

be made true. The sides are also to be made true, and on them there are to be fitted and bolted cast iron strips on each side presenting a beveled surface made perfectly true as shewn on the plan.

Each of said strips are to be held to its position by means of 6 tap bolts,  $\frac{3}{4}$  inch diameter. One  $\frac{1}{2}$  inch from the middle of the bottom flange, of the breadth of gate frame, there is to be a hub  $5\frac{1}{2}$  inches diameter forming sockets as shewn on the plan.

The centre of said hub is placed 3 inches from the outside of the horizontal part of the iron frame. On the top there is to be also a hub  $5\frac{1}{2}$  inches in diameter, with  $2\frac{1}{2}$  inches hole, made perfectly true and at right angle with the faced part of said frame.

The outside flange on each of said gate frames is to have 8 holes 1 inch diameter (2 on top, 2 at bottom, and 2 at each side). Said gate frames are all 4 to be firmly secured to the walls by means of 8 anchor bolts, 12 inches long,  $\frac{3}{4}$  inch diameter, for each frame, and made water tight with a cement joint.

Into each said frames there is to be fitted a cast iron wicket gate, fitting most accurately, thickness of metal 1 inch in the main body, one  $\frac{1}{2}$  inch from the centre is to be a vertical boss  $5\frac{1}{2}$  inches outside diameter, which with strong fillets, is to unite with the main body of said gate. With a view to strengthen the said gate there are to be 4 horizontal ribs, 1 inch thick,  $2\frac{1}{2}$  inches wide, near the hub, and tapering to 1 inch at the points of bearing of said gate. This hub or boss is to be bored out true, and at right angle to the outer surface of the gate, to  $2\frac{1}{2}$  inches, which is to receive at the lower end a wrought iron pivot of  $2\frac{1}{2}$  inches diameter, put on from below and keyed to said hub. The bottom, top, and sides are to be made perfectly true and fitted into the frame on each gate as described.

Each of the above named gates is to receive in its central boss a stem, in wrought iron, that is to reach to the top of the pivot described above. This stem is to be secured to the gate by means of 3 flat keys  $2\frac{1}{2}$  inches wide  $\frac{3}{4}$  inch thick. Said stem is further to fit into the boss of the top flange of the iron frame, and to extend vertically and within  $\frac{1}{2}$  inch from the wall to a height of 13 feet from the lower end.

On the upper part of each of said valve stem there is to be a cast iron frame, with boss  $5\frac{1}{2}$  inches outside diameter, said frame is to be of the shape shewn on the plan, and is to have holes to receive anchor bolts and setting pins with small chain. Immediately on top of said frame and secured to the stem, there is to be a wrought iron needle, with pins to fit into the holes of the frame.

The wrought iron needle after extending through both these parts is then to be formed in a square section, and to have fitted thereon a wrought iron loop, 6 inches diameter, 6 feet long from the centre of the hub and shaft.

The whole to be made according to a working drawing to be furnished.