27. Has each riveter its own accumulator ?-No. Sometimes the four machines are working off the one accumulator.

28. Is that accumulator a specially large one, or is it simply the accumulator that came out with the riveter ?—It is the original accumulator which we had.

29. It is intended for the riveter also ?—It was originally got for the first fixed riveter.

30. And you have adapted it for other work since ?—That is so.

31. You have no flanging plant at Addington ?—No.

32. Is your flanging done by hand ?—Yes.

33. Plate by plate?—Yes.

34. Reheating on the fire or furnace?—The furnace generally. If we have an awkward plate we have to do it locally, but generally out of the furnace.

35. Then back to the furnace again ?—Yes, straightened, and then annealed.

36. Can you get them through on one heating by hand ?—On certain plates you can, but with other plates you cannot.

37. What average number of rivets do you say you can put in with the present appliances ?-

Two hundred in eight hours.

38. That includes lifting, shifting, &c. ?—Yes.

39. You also said that you had kept time-costs and also wages-costs of the various jobs ?—Yes. [Statement of costs put in.]

40. Mr. Roberts.] These two plates that took four and a half hours to roll—were they the usual boiler-plates ?—Yes.

41. Only one longitudinal seam ?—Yes.

What was the size of the plate ?—About 15 ft. long by over 9 ft. in width.

43. It was not a cone-plate, then ?—Yes, the first of the cone.

44. I thought you could not roll these plates in your roller ?—We have to take it in sections.

45. Were those  $\frac{3}{4}$  in. plates you said you could roll cone-plates ?—No, barrel.

46. How long did it take you to roll them ?—Two in four hours and three-quarters.

47. How long were they ?—Roughly, the circumference would be about 15 ft.

48. Fifteen feet by over 9 ft. in width ?-No, I do not think they would go much more than about 8ft. 8 in.

49. Can you give me any idea as to how long it takes you to flange by hand the shell-plates of the firebox ?—We could flange them for the X boiler in five days.

50. That is the largest boiler you have ?—Yes.

51. How long does it take to flange a boiler-head plate ?-For the X boiler we have to heat that locally, because the furnace is not large enough to take it in.

52. And the tube-plate ?—We should flange that for the X boiler in about ten hours.

53. Is that done by fire, too ?—For the X boilers these were imported.

54. Were they flanged when they came out ?—Yes.

55. You did not do them up there ?—Not for the X boilers, we did not. 56. Take the A locomotives: were they imported ?—No, we flanged them. 57. How long did it take you ?—Ten hours.

58. What is the diameter ?—4 ft. 8 in., I think.

59. What is the thickness of the plate?—Five-eighths of an inch. 60. Single- or double-riveted?—Double-riveted.

61. How many men are engaged flanging a circular plate in the A locomotive ?—A boilermaker and four assistants.

62. How many men are engaged on the front plate you spoke of ?—The same number.

- 63. Can you give me the details of the work on the throat-plate at the back of the firebox ?—Five days to five days and a half to flange it, with the same number of men and the same amount of work.
- 64. Do you consider that a reasonable time ?-I do, for a plate of that description. It is a very difficult plate.

65. Are they all  $\frac{5}{8}$  in. thick ?—I think the top plate is  $\frac{3}{4}$  in.

66. Have you ever drawn the Manager's attention to the want of a flanging-machine ?—No.

67. I think you said it would be better if a flanging-machine were procured ?—Yes.

68. But you never called the attention of the Manager to that fact ?-Not officially. It has been spoken about, but I have never reported the matter officially.

69. You also spoke about the necessity for up-to-date punching-machines. Do you punch the

holes in the boilers ?—No.

70. You drill them all ?—We work strictly to Board of Trade in that respect.

71. A flanging-machine is not much required for boiler-work ?—It would be hardly used for boilerwork at all.

72. Have you ever complained about this deficiency to the Manager ?-No; some time ago we were asked about our machines, and this matter was reported on.

73. You have made a complaint ?-No. I recognised that my superior officer had been asked about that.

74. You say now that a proper punching-machine is required ?—Yes.

75. It is only now that you have found out that these flanging and punching machines are required ?-No.

76. Yet you have not complained about the matter ?—The reason is that, so far as the punching

is concerned, our machines are getting the worse of wear-and-tear, and our work is growing.

77. You have been working at a disadvantage with the present machinery ?—For a while we have.

78. And you have not complained about it ?—No.