I. M. Jorden,

Hydrant.

No. 909. Patented Sept. 8, 1838.

Fig. 4

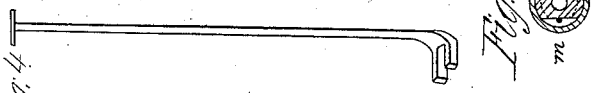


Fig. 5

Fig. 3

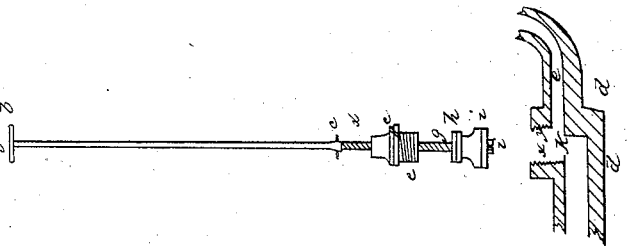


Fig. 2

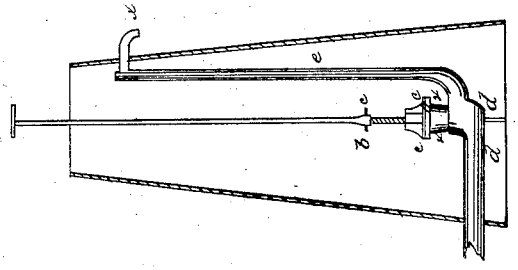
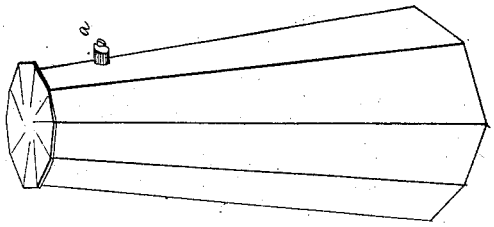


Fig. 1



UNITED STATES PATENT OFFICE.

JOHN M. JORDEN, OF BALTIMORE, MARYLAND.

FIRE-PLUG AND HYDRANT.

Specification of Letters Patent No. 909, dated September 8, 1838.

To all whom it may concern:

Be it known that I, JOHN M. JORDEN, of the city of Baltimore and State of Maryland, have invented a new and useful Improvement in Fire-Plugs and Hydrants to Prevent the Water from Freezing in Them; and I do hereby declare that the following is a full and exact description.

In the common way of using plugs and hydrants the water, by remaining in the pipe above the lower line of the ground pipe, they are subject to freezing and may, by frost be rendered useless, but if kept in order, are invaluable in time of fire.

Figure 1 represents the ordinary fire plug *a*, *a*, the screw cap, which may be removed to attach hose as they are variously attached. Fig. 2, a section of a plug or hydrant *b*, a handle to turn off and on the water by the cock *c*, below. *d*, the main or ground pipe, *e* the upright pipe, *f*, a nose or spout of a hydrant.

In Fig. 3, *b*, is the handle as seen in Fig. 2, the cross top is fastened on the stem by a screw, so that it may be taken off, repaired and regulated. I adjust the cock without taking up the pavement. *b*, *c*, is a socket joint with a pin to connect the rod to the screw *d*, so as to adjust and regulate the cock. *e*, *e*, is a brass piece, the bottom of which is a screw which fits in *f*, *f*, which the part *f*, *f*, of Fig. 1, and becomes a stationary fixture of the cock. *g*, is the continuation of the screw *d*, through *e*, *e*, below *g*. *i*, *h*, is a brass piece with the washers on represented by the rod; when the rod *b*, of which the screw *d*, and *g*, and the piece to which the leathers *h*, *i*, are attached is turned to shut off the water, the leather *i*, shuts down close on to the opening *k*, but when the water is running the leather *h*, closes up under, in the inside of the screw *e*, and closes a small hole which passes up from the inside to the outside at *e*, on the right in Figs. 2 and 3, in nut *e*, *e*, of Fig. 3; it wastes the water which would remain in the pipe above the cock when the cock is closed, or the water of the main pipe shuts off. *l*, is a washer or nut to hold the leather washer on at *i*. The leather washers form durable and perfect valves, which metal alone could not do.

Fig. 4 is a wrench to unscrew the piece *e*, *e* from the part *f f* to renew the valves and other purposes.

Fig. 5 represents the top view of the piece or nut *e*, *e*, with the turning screw or handle *d*, *g*, taken out. The small hole *m*, at the side is the waste hole mentioned in Fig. 3. Hence it may be seen that when the washer *c* is down and closes the hole R of the pipe and cock, the water from the pipe at *e*, in the right passes up past the side of *h*, *i*, and past the screw and out at the small hole in the piece at *e*, at the right hand of the piece *e*, *e*.

What I claim is—

The particular manner in which I have constructed the cock or plug, for closing or opening the aperture *k*, in combination with the screw cap *e*, with its opening for discharging the waste water, as above described.

JOHN M. JORDEN.

Witnesses:

WILLIAM P. HOWELL, Jr.,

F. T. TOWNSEND.