- 17. Mr. Roberts.] What sort of locomotives had you been building at Newmarket ?—FA and LA.
- 18. How many ?—Four of each sort. That was while I was there; some may have been erected
 - 19. Were those new engines ?—Two were new engines, and two were converted.
 - 20. What were the new ones ?—They were Fa's.
 - 21. Is that long ago?—I left Auckland in 1896—it was a year or two previous to that.

WILLIAM HENRY COLE examined. (No. 16.)

- 1. Mr. Beattie.] What is your present position?—Foreman blacksmith, including the forge at Addington.
- 2. What is your experience ?—I served my time at the Ashford Works of the South-eastern Railway Company, England, and also in Mills and Cable's works in Wellington and other similar
- 3. What is your opinion of your present staff at Addington ?—I have a first-class staff, and would not wish to have under me a better number of smiths.
- 4. With regard to your smith-work generally, what is its present position?—We are further forward than ever Addington has been known to be.

5. You have a lot of repeat-work in the smiths' shop ?—Yes.

- 6. Do you make special arrangements for stamping that work ?-Yes. In that connection I have brought out a great many tools not only in Addington, but at other Railway shops in New Zealand—tools for switch-rods for 70 lb. points and crossings, which work was previously done at Addington on the anvil. I am not going to take all the credit for the manufacture of my machine for points-andcrossings work; the suggestion was previously made to me. I submitted to Mr. McCarthy and Mr. Jackson an idea for punching out the double lines, and at Addington the double lines are now punched out in the quickest manner I have ever seen.
- 7. Your tools facilitated the turning-out of repetition-work by the use of stamping appliances ?-That is so.
- 8. By how much per pound approximately have you reduced the cost of the smiths' work on points and crossings ?—A halfpenny per pound.
- 9. On general engine-work, what do you reckon you have reduced the cost per pound ?—About
- 10. And, of course, you have expedited the output ?—Yes. I encourage even the youths and apprentices to think out ideas for the facilitating of the work. They submit those ideas to me, which, of course, I consider, and draw the Manager's attention to them. In nearly every case the suggestions put forward are an improvement. Even the boys in the shop are at it now.

11. You find it a good thing to encourage the employees to scheme out things ?—Yes.

- 12. How have cranks for velocipedes been made hitherto ?—Up till lately they have been made on the anvil, and I have just completed a tool whereby these can be turned out at the rate of one per twenty minutes, as against two hours previously. The Manager gave me permission to make this
- 13. What time do you reckon you have saved per set by means of your appliance in the pointsand-crossings work ?-We used to make about two or three a day on the anvil; I can make eight.

14. You have more than doubled the output ?—Yes.

- 15. Did you do a quantity of work for the A engines which are being built by contract at the Thames ?-Yes; the connecting-rods, the eccentric cranks, the wing-nuts for the drawing-gear, buffer heads and shanks.
- 16. Wherever you can you use the stamper for that work ?—Yes. There is very little stamping in that, of course.
 - 17. You do a quantity of work for the WF class of engines now being built at Hillside ?—Yes.
- 18. What do you do for them ?—All the smith-work for the boilers, the connecting-rods and coupling-rods, eccentric cranks, and buffer heads and shanks.
 - 19. How many men have you generally under you ?—Eighty men and eleven boys is the staff.

20. With regard to your shop, are you fairly well supplied with plant and appliances?—We could do with a little more plant.

- 21. What additional appliances do you require?—With this steam-hammer stamping we want at least three more steam-hammers, and I would like a pair of bar-iron shears. That would save a lot of trouble. A hydraulic press for bending foundation-rings, and a more up-to-date bolting-machine would also be advantageous.
- 22. If you had these additional tools of a suitable type, do you think you could turn out work in competition with any one in the Australasian Colonies?—Yes.

 23. Do your men stick well to their work?—Yes. If they do not they get treated as the last one did—he got sacked for not sticking to his work. This man I am referring to I reported to the Workshops Manager, and he was fined, and came at his tricks again. He got the sack next time.
- 24. Have you any incivility from the men?—None whatever, and I have not had anything approaching disobedience since I have been in Addington. I deal with the men fairly, and if they want trouble they can have that, too, without much talk about it.

25. The Chairman.] When did you go to Addington ?—In July, 1904.

26. Was any stamping done in the shop at the time you went there ?—They used an old out-ofdate drop-hammer for stamping hooks and eye-holes for side chains. I made tools which increased the output at the rate of five to one.