G. M. Selden,

Hydrant.

No. 33,054. Patented Aug. 13, 1861.

Fig. 1

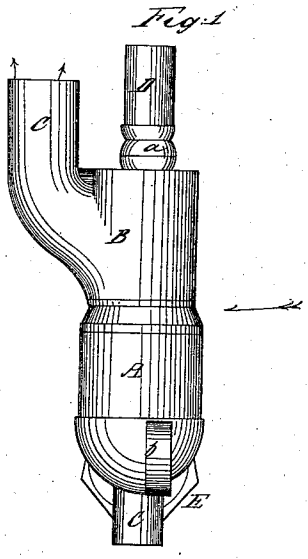


Fig. 2

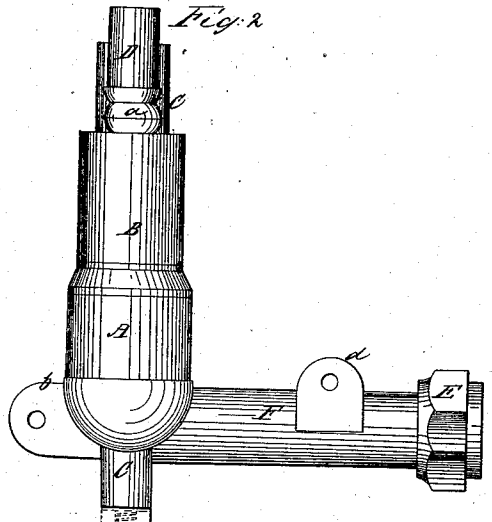
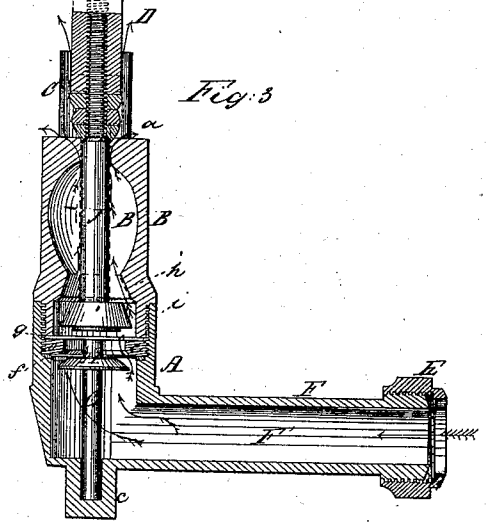


Fig. 3



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE M. SELDEN, OF TROY, NEW YORK.

HYDRANT.

Specification of Letters Patent No. 33,054, dated August 13, 1861.

To all whom it may concern:

Be it known that I, GEORGE M. SELDEN, of Troy, in the county of Rensselaer and State of New York, have invented a certain new and useful Improvement in Hydrants; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a front view of my improved hydrant. Fig. 2 represents a side view looking in the direction of arrow 1, Fig. 1, and Fig. 3 represents a section showing the operation of the valves.

In the drawings, A represents the base of the hydrant which is generally cast with a short inlet knee or pipe F.

B represents the top of the hydrant and is cast with an outlet pipe or conductor C. The bottom of B screws into the top of A, as seen at *i*, Fig. 3, and has fastened to its lower end a narrow cross piece *g*. B is also provided with an internal rod or spindle J to the lower end of which is fastened a valve I, while its upper end extends up through a hole in the top of B, and is provided with a screw thread, upon which is screwed the connection piece D, after a suitable packing *a*, has been slipped on.

Before the part B is screwed into A, a valve seat piece *e* is screwed down upon a packing ring *f*, the spindle G, with its valve H, having been previously placed in position as shown in Fig. 3.

C is provided with an internal screw thread for the reception of the delivering pipe, while the outer end of F is provided with an external thread for the reception of the usual connections E, or these connections may be made by soldering or otherwise.

c is an extension to allow of a support to the lower end of spindle G.

b d are ear pieces by which to fasten the hydrant in any well known manner.

The operation is as follows: The hydrant being in place with all of the proper connections, the operator, by means of a rod screwed or fastened to the upper end of D, presses down spindle J, and valve I, as seen in dark lines Fig. 3, whereby the water is allowed to flow through pipe F, as indicated by arrows at F′, thence up through A, and out at C,—the packing *a*, being pressed against the top of B, preventing any water passing up and out of the side of spindle J, where it passes through the top of B. The arrangement should be such as to enable the operator to fasten down the rod by which spindle J, and valve I, are operated.

When it is desired to shut the water off, the fastening which holds spindle J, down is to be removed, when the force of the water against the bottom of valve I, forces it up against its seat *h*, thereby preventing all further flow of water; while the water then in the outlet pipe connected with C, flows back and out under packing *a*, (which is always raised when valve I, is closed) as shown by red arrows Fig. 3. It will thus be seen that the operation of my hydrant is almost self-acting, and that its simplicity is such that it is not liable to be displaced by unskilful operators.

When it is necessary to repair any of the pipes or valves above A, the water does not have to be shut off from the main pipe, since by simply unscrewing B, spindle G, and valve H, rise up by the action of the water until valve H, strikes against valve seat *e*, when the water is prevented from flowing, and the part B, together with valve I, and pipe C, can all be removed for repairs.

When the part B. is screwed in again, as soon as the narrow piece *g*, which extends across its bottom, strikes the upper end of spindle G, which projects above valve H, as seen in the drawings, spindle G, with its valve H, are forced down, whereby the water is again allowed to flow freely up into B, as indicated in Fig. 3. By this arrangement, all necessity of digging down in the streets or under pavements in order to shut off the water, when it is necessary to repair any of the parts above it is avoided.

By the use of a box to prevent dirt from falling into the end of A, B, can be unscrewed and taken up, although many feet under ground, repaired and then put down and screwed into A.—the operation being conducted by the most simple device. For in-

stance by running down a piece of board between the end of C, and D, and then turning it, B can be unscrewed with ease.

Having described my invention what I claim and desire to secure by Letters Patent, is:

The combination of the independent valves H, and I, with cross piece *g*, removable screw valve seat *e*, and sections A, B, substantially as set forth.

In witness whereof I have hereunto subscribed my name.

GEORGE M. SELDEN.

In presence of—

GEO. GOULD,

F. H. JOHNSON.