

JOHN BARBOUR examined. (No. 17.)

1. *Mr. Beattie.*] What is your position ?—I am foreman of the Addington foundry.
2. How long have you been at Addington ?—Six and a half or seven years.
3. What was your experience before that ?—Previous to coming to Addington I was nine months at Petone. Prior to that I worked in Christchurch, Wellington, Sydney, Adelaide, and Perth as a moulder.
4. What is your opinion of the output at Addington, judged by your experience in these several establishments ?—I think Addington compares favourably with any shop I was ever in, and in many instances it is a good deal better. I should have but small means of ascertaining the output in private shops, because the bosses take good care that an employee has not much opportunity of seeing that. But since I have been foreman, during the visits I have made to other towns when on holiday, I find that the output at Addington is a good deal in excess of jobbing-shops in New Zealand.
5. Will you describe the class of work generally done at Addington ?—I consider it is of a very intricate nature, far more so than in the average jobbing-shop, because the engines being manufactured there now—*i.e.*, the A and the X—are undoubtedly very intricate, more especially the high-pressure cylinders.
6. How many cupolas have you at Addington ?—Two.
7. What do you think of them ?—I think they do remarkably good work. From what I can gather, on looking up the American shop-practice, I find that our every-day average practice is better than the American work with the cupola. In every-day practice we average 9 lb. of iron to 1 lb. of coke, and, of course, the class of scrap we have to deal with is heavier and bigger than the average foundry has to deal with.
8. What is the heaviest casting you have made at Addington at any time ?—Six tons and a half, turntable-centre. We have subsequently turned out a 7-ton turntable-centre in two parts of 3½ tons each.
9. In all foundries you have, I suppose, a certain number of wasters in your castings. Have you a higher or a lower percentage of such at Addington as compared with outside shops ?—I consider that the percentage of wasters at Addington is a low one. It is a lower percentage than that of some shops that I have been in. The men pay attention to their work, because they know it has to run the gauntlet of the Manager and the Engineer. If it is not true to the print, then the other foremen refuse to take the work.
10. Is the pneumatic accumulator of the big moulding-machine satisfactory ?—The Tabor moulding-machine is a splendid machine, and is doing splendid work. Since the snap flask has been introduced the output has been increased by 35 per cent. per day, and, in addition, there has been a great saving in labour and in cost of plant.
11. Does the snap flask do away with the need of a very large number of ordinary iron boxes ?—Yes, it is almost impossible to calculate the number you could do without with it. I have three in the foundry, and, of course, that saves a tremendous amount of boxes.
12. Taking the standard car and wagon brake-blocks, how many brake-blocks per day will that Tabor machine mould ?—Forty per day with one man, and ninety per day with two men.
13. That is, ninety blocks ?—Ninety pair : there are two in each box.
14. In other words, you require ninety cast-iron boxes to attain that output of 180 separate brake-blocks ?—Yes.
15. How many snap flasks would you use, then, to turn out these ninety pair of blocks ?—Two. One man would work the machine, while a second puts in the cones and plates—that is, two men with two snap flasks, as compared with ninety boxes previously.
16. How long have you been using these snap flasks ?—Roughly speaking, six or eight months.
17. Did these snap flasks come with the Tabor moulding-machine ?—No.
18. Have you kept yourself posted in the most recent foundry practice of the rest of the world ?—Yes ; I am a constant subscriber to the *Foundry*, an American publication, which I find even better than publications dealing with the practice of British shops.
19. Does the *Foundry* give details of the proportion of coke to iron per cube ?—Yes.
20. Are you able to keep alongside that ?—Yes, and we can do better. Their smallest cube average is thirty-six, whilst ours is only twenty-six ; and they only melt per pound of coke 6·4 lb., while we melt 6·12 lb. with one kind of coke, and 8·13 lb. with another kind of coke, and with another kind we can do 10 lb., and with another 8·77 lb. ; so that with a 26 in. cupola, as we stand now, I think the American practice is not in it with us. Of course, this was due to the quality of New Zealand coke and to the intelligence of the furnaceman.
21. You have charge of the brass as well as the iron foundry ?—Yes.
22. Are you satisfied that the brass-foundry is working on efficient lines ?—Yes.
23. Have you any moulding-machines in the brass-foundry ?—One, the Pridmore.
24. One or two ?—One, but it does the work in two pieces.
25. Do you mould all the repeat-work you can in this Pridmore machine ?—Yes ; that is one of the instructions of the Workshops Manager.
26. By the use of these Pridmore machines you are saving a considerable amount ?—Yes. I have asked for two more of these machines, so as to obviate the necessity of taking those at present in use to pieces in order to put on other patterns.
27. With this machine you manufacture padlocks. Can you tell what saving you make per gross as compared with the old method ?—We make now in forty-eight hours what it used to take three days to make—a saving of 50 per cent. in labour.
28. Are you satisfied with your staff ?—Yes. I reckon I have got a really good staff ; they are capable, efficient, good, and honest workmen.