

16th. **FOOT VALVE.**—This valve, composed of cast iron, chest and seat for valve, also 2 brass valves, also bonnets, keys, and bolts, is to set and connect to the furthest end of this second outlet pipe from the pumps. Its total length is to be 6 feet. It is to be provided at one end with a round flange 30 inches inside diameter, and 40 inches outside diameter; said flange, like all other bolted flanges, are to be faced, though it may not be especially mentioned above in the description of the other parts; it is to be bolted to the outlet pipe. At the other end there is to be a detached sleeve, in two parts, bolted together to receive a 30 inch pipe. The width of said foot valve in the inside is to be 40 inches, height in the inside 30 inches; this foot valve is to have the same kind of valve seat, valves, and bonnets as those of the valve chests at the pumps, with this difference only of being of proportionably larger dimensions as shewn on the working plans. The thickness of metal is also to be the same. The whole valve and chest to be made according to a working plan furnished.

17th. **CONNECTING PIPES WITH EXISTING MAIN.**—These pipes are to be made in cast iron, 8 in number; the first 5 are to be 30 inches in diameter inside, $1\frac{1}{2}$ inch thickness of metal, four of which are to be arranged with bell-mouth connections. They are to form a total length of 45 feet, or less, but made so as to connect with existing main. They are to be made and laid according to the plans.

Two other ones are to be arranged each with a double mouth-piece at one end, one 30 inches and the other 24 inches inside diameter; they are to be secured together, and to connect with the 30 inch main from these new works, also to the existing ascending mains. The thickness of metal is to be $1\frac{1}{2}$ inch, strengthened with ribs, the area, and form to be made as shewn on the plan. The eighth pipe is to be 30 inches diameter, total length 9 feet, or less, but made so as to connect with the receiving main from the existing works. All these 8 pipes have to be connected together and to the different mains and parts named so as to form perfect joints. The excavations are to be prepared by other parties.

18th. **INLET PIPE.**—This pipe is to be of cast iron, $\frac{3}{4}$ inch thickness of metal; its total length, in straight pieces, is to be 86 feet 6 inches. Of this length 57 feet are to be 33 inches inside diameter, and 29 feet 6 inches are to be 30 inches inside diameter; 3 feet of the 33 inch diameter pipe is to form the seat of a throttle valve, and to have on each extremity a square flange faced with bolts. In this said seat there is to be a throttle valve, in cast iron, $1\frac{1}{4}$ inch face at the circumference, well fitted into the the seat, which is to be bored out for that purpose; said throttle valve is to be secured to a wrought iron stem $2\frac{1}{4}$ inch diameter, which stem is to