2 Sheets—Sheet 1.

J. BIRKINBINE.

FIRE-HYDRANTS.

No. 180,830. Patented Aug. 8, 1876.

Fig. 1.

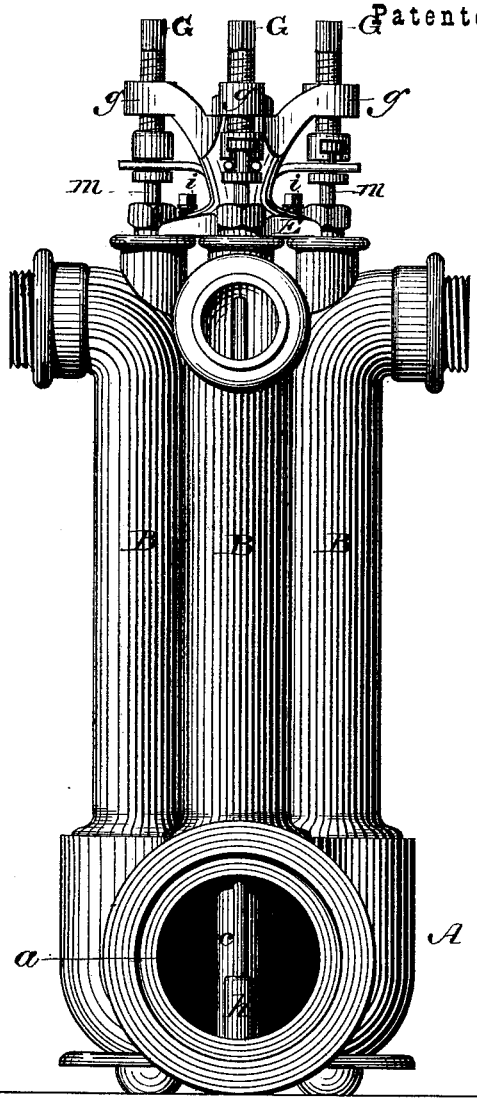
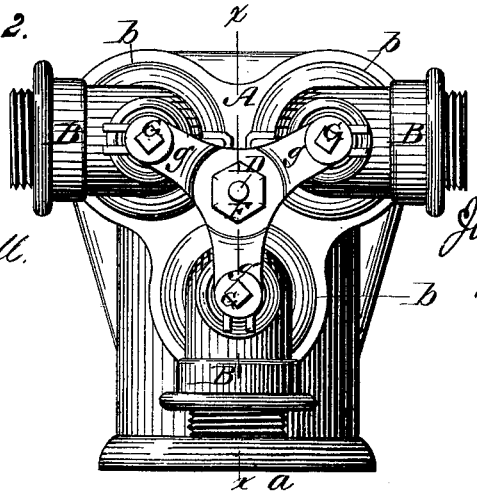


Fig. 2.



Witnesses;
Will H. Dodge.
Donn P. Twitchell.

Inventor:
John Birkinbine
By his attys.
Dodge & Son.

2 Sheets—Sheet 2.

J. BIRKINBINE.

FIRE-HYDRANTS.

No. 180,830. Patented Aug. 8, 1876.

Fig. 3.

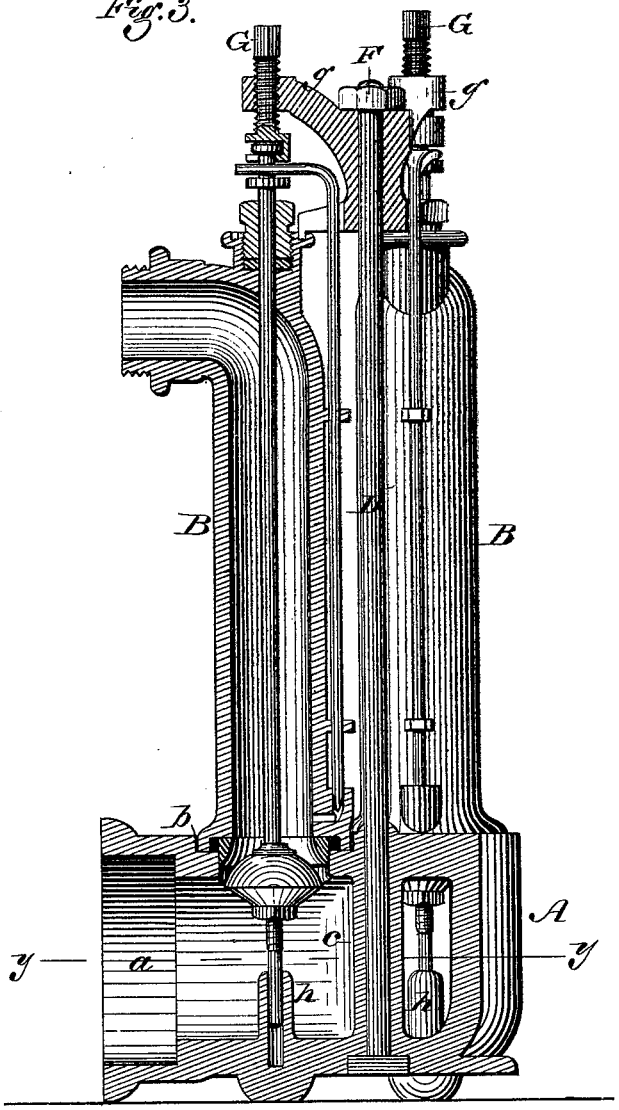
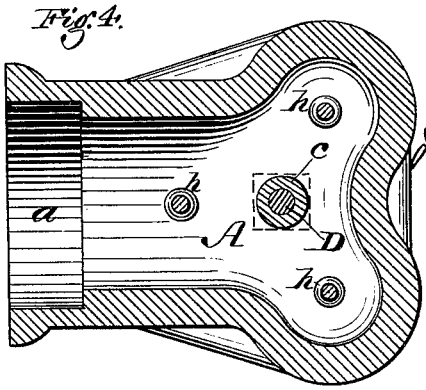


Fig. 4.



Witnesses:
Will H. Dodge.
Thos. S. Twitchell.

Inventor:
John Birkinbine
By his attys.
Dodge & Son.

UNITED STATES PATENT OFFICE.

JOHN BIRKINBINE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN FIRE-HYDRANTS.

Specification forming part of Letters Patent No. **180,830**, dated August 8, 1876; application filed May 8, 1876.

To all whom it may concern:

Be it known that I, JOHN BIRKINBINE, of Philadelphia, in the county of Philadelphia, and State of Pennsylvania, have invented certain Improvements in Fire-Hydrants, of which the following is a specification:

My invention consists in securing two or more independent complete hydrants upon a common base or supply-chamber by means of a pressure-plate at the top, held down by a rod or rods passing through the base; in so constructing said pressure-plate that it also supports the screws by which the valve-stems are operated; in a peculiar manner of uniting the valve-stems and screws, and in a peculiar construction of the base, as hereinafter explained.

Figure 1 represents a front elevation of my improved hydrant, constructed with three discharge-pipes or mouths; Fig. 2, a top plan view of the same; Fig. 3, a vertical transverse section of the same on the line *x x*, and Fig. 4 a horizontal transverse section on the line *y y*.

A represents the base, consisting of a metal chamber cast in one piece, with a large mouth, *a*, on one side to connect with the water-main or supply-pipe, and with three circular openings or seats, *b*, in the top or roof, to receive the lower ends of the hydrants or stand-pipes B. At its center, the base is provided with an internal post, *c*, and with a vertical hole extending down through the same and terminating in a square enlargement or seat. Through this central hole, from below, I pass a vertical bolt or screw-rod, D, seating its head in the enlargement or cavity at the bottom, so that it cannot turn. I then place the hydrants in position on the base, and apply to the upper end of the bolt or rod D a plate, E, of such size and form as to bear upon the three hydrants, and force the same down firmly thereon by applying a nut, F, to the bolt or rod, as shown. In order to render the union of the parts perfectly secure and rigid, the upper ends of the hydrants should be provided with recesses, and the plate E provided with lips to enter the same, as shown, or the parts otherwise constructed, so that they will lock securely together, and render the escape of the hydrants from under the plate impossible. The plate E is, in the present instance, constructed with arms *g*, which serve as nuts or supports for vertical screws G, which are connected at their lower ends to the valve rods or stems *m* of the respective hydrants, for the purpose of operating the same. While it is not necessary that the plate shall thus sustain the screws, it is better to have it do so, for the reason that the cost of the hydrant is thereby lessened, and the adjustment of the parts rendered easier and more certain of accuracy. The valve-stems *m* are each provided at the upper end with a head or enlargement, which is inserted laterally into a corresponding recess in the lower end of the operating-screw G, as shown, so that while the turning of the screw raises and lowers the stem the two can be separated by simply moving them sidewise in relation to each other. This manner of uniting the valve-stems and screws is extremely cheap and simple, admits of the screws being readily detached, and is at the same time safe and reliable.

By mounting and securing the independent hydrants upon the base in the manner shown, and employing the peculiar mode of uniting the screws and stems, I render the removal of the hydrants separately, for repairs or other purposes, a very simple and easy matter.

In order to facilitate the adjustment of the hydrants or stand-pipes, and insure the proper action of the valves, the base A is provided at its bottom with three internal studs, *h*, which receive and guide the lower ends of the valve-stems, as shown.

It is obvious that, instead of providing the base with three hydrants or stand-pipes, two, or four, or any greater number, may be employed. It is also obvious that, instead of constructing the base with a single mouth, *a*, it may have two, three, or four of them, so located as to adapt the base for use directly in the line or middle of a water-main, or at a point where the main forks or branches, or where two mains intersect each other. It is also obvious that the hydrants or stand-pipes may be of any suitable form and construction; that two or more of the rods or bolts may be employed to hold the plate E, and that when several stand-pipes or hydrants are combined on one base the plate E may be provided with set-screws *i*, to bear upon the different hy-

drants and equalize the pressure thereon, as shown in Fig. 1.

Having thus described my invention, what I claim is—

1. The combination of a base, A, constructed substantially as shown and described, two or more hydrants, B, seated thereon, a top plate, C, bearing upon the hydrants, and holding them in their proper relative positions, and one or more rods or bolts, D, extending from the top plate to the base, and holding the parts together, substantially as shown and described.

2. The base A, provided with a mouth or mouths, *a*, two or more seats, *b*, and one or more hollow internal posts, *c*, as and for the purpose described and shown.

3. The plate E, arranged to bear upon and hold the hydrants, as shown, provided with the arms *g*, having the valve-operating screws G mounted therein, as shown.

4. The combination of the base A, hydrants B, plate E, rod D, and nut F, as shown.

5. The combination of the screws G, having the lateral recesses made in their lower ends, with the valve-stems *m*, having their upper ends provided with heads, and inserted into the recesses in the screws, as shown.

6. The combination of the stand-pipes or hydrants B and the plate E, held by one or more rods, D, and provided with screws *i*, bearing upon the hydrants, as shown.

JOHN BIRKINBINE.

Witnesses:

S. A. McCLURE,

C. L. JAMES.