29. Have you any difficulty in maintaining discipline ?—None whatever.

30. Do you receive any incivility from them ?—No, I give them civility myself, and get it back

31. The Chairman.] How do you bring your coke and iron on to the platform of the cupola ?-It is carried up by manual labour, the coke in sacks, and the pig iron is broken into about 28 lb. pieces.

32. Are you satisfied with this arrangement ?—No.

- 33. You said you were satisfied with the appliances ?-The Workshops Manager and I have been talking this over, and the Manager has decided to give me a pneumatic lift.
- 34. How is the pig iron broken up ?—At present with a hammer, but the Workshops Manager has instructed me to get a casting for a hydraulic pig-breaker, and I understand that that machine is at present being pushed along in the fitting-shop.

35. After bringing the metal from the cupola, what is the method of transporting the ladle?—We

only have the crane, and that is very slow.

36. Is that satisfactory ?-Yes. It would be more satisfactory if we had a crane that worked faster, and which would not be so hard on the men.

37. How many men does it take to manipulate the crane with, say, one of the larger ladles ?-Twelve men, arranged in groups.

38. Do you use your overhead traveller for hauling the castings out of the sand, or do you dig them out?—We dig them out.

39. How many men have you on them, then ?—It requires six men to take a long girder-casting

40. That would mean a large amount of digging ?—We do not do much digging.

41. Have you a bolting-down floor there ?—I put in a small one there, 15 ft. by 8 ft., for a job, and we left it in.

42. Have you a casting-pit ?—No.

43. How do you manage castings in large work, then ?-We sink in the floor as far as we can with safety.

44. There is a good deal of water there, is there not ?—Yes, it is very wet. 45. A watertight casting-pit would be a great improvement ?—It would.

46. What do your castings cost per hundredweight for labour, material, and fuel?—The metal in the ladle before it is run in costs actually 4s. 9d. per hundredweight, including pig iron, coke, and

47. That includes breaking up the pig and the lifting ?—Yes, all labour.

- 48. What does the finished casting cost ?—For the 55 ft. girder for the turntable four men are occupied for two days, and three men for two days additional—in wages that is £6 7s.
 - 49. You do not know what the cost per hundredweight for the finished article is ?—No. 50. How many pounds of metal are produced per pound of coke ?—Two pounds of metal.

51. Have you charge of the steel-foundry ?—Yes.

52. How many pounds of steel are produced per pound of coke burned ?—It takes 252 lb. of coke to melt 140 lb. of metal.

53. Mr. Niven.] How many men are employed altogether in your department?—Forty-five. 54. How many permanent hands ?—I really could not tell you from memory. There are three

classes—permanent, casual, and emergency casual.

55. You do not know how many moulders and how many labourers you have ?—Yes, I have eighteen moulders in the iron-foundry, four in the brass, and six in the steel. The balance are labourers and apprentices.

56. How many apprentices have you ?—Three.

- 57. Do you find it is not advantageous to work with apprentices ?—I do not mind apprentices, but the trouble is that I cannot get them.
- 58. When hauling big castings out, do you get extra labourers in ?—No, each shop works independently.
- 59. You are not allowed to borrow men?—I do not know that, but we could not get them if we wanted them.
- 60. Was the charge of 12s. 6d. per casting given by a previous witness for large or small castings?— Small. That is one of our troubles. We have all the maintenance work to do, and a good deal of their work comprises very light castings—windmills and velocipedes.
- 61. You have a fair amount of engine-cylinders, I suppose, to turn out ?—Yes, and there are a ot of castings in connection with points and crossings. Crossing-blocks are made with the Tabor moulding-machine.
 - 62. Mr. Roberts.] How many labourers are there in the iron-moulding department?—Two.

63. How many in the brass-moulding department ?—One.

64. How many in the steel?—Three at present, but generally we have only two. 65. In addition, there is a furnaceman, I suppose?—Yes, and his helper.

66. How many casting-dressers ?—Two.

- 67. Where do you get your men from for the crane ?—We use the moulders.
- 68. How many days in the year does the shop run ?—I should say there were in all about twentyfive days holiday.

69. Do you reckon that 538 tons of castings is a fair average per year for the number of men you have employed ?-Yes, with the class of work we have to contend with.

70. What quantity of brass castings do you put out in the year ?—On an average from 6 to 7 tons

71. Have you got the exact quantity you put out last year?—No.