operations, or any of these people, where overtime is drawn, where there is a situation such as is shown here by these payrolls, that often, on the two shifts, you pay one crew while working with the engine, and pay the other crew while waiting to get the same engine? Do you know of any situation where the machinist who is working at the machine draws pay while another man, for eighteen hours in one month, is drawing pay while waiting to get the machine?

Mr. Keefe: I couldn't answer that question accurately, but from my personal knowledge I don't know of any such a situation.

Mr. Sheean: Well, did you ever hear of any situation in the crafts where they paid this time and one-half for overtime where there was a situation where one crew was under pay while using the machine, and another crew drawing pay while waiting for it?

Mr. Keefe: I have never heard of any.

Mr. Sheean: And yet the payrolls that you have introduced here, even under the present situation, show that that is now the fact on double-crewed engines?

Mr. Keefe: Yes, sir.

Mr. Burgess: Well, Mr. Keefe, if a machinist was ordered to report at a given hour, and when he reached there he found some other machinist running the lathe that he was expected to run, would he not be paid from the time that he was ordered to report?

Mr. Keefe: My knowledge of that situation is that he

would be assigned to some other work. He would be probably assigned to another class of work, which it would be feasible for him to do at that point, which you cannot do with an engineer waiting for an engine.

Mr. Burgess: Yes, but in no instance would he be denied his pay for the time that he was ordered to report? From the time he was ordered up to the time he went to work?

Mr. Keefe: No, because the company would have the opportunity of utilizing him for other work.

Mr. Burgess: But if the company did not have any other machine ready, would he not be given his pay just the same?

Mr. Keefe: I cannot conceive of any such situation arising in any manufacturing plant.

Mr. Burgess: But if that situation did arise?

Mr. Keefe: I think it would be improbable that a situation of that kind would arise in a shop.

Mr. Burgess: That is all.

Mr. Stone: They would not assign him to any other class of service, other than that of machinist, however?

Mr. Keefe: I don't believe so. He would be employed as a machinist.

Mr. Burgess: But, Mr. Keefe, you were here when the agreement covering the machinists on the Chicago, Milwaukee & St. Paul Railroad was introduced, wherein it provided that a machinist would be paid for all time going to a wreck except that time that he might be in bed, to the extent of five hours, is that right?

Mr. Keefe: Yes, that takes care of an unusual situation, and one that is not of any frequency at all, so far as the machinist is concerned. It is an exceptional case where he is sent out on the road.

Mr. Burgess: But he would be paid for the time he was eating his meals and riding on the train, and riding back again, at full rates, would he not?

Mr. Keefe: If the exhibit shows that, I do not care to dispute it.

Mr. Burgess: That is all.

Mr. Carter: Mr. Keefe, Rule 8 of the Machinists' Schedule on the Milwaukee Railroad, page 4, says:

"Machinists sent out on the road shall receive pay from the

time from which they are called until they return, as follows: Overtime rates for all overtime hours, whether waiting, traveling, or working, and straight time for what are straight time hours."

Now, it did not matter whether he would be waiting, traveling or working, his pay would not only go on, but it would be time and one-half. Now, waiting, traveling or working, shows that "working" is only a third of the matter. That is all.

Mr. Stone: That is all.

Mr. Sheehan: Some exhibit was introduced here, Mr. Keefe, and I don't remember the number, purporting to show that revenues were improving on these Western Railroads. Did you receive this morning a statement as to the latest showing of the railroads up to the latest time that reports were made to the Interstate Commerce Commission?

Mr. Stone: Is this the statement for the Rate Case, or the one for the Wall Street Journal, which?

Mr. Sheehan: This is to bring Mr. Lauck's information up to date. He was promising us pictures of prosperity, and I wanted to get it down to the latest information that we could obtain from the Interstate Commerce Commission.

Mr. Keefe: Yes, sir, I received this morning a statement on the same form as sheet No. 7 of Exhibit No. 4, introduced by the Railroads. That previous exhibit was for the five months ending in November. The information that was received this morning is for the month of January, and for the seven months ending January 31, 1914.

Mr. Sheehan: If your Honor please, I would like to read this into the record, and I will have it put in print today and furnish you copies, if that is satisfactory. It was only received this morning.

Mr. Stone: What is it from, the I. C. C.?

Mr. Keefe: Yes; it is compiled by the Bureau of Railway Economics.

Mr. Stone: I would not care anything about that, because they were never known to get anything right.

Mr. Sheehan: Well, I will ask leave to file it as Exhibit No. 49, your Honor, just as soon as it is printed, and in the meantime, read it into the record.

(The document so offered and identified was received in

evidence and thereupon marked "Railroads' Exhibit No. 49, March 18, 1915.")

Mr. Sheean: Now, Mr. Keefe, what is the situation on these Western roads, for the last seven months?

Mr. Keefe: Just for the seven months, as a total, or for January?

Mr. Sheean: No. Give us the information as summarized there.

Mr. Keefe: For the month of January, it shows that the total operating revenue decreased \$5,546,549.00 as compared with the same month of the previous year.

The operating expenses decreased \$4,332,120.00.

The net operating revenue decreased \$1,214,429.00.

Mr. Sheean: That is, the month of January, 1915, is over a million dollars worse off than the month of January, 1914.

Mr. Carter: What railroads?

Mr. Sheean: All the Western railroads.

Mr. Stone: What per cent is that of the same period last year?

Mr. Keefe: Decrease of 12 per cent in amount—decrease of 5.8 per cent, Mr. Stone.

Mr. Stone: I have just sent Mr. Lauck after the Financial America, which yesterday stated, as I recall it—I am simply quoting from memory—I much prefer to have the paper itself—about 3 per cent less over the same period last year, for all the railroads in the Western territory.

Mr. Sheean: Well, he probably has the entire Western territory. This is for the railroads involved in this movement.

Mr. Stone: Well, there are only two or three small roads left out.

Mr. Sheean: Now, go on and finish.

Mr. Keefe: In the taxes, there is a decrease of \$45,000.

The uncollectable railway revenues increased \$22,392.

Mr. Stone: Just what would that consist of?

Mr. Keefe: That is a new account that was opened up since the 1st of July, 1914, and I personally have not had an opportunity to become familiar with all of the new accounting rules, since the new rules went into effect.

Mr. Stone: Probably a new kink in railroad book-keeping.

Mr. Keefe: No; I take it it is the amounts they are able

to collect from the patrons of the road, for transportation services.

Mr. Sheean: Bankruptcy accounts are some part of it.

Mr. Stone: I did not suppose they were running any credit for patrons of the road for transportation, or anything of that kind.

Mr. Keefe: There is an uncollected account always in railroad operations, the same as there is in other operations, Mr. Stone:

The operating income decreased \$1,191,090.00, or 6.7 per cent.

Mr. Carter: Was that increase or decrease?

Mr. Keefe: Decreased \$1,191,090.00. That is for the month of January only. That is notwithstanding that there was an increase in the operated mileage, of about 1,500 miles.

Mr. Stone: What is the increase or decrease in ton miles?

Mr. Keefe: I have no increase in the ton miles. These are simply the earnings and expenses. They don't report those ton figures, by months, Mr. Stone. They are the annual figures.

Now, for the seven months ending January 31, 1914, the decrease in operating revenue is \$41,488,658.00 over the same period of time for the previous year.

The decrease in operating expenses was \$34,051,072.00.

The decrease in net operating revenue was \$7,437,586.00.

The increase in taxes was \$292,177.00.

The increase in the uncollectable railway revenues was \$141,629.00.

The operating income shows a decrease of \$7,871,392.00.

Mr. Sheean: And what is that in percentages, as compared with 1914?

Mr. Keefe: 4.8 per cent.

Mr. Sheean: Now, your Exhibit No. 4 had shown that 1914 had fallen off 11½ per cent from 1915, and now 1915 is still below 1914.

Mr. Keefe: Yes, sir.

Mr. Carter: Will you show what the decrease in the earnings of the engineers and firemen have been, for the same comparative period? Don't you think it would be about 25 per cent, instead of 4 per cent?

Mr. Keefe: Not as to the individual men at all.

Mr. Carter: I am talking about all the men, as it affects all the roads.

Mr. Keefe: The aggregate amount paid to engineers and firemen may show a decrease.

Mr. Carter: That is what I meant.

Mr. Keefe: But the amount received by individual engineers and firemen don't correspond with that proposition at all.

Mr. Sheean: But the previous exhibits have shown that the decrease to engineers and firemen is not proportionate to the decrease in operating expenses?

Mr. Keefe: Certainly.

Mr. Sheean: Not commensurate with them?

Mr. Keefe: Certainly.

Mr. Sheean: That is all as to that. Now, Mr. Stone, you requested Mr. Trenholm to file the blanks that were used on their efficiency tests. How many copies do you want filed?

Mr. Stone: I would like for the Board to have a copy, and have a copy for my own files.

Mr. Sheean: And then we can file the same number and make it an exhibit?

Mr. Stone: Yes.

Mr. Sheean: We submit that, then, as Exhibit 50, and we will supply 49 as soon as we have put it in type.

The document so offered and identified was received in evidence and thereupon marked "Railroads' Exhibit No. 50, March 18, 1915.")

Mr. Stone: I should like to read from the Financial America of yesterday, in reply to Mr. Keefe, if I may be allowed to do it when Mr. Lauck comes with it.

Mr. Carter: Nothing about throwing switches here.

Mr. Sheean: I have not looked at it. I don't know anything about it. Mr. Keefe, I did want to ask you one question, too. I have forgotten the gentleman's name—Mr. Hintz, was it, of the North Western?

Mr. Keefe: Engineer Charles Hintz, who called attention to a difference in the compensated time shown by his slips and the compensated time shown by the payroll.

Mr. Sheean: And on cross-examination, I think I asked him to take up with the time-keeper and see what the difficulty was,

and have you a report from them, as to just what the facts are in that connection?

Mr. Keefe: Yes. There was a difference of 16.1 hours between Mr. Hintz's report and the payroll record.

Mr. Sheean: And how was that brought about?

Mr. Keefe: Due to the fact that Mr. Hintz's time did not include the time that he was being towed into the terminal, after being tied up under the Hours of Service Law.

Mr. Sheean: That is, on some of the trips that month he did not complete the run, but was towed in by another engineer?

Mr. Keefe: Yes; seven trips of that character.

Mr. Sheean: That created sixteen hours during the month?

Mr. Keefe: 16.1.

Mr. Sheean: That made the difference between the 330 and the 346?

Mr. Keefe: Whatever is the difference.

Mr. Sheean: I think that is all that I wanted to ask Mr. Keefe.

Mr. Stone: Mr. Chairman, if I might be allowed, I would like to read this from the Financial America of New York, March 14th. This is in reply to Mr. Keefe's statement of their freight falling off.

"Chicago, March 13.—'Weather conditions and market prices entered into the traffic situation the past week, and business has fallen off 3% as compared with last year, says an official of the Chicago & North Western.

"'Conditions of traffic as a whole made little change the past week, the volume of business continuing 5% ahead of last year,' says an official of the Rock Island.

"'Some diminution was shown in the volume of freight being handled over our lines during the past week, whereby loadings were 6% less than a year ago,' says an official of the Atchison. 'Shipments of grain were 10% lighter, packing house products 12%, and miscellaneous business 4%. General merchandise continues of about equal proportion with last year, with deliveries of oil 13% larger.'

"'Freight operations over our lines during the first week of March indicated a lighter movement of grain than has prevailed for several weeks,' says an official of the St. Paul. Miscellaneous business was also somewhat lighter, while lumber shipments

showed some increase. Merchandise tonnage kept up fairly well, and livestock was a little better, but general traffic was under that of last year from 3 to 5%.

"An official of the Burlington says: 'With the exception of an increase in tonnage in livestock of 25%, traffic reports point to a lighter movement of freight generally. The lower tendency in market quotations on grain the past week caused a falling off in shipments of that commodity of 30% to 40%, as compared with last year.'"

Mr. Byram: I can give you the exact decrease for the Burlington: Its decrease was 17 per cent.

Mr. Stone: "Coal loadings were lower by 45%, miscellaneous freight 3%, with merchandise steady. Operations as a whole were less by 10% than a year ago."

Mr. Carter: Mr. Chairman, with your permission, I would like to read a news article in the Chicago Tribune of March 18th:

"Washington, D. C., March 17: Directors of the Chamber of Commerce of the United States, on reaching Washington for a business meeting, brought tidings of prosperity in every section of the country.

"According to these directors, as well as the correspondents of the Chamber, business is picking up throughout the country. The upward trend appears to be so certain that President Fahey of the Chamber of Commerce issued this statement:

" 'The resumption of business activity is continuing steadily and the movement should quicken now. The consensus of all expressions is that in almost every direction things are mending rapidly. As a result of the War, it is inevitable that there be slowness in some lines, but more men are being put to work every week and the industrial output is increasing.

" 'The products of our factories are moving in an orderly way in response to the natural demand. The prosperity of our industrial sections is, of course, almost wholly dependent upon domestic demand, and that demand begins with the people of the mining and agricultural districts as they get money in hand.

" 'Our factories are being called on to supply the needs of this great factor in our population. In addition, the people employed in those industries selling war supplies, now have funds in hand and the volume is increasing every day. These

thousands of people are coming into line in their demand upon our factories.

“ ‘Just now, of course, business is beginning to be influenced by the movement of goods in response to seasonable demand, just as in other years. The evidence is clear that in every direction stocks in the hands of retailers and manufacturers have been low, and are being kept low and that there is a strong tendency toward economy on the part of the people of all classes, is shown by the condition of savings banks and the general expression of sentiment in all sections.

“ ‘While general optimism is increasing, at the same time business is going forward with a good deal of caution.’ ”

Mr. Park: That is a political document, is it not?

Mr. Carter: I don't know what party the President of the Chamber of Commerce of the United States belongs to. If he belongs to the “outs,” why, he would not talk that way?

Mr. Sheean: Now, Mr. Keefe, is that all that you have on your mind?

Mr. Keefe: Yes.

Mr. Sheean: We are through, then.

Mr. Carter: That which I read was from the Chicago Tribune, Washington correspondent.

Mr. Burgess: Mr. Chairman, if I understand the nod of assent between Mr. Sheean and Mr. Stone, they have about concluded their evidence. Is that right? Well, Mr. Chairman, I would like to crave the indulgence of the Board and the gentlemen present, to read into the record a reply, or rather, the position of the engineers relative to the surprise tests. If I recall correctly, it was the morning of December 21, 1914, that Mr. Park read into the record a statement relative to that question, and it seemed necessary to admit our unpreparedness to reply, and I asked you for the privilege of reading into the record at a future time, after the evidence was in, and if I recall correctly, you gave your assent. Now, I wish to reiterate that request at this time.

The Chairman: All right. Read your statement.

Mr. Burgess: A study of the record will reveal the fact that Mr. Park, on the morning of December 21, 1914 (page 1720), questioned the witness (Mr. Modenbach) relative to a surprise test, which, according to the direct testimony of the witness, had

occurred on the Chicago, Rock Island & Pacific Railway, at or near a station named Dover (see page 1684). After Mr. Park had examined the witness, he read into the record a statement purporting not only to set forth his personal views in regard to the continuance of the present practice of conducting surprise tests, but Mr. Park had also woven into his written protestation, abstracts from various reports of the Interstate Commerce Commission, which, in the absence of the entire report, might tend to create the thought that the purpose of Article 11, in the proposal before us, was to nullify proper discipline, or obstruct remedial activities deemed necessary for the preservation of life and limb.

While we cheerfully acknowledge the right of Mr. Park to entertain and promulgate this opinion, if he so desires, we also beg to respectfully disagree with his views or any conclusion that may be reached, by either placing an unwarranted interpretation on the language of the proposal, or selecting only certain paragraphs appearing in the report of the Interstate Commerce Commission.

We hold that no law, report or communication can be properly interpreted, unless we inquire after the will of the maker, which is collected from the words, the context, the subject matter, the effects, and consequences, or the spirit and reason, and if the spirit and reason cannot be used in construing this, or any other report or rule, it ought to cease to exist, for that which is not reason is not worthy of being taken as a rule of action, and it is upon this ground that we except to the statement by Mr. Park.

We maintain that it would be highly improper for this Board, the Interstate Commerce Commission, or any Government tribunal, to assent to any rule for efficiency tests of locomotive engineers or firemen, that would needlessly place in jeopardy the lives of such employes. We further affirm that, apart from the personal injuries to the engineers and firemen resulting from this practice, we must have in mind the interests of the American people, in the final adjudication of this very important question, and as practical locomotive engineers and firemen of many years' experience, we have no hesitancy in stating there is no actual service connected with operating a locomotive, that so thoroughly robs the engineer and fireman of that self-posses-

sion and calmness, so essential to safe operation, as the knowledge that they may at any moment receive a false and unnecessary indication, that, to them, momentarily signifies disaster, and possibly death, and after one or two such experiences, we find an engineer and fireman trying to bring a first class train to a terminal, with their nervous system in a shattered condition, at a time when it should be at its best. Of course, sleep and rest will tend to repair the damage, but a continuity of this practice soon baffles the best efforts of nature.

Moreover, it is highly interesting to note the change in the complexion of the question, when all the facts in connection with the report of the Interstate Commerce Commission are uncovered, for unquestionably no person who has heard Mr. Stone read into the record the communication from the Commission, or the report of 1914, can possibly place the responsibility for the test complained of, at the door of the Interstate Commerce Commission.

But, aside from any report of the Commission, or any statement by an arbitrator or witness, we cannot disguise the fact that the language found in Article II of the proposal, does not contemplate the restriction of proper discipline. It simply provides that tests be conducted in accordance with railroad rules and practices, and this thought can be amply verified by referring to statements by Mr. Stone, pages 181, 182, 183, 184 and 1733; also Mr. Carter, pages 1727 and 1728, and Mr. Phillips, pages 135 and 139.

We appreciate the fact that Mr. Park is a successful operating official of high standing. Notwithstanding that fact, we believe that no member of this Board can escape the responsibility, even if he so desires, and when the question is divested of all ambiguity and viewed from an unbiased standpoint, it could be properly paraphrased as a plea from 65,000 railway men, to relieve them from the practice that daily jeopardizes their lives and limbs, with no appreciable results.

The Chairman: Is there anything further?

Mr. Shecan: Nothing further.

Mr. Stone: Mr. Chairman, if I might, if there is any question on the part of the Board as to whether firemen really shovel coal or not between terminals, I would like to leave with the Board—I can't file it as an exhibit, because there is only one

copy in existence—I have here a blueprint of a dynamometer car that was on the Chesapeake & Ohio Railroad—the only one I could get. It tells the whole story, and it is not biased in any way. It is simply a mechanical machine and registers every movement of the train from one terminal to another. I should like to leave it with the Board.

Mr. Sheean: Is this a passenger or freight?

Mr. Stone: This is a passenger. I could not get a freight one. I suppose there are in the archives of some of these Western Roads some of these blueprints. I know the Santa Fe had this car for some month or six weeks. This chart was made July 25, 1911. I might add for the information of all, that there are a number of dynamometer cars in the country that register the speed and tractive power. This is the only one of its kind that ever gave all of this information. In fact, it gave so much that nobody wanted it and the machine was scrapped. They said it told too much.

Mr. Park: Mr. Stone, they kept the record of the coal put into the fire box, in exactly the same way as these observers on the engine, indicating with a machine every time the fireman threw a shovelful of coal into the fire box.

Mr. Stone: That perhaps might be true. Every one of these registers five scoops, so it says. I am not filing it as an exhibit.

Mr. Sheean: I haven't the slightest objection, but if there is any possible way of getting in the record the one on a slow drag freight—

Mr. Park: I have got them.

Mr. Stone: I couldn't get them, Mr. Park.

Mr. Park: We have a car in operation. There is one right over here in the yard now.

Mr. Stone: But it don't show all of this.

Mr. Park: No, we would have to go back some two or three years to get an exhibit for a freight train. I can get it.

Mr. Sheean: The same privilege will be extended to Mr. Park, if he can get it, and it can be used in the same way as this, for ready reference.

Mr. Stone: Surely.

The Chairman: The Board would be glad to hear any suggestions that you may have to make, as to the time which you

think will be necessary for you to have in order to prepare your briefs.

Mr. Carter: Mr. Chairman, I think we would be willing to abide by the wish of the Board. If it is desired by the Board to have no brief and no closing argument, why, it will be suitable to us, or if a brief is prepared, why, we will be glad to prepare one.

Mr. Sheean: If your Honor please, it has been my thought and expectation, since conference some time ago—informal conference, that at the completion of the evidence a reasonable time would be given for the preparation of a brief, and I then thought and still think that a sufficient length of time, at least, to have a fairly presentable brief, is in the interest of economy of time for all concerned. With a record of this magnitude, I do not think that any sort of a brief that could be helpful, could be prepared in less than one week's time, and I have always thought not less than one week would be necessary. In view of the fact that a week would take us over until Friday of next week, my belief, and my suggestion and recommendation and hope is that the Board will convene for the purpose of hearing the arguments and briefs, on a week from next Monday. I should think that persons hearing this evidence—this mass of evidence of some seven thousand or eight thousand pages, unless analyzed and digested, and arranged in some connected way, it would be almost an undigestible mass, and I don't think that a brief will really be helpful that could be prepared in a length of time shorter than that. Therefore, I would ask that I be given that length of time to file a brief, and at the same time that it is filed, to be ready to proceed with the oral argument.

The Chairman: What time will you need for oral argument?

Mr. Sheean: That depends, your Honor, in my judgment, entirely upon the colloquy between the Arbitrators and those presenting it. I think that an oral argument is always more helpful to all concerned, if, instead of a set speech, it is merely the good faith effort to exchange ideas between the Board to whom it is presented and the person presenting it, but to make an argument on these sixteen propositions that would really cover only the high points in it, I should think would necessitate at least a day's time, by the party attempting to present arguments in support of, as well as the one presenting arguments against it.

The Chairman: I should think so.

Mr. Sheean: At least that, and I think it would be better done and probably save more time, if a more liberal allowance than that were made.

The Chairman: I had hoped that we could come back here next Friday morning and have the argument on Friday and Saturday, but, of course, I appreciate the fact that the more care that is exercised in the preparation of the brief, the more benefit the brief will be to the Board. After adjourning today, the Board will reconvene each day, in executive session, and speaking for myself, I will say that I will spend the intervening time in reviewing the mass of evidence which has been offered, in order that I may be better able to appreciate argument of counsel.

Mr. Sheean: Well, I should think, your Honor, that that would be helpful in connection with what I suggested as to what to me seems the desirable way of making the oral argument, namely, of having a simple colloquy and inviting discussion, and the analytical work that is done by the members of the Board as to just what the evidence now contains and what questions are raised by it; of course I think that is almost as necessary as is the brief. I think argument that is helpful is as necessary as a brief, the analysis of the evidence that is made in the oral argument.

The Chairman: I find in court that it is always very helpful to ask questions of counsel. Of course, not with the view of embarrassing them or throwing them off the track, but simply with the view of getting the facts and the law bearing on the case. I think in that way questions are very helpful, coming from the Court, and I don't know how many questions I may have to ask, but I am sure I will not ask very many.

Mr. Carter: Mr. Chairman and gentlemen of the Board, so far as we are concerned, why, if the Board prefers, on account of the great length of these proceedings, to immediately consider the evidence and render an award, it is acceptable to us. If, on the other hand the Board prefers that briefs be prepared and arguments be presented, why I agree with Mr. Sheean that it will take at least a week to properly prepare and print a brief.

The Chairman: Well, the Board is not going to require anyone to file briefs, but of course if briefs are filed they will be very helpful to the Board. That is a matter for you to determine.

Mr. Carter: Well, what I meant, Mr. Chairman, is that we would prefer, so far as Mr. Stone and myself are concerned to follow your desires rather than our own. We are willing to do either way.

The Chairman: It is always very helpful, and is the only way I know by which we can arrive at the correct conclusion. I can understand how a brief well prepared on the various points here, citing the evidence and the pages, and so on, will be very helpful. But I do not mean by that that I would like to see a brief like one of those books there. If a brief is what the word implies it is a splendid thing. But if it is not, sometimes it is more confusing than helpful.

Mr. Stone: Mr. Carter and myself, of course, will do the best we can on our brief. It is out of our line of business. It will probably come all right from Mr. Sheean, but our experiences have been limited on the matter of briefs. I think we have only prepared four all told.

The Chairman: Well, you have acquitted yourself splendidly, I must say, Mr. Stone, and I am sure you will be equal to the occasion.

Mr. Stone: I thank you very much for saying so.

The Chairman: And I mean it, Mr. Stone, I mean every word of it.

Mr. Stone: In the Arbitration in the East we were limited to three hours in the argument on each side, which gave an hour and a half for opening and closing. I don't know how much Mr. Carter wants nor how much Mr. Sheean wants, but as far as I am concerned I can say what I have to say in an hour easily.

The Chairman: I am not going to limit you.

Mr. Stone: If Mr. Carter and Mr. Sheean want to talk the whole thing to death and themselves too, I shall not object.

Mr. Sheean: Well, I assume you are entitled, as of course I know you are, to the opening, and how much I shall want to say, of course, will be dependent somewhat on what is said in the opening. You are also entitled to the close. And was it the intention, or is it out of order to discuss that here now, as to whether you had thought at all that one would open and the other close, or have you given any thought to that?

Mr. Stone: Mr. Carter will open.

Mr. Carter: Mr. Chairman, Mr. Stone and I have discussed this matter and we had reached this conclusion, after a conference in the other room, that no argument will be made until the brief is presented. The argument will be made from the brief. That fell to my lot. We understood then that you (addressing Mr. Sheean) would deliver the address of the occasion, and Mr. Stone would close.

Mr. Stone: With what is left of the fragments.

Mr. Carter: Yes, with what is left.

The Chairman: You are entitled to the opening and conclusion. You can arrange the order of argument as you see fit.

Mr. Carter: Now, do I understand that we will adjourn until when?

The Chairman: The Board will hold an executive session every day, but between now and Monday, the 29th, you will not be needed.

The Board will adjourn until tomorrow.

(Whereupon at 12:20 P. M., Thursday, March 18, 1915, the testimony in the above entitled matter was closed, and further sessions adjourned until Monday, March 29, 1915, at 10 o'clock A. M.)



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