

79. With regard to the riveting, you say the sizes are $\frac{3}{8}$ in., $\frac{7}{8}$ in., and $1\frac{1}{8}$ in. Are they the sizes used in the large boilers you are making?—There are three diameters— $1\frac{1}{8}$ in., 1 in., and $\frac{7}{8}$ in.

80. You have been taking notes of the riveting of these boilers. Can you tell me how long it takes to put in rivets of the respective sizes?—On the circumferential seam, one minute and a half to each 1 in. rivet; for the $1\frac{1}{8}$ in. rivet on the horizontal seam, one in two minutes; the $\frac{7}{8}$ in. rivets in the smoke-box tube-plate are put in by the portable plant at the rate of one every minute.

81. Have you worked in any shop where hydraulic riveters were used?—Yes.

82. Where?—San Francisco.

83. What speed did you get there?—I was only a boy of fifteen years of age, and, as a matter of fact, was passing rivets to the machine.

84. It was not a machine the same as is at Addington?—No.

85. How fast do you reckon the machine in San Francisco put in rivets?—I should judge, from my passing of the rivets from the forge to the workmen, that the time occupied was about the same.

86. You never made observations of speed?—No.

87. Have you worked in any shops in this colony where hydraulic riveters have been used?—Only in Kincaid and McQueen's.

88. Did you see a hydraulic riveter working there?—Yes, on the boilers of the s.s. "Invercargill."

89. What was the size of the plates?—I could not say; I should think about $\frac{7}{8}$ in. shell.

90. Have you any idea of the speed at which they were got through?—No; it is a very long time ago.

91. *Mr. Niven.*] If you were informed that there was a hydraulic riveter similar to that at Addington in the Dominion putting in over five hundred rivets of $\frac{7}{8}$ in. size in boiler-shell work, would you be inclined to discredit that statement?—No; everything depends on whether it is a straight run or not.

92. *Mr. Hampton.*] You spoke in your evidence of a machine used for cutting curvatures: can you tell us the name of the man who invented that machine?—Fitter Sloane, at Addington Workshops.

93. Is it his invention, or is it his improvement on an existing machine?—To the best of my knowledge Sloane got the tool out.

94. Are there any other machines there that Sloane got out?—Yes, a tube-cutter and a tube-expander.

95. Is that all?—I do not recollect about any others.

96. Do you know whether Sloane has received any special consideration in view of getting out these machines?—I do not.

97. A previous witness has stated that he had heard that workmen in Addington were in the habit of speaking to their foremen in an insulting manner. Has anything of that sort ever come under your notice?—No. On one occasion a man did speak to me in that way, and I brought him before the Workshops Manager and he apologized. That is the only occasion.

98. This gentleman spoke as if this conduct was allowed there, and would not be allowed in a private shop?—It has not occurred with me, anyway.

99. You would have no difficulty in dealing with such a man?—It would be either he or I who would go out of the works.

JOHN SPENCE CLARKE examined. (No. 15.)

1. *Mr. Beattie.*] What is your present position?—Foreman fitter at Addington Workshops.

2. What has been your experience at Addington with regard to discipline?—It is very good—quite as good as that of any establishment I have been in, and I have been in all the main shops of the Dominion.

3. What has been your experience before joining the Railway service?—I started in the Railway service.

4. Have you seen any idling or loafing at Addington?—No.

5. Taking generally the plant for the new work, do you consider that it answers the requirements?—Yes, under the conditions which we work under.

6. If you had the cranes in the erecting-shop electrified, would that help you?—Certainly.

7. In the furtherance of the new locomotive-work, are you able to carry on that new work all the time, or have you to give over the new work for the purpose of taking on repair-work?—At times we have to take men off the new work and put them on to repair-work.

8. Does that interfere with the expedition of the output of new work?—Yes.

9. Have you a good staff under you?—Yes.

10. Have you had any experience of your staff being uncivil or insubordinate to you?—No.

11. *The Chairman.*] Where have you had experience in locomotive-work?—At Newmarket, East Town, Petone, Invercargill, and Addington.

12. Is Addington the only shop in which you have been employed at which new locomotive-work has been done?—Yes.

13. Therefore, practically, you had no experience in new locomotive-work until you came here?—Some years ago in Newmarket we built some engines, and in the same connection I had experience at Petone.

14. Have you had any experience in Australia?—I have been a visitor at the Eveleigh Works.

15. You spoke about electrifying the existing cranes at Addington: how many lifts are made by those cranes?—On an average throughout the year four times per day.

16. What was the speed on the cross-traverse?—I did not take the cross-traverse.