

27. Was any stamping under the hammer done when you went to Addington ?—There was a lot of steam-hammer work done, but very little stamping. Since I have been in the shop the drop-hammer work I have stopped, and now have all that work done under a steam-hammer.

28. Apart from the drop-hammer, was there any system of stamping under the hammers in use in the shops when you went there ?—Not so far as I remember.

29. You stated that you reduced the cost of smiths' work practically all round by $\frac{1}{2}$ d. per pound ?—Yes.

30. Can you tell me what the cost of engine-work is ?—Twopence farthing per pound for labour only.

31. Does that include fuel, or is it simply labour ?—Simply labour.

31A. What is the cost for fuel ?—I could not tell you the cost per pound of ironwork.

32. What is the labour per pound on points and crossings ?—About $1\frac{1}{4}$ d.

33. You do not know the fuel-cost ?—No.

34. On your bolt-work and general smiths' work ?—It will run to about $2\frac{1}{4}$ d. or $2\frac{1}{2}$ d. on general smiths' work.

35. But you do not know what your fuel costs ?—I know what it is costing, but not what it costs per pound of ironwork. I should say that in the smiths' shop about 3 tons of coal is used per day for the smiths alone.

36. In estimating the cost of a job, how do you get at the cost per hundredweight ?—We take the fuel and the men's time on the work.

37. Do you know the cost of fuel per hundredweight ?—Not from memory. I have run out several jobs on the cost of coal.

38. Do you find that you have much office-work ?—Yes, I have a good deal.

39. How much time does your office-work occupy ?—I should say quite three hours every day. I have to make out orders for the materials for the men, and then I have ninety-one time-books to go over and sign every day, and check the order-numbers. In addition, of course, I have to hunt up the blue prints. I have no leading hand, and have to control ninety-one employees.

40. Do you check the time-books in the shop or in the office ?—In the office. I have a man to collect them, and I go through them.

41. How do you know that a man has been employed on the work for which the order number stands ?—I have all the work in my office, and give it out to them. Very often they will make mistakes in their order-number.

42. In checking these books, then, it is a matter of memory ?—It is to a certain extent ; but I go over them every day, and that is very good practice ; and I can recollect pretty well all the numbers.

43. *Mr. Roberts.*] How long does it take to make a foundation-ring for the A engine ?—About seven days.

44. How many are employed on that job ?—It takes the whole of the staff to forge them—the forgerman and four helpers.

45. How long does that take ?—About two days.

46. And the smith's time ?—He has to work very hard to get rid of it in five days, if that, and he has two helpers.

47. How long does it take to complete a buffer for the same engine ?—About four hours, including the forge-work and the smith-work.

48. With the shank and all ?—Yes.

49. How long does it take the forge to do one ?—I think we make from six to eight buffer-heads in a night. That is, about two hours for each head. We will make a shank in half an hour ; but for an engine-buffer we generally allow a little more time than for a wagon-buffer. The smith will put the shank into the buffer in about two hours. At the most, about four hours and a half altogether.

50. Take a set of connecting-rods and coupling-rods for the same engine : I suppose you rough some of them out ?—We finish in the forge. We get them near enough for machining.

51. How long does it take ?—We will do two rods a day ; it all depends on the class of rods.

52. Take coupling-rods alone ?—I have turned out four rods in a day, but good heavy going is three rods—that is, providing we shingle our iron.

53. You said something about looking over the blue prints ?—Yes, I have to supply them to all men I give work to.

54. Do the men work to blue prints ?—Yes.

55. Are they full size ?—Yes ; the full size is given.

56. They are tacked on a board ?—Yes.

57. They are full-size prints ?—Most of them are full size, and, if not, the scale is given generally $1\frac{1}{2}$ in. to 3 in. to the foot.

58. Do you allow blacksmiths to work to a scale of 3 in. to the foot ?—Yes.

59. You do not always give them full-size drawings to work to ?—Not always.

60. These drawings are, I suppose, prepared in the office. Do you have anything to do with that ?—No. I simply get orders to work to them.

61. Sometimes they are $1\frac{1}{2}$ in. to the foot, sometimes 3 in. to the foot, and sometimes full size ?—Yes, and even $\frac{3}{4}$ in. to the foot.

62. They are all figured, I suppose ?—Yes, and where figures are given, if the articles do not scale out to the scale, we always take the figures for it.

63. *Mr. Hampton.*] You spoke of one of your employees bringing out an improved machine for points and crossings ?—Yes ; his name is May.

64. It has effected a considerable saving ?—Yes.

65. Has May received any extra recompense apart from his wages ?—No.