- 64. With regard to the Australian locomotive-shops, in what respect are they better equipped than we are at Addington ?-In respect to their flanging plant, I should say. That is all. And, of course, their overhead cranes are electrically driven.
- 65. I think you have been in the habit of keeping notes of the time and cost of the work going
- through your shop?—Yes.
  66. You have a knowledge of what work costs, and you have a pretty good knowledge of what each man is doing and is able to do ?-Yes.
- 67. Are you satisfied that the staff under you are doing a fair thing ?—I am quite satisfied that every man is doing his best. During the last twelve months they have had to go pretty fast.
  - 68. Any imputation of idling is, in your opinion, then, quite unwarranted ?-That is so.
- 69. You are perfectly satisfied with your staff, and refute the suggestion that they are inefficient or idling !—I do.
  - 70. How many leading hands have you under you at the present time ?—One.
- 71. What is his name?—Charles Earwaker.
  72. What is your opinion with regard to additional leading hands in your shop?—Now that we have got through the rush work, I do not think it is necessary to have another one. Of course, we have an additional leading hand on at night, but that is another shift.

## Monday, 15th March, 1909.

## James Thomas Henderson, Examination resumed. (No. 14.)

- 1. Mr. Beattie.] Can you tell us what percentage of rivets you usually reckon on having to cut out of boilers in the Addington Workshops with the hydraulic riveter ?—A very low percentageperhaps one out of four or five hundred rivets. In a boiler sometimes we do not have to cut out any.
- 2. The Chairman.] What shop did you serve your time in ?—R. S. Sparrow, in Dunedin, and I finished with Morgan and Cable at Port Chalmers.
- 3. Have you worked in any shops out of the country ?-I started in the boiler establishment of the Risden Iron and Locomotive Works, San Francisco. After that I worked in Imry's at Port Chalmers, Kincaid and McQueen's at Dunedin, and then in the Government workshops.
- 4. You spoke of the Australian shops and what they were doing in some of the Australian boilershops. Do you speak of your own knowledge ?—Only as a casual visitor. During my annual leaves of 1907 and 1908 I visited Australian shops.
- 5. Were you sent on those visits or did you make them on your own initiative ?--I made them on my own initiative during my annual leave.
  - 6. Do you find the boiler-shop at Addington too big for you to manage as foreman ?--No.
- 7. What is the clerical work which you have to do?—There is the answering of correspondence; writing up the job tickets for material, picking it out from the drawings, and, of course, getting out the quantities; and initialling the time-books.
  - 8. I think you said that initialling the time-books took you two hours a day ?--Yes.
  - 9. You do not initial the time-books in the shop ?—No, in the office.
- 10. If you do this work in the office, what check have you that the time has been entered to the proper number by the men ?—Only from general observation.
  - 11. From memory ?—That is all.
- 12. Have you never done this work in the shop as you went round ?—I did at one time, until the staff got too big.
  - 13. You found you could not do it in the shop?—Not now.
- 14. Have you any clerk or boy to assist you in the office ?—There is the clerk of the Workshops foremen, who is supposed to assist us. He is generally with the foreman fitter, and if I require anything I have to get him to come along and assist me.
  - 15. He is shared out amongst the foremen ?-Yes.
  - 16. And the foreman fitter has the best of him ?—I think so.
- 17. You spoke about some plates that you were not able to roll. What plates were those ?-They were cone plates for the barrels of these X boilers.
- 18. You were not able to roll them ?-In the first place, our rollers were not strong enough. We did roll one, and it broke up our gear.
  - 19. How thick were those plates ?—Seven-eighths of an inch.
  - 20. Were they exceptionally hard ?—No.
  - 21. Did you roll them cold or with the chill off?—Cold.
- 22. And you found the rollers would not roll them ?-We could have continued rolling them, but the time occupied in repairing the rollers would have been so great that it was not worth while.
- 23. Stevenson and Cook finally rolled them, and had some trouble ?-Yes, it took them twelve hours to do the first one, and to adjust the top roller they had to get seven or eight men on to the levers to obtain the required pressure.
  - 24. These plates were  $\frac{7}{8}$  in. thick, and not  $1\frac{7}{8}$  in. ?—Yes.
- 25. What is the biggest barrel-plate you have rolled at Addington with the present plant?— Three-quarters of an inch thick.
- 26. How long did it take ?—Two plates took four and a half hours, including putting them into the rolls and taking them out, and there was no trouble whatever.