A. C. AUSTIN.
Hydrant.

No. 200,121. Patented Feb. 12, 1878.

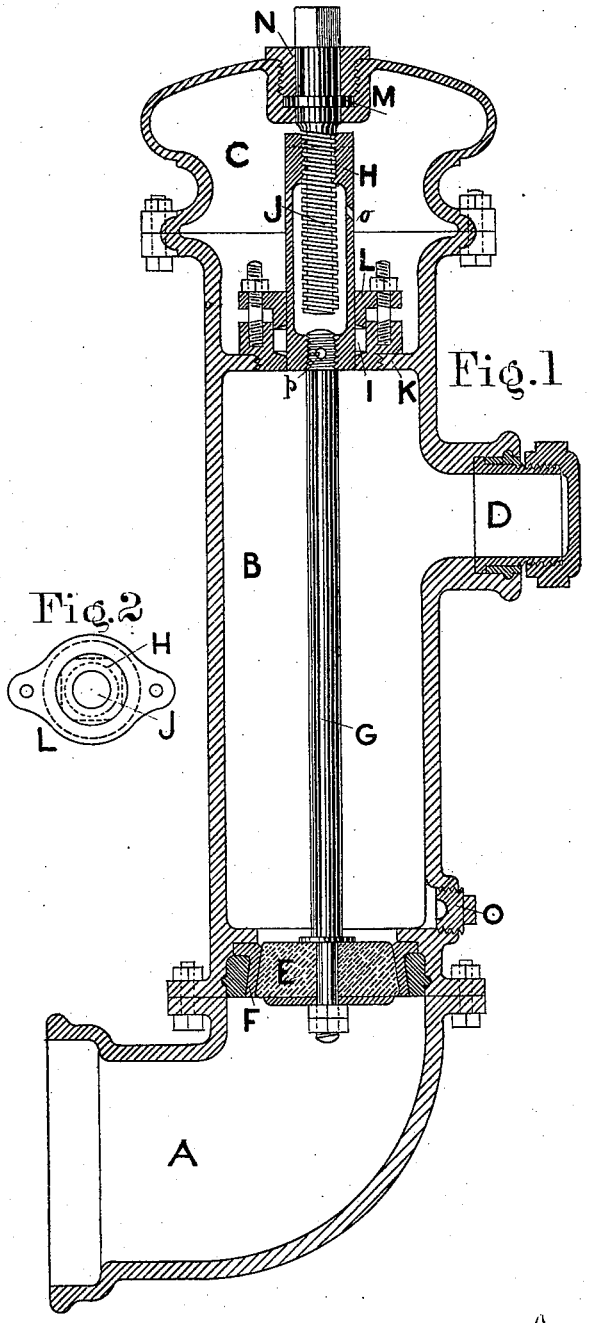

Fig. 1

Fig. 2

Witnesses
Geo Pardy
A. C. Stevens

Inventor
Aboah C. Austin
per George Pardy
Atty

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ALVAH C. AUSTIN, OF OAKLAND, CALIFORNIA, ASSIGNOR TO ANTHONY CHABOT, OF SAME PLACE.

IMPROVEMENT IN HYDRANTS.

Specification forming part of Letters Patent No. **200,121**, dated February 12, 1878; application filed December 15, 1877.

To all whom it may concern:

Be it known that I, ALVAH C. AUSTIN, of Oakland, Alameda county, California, have invented an Improved Hydrant, of which the following is a specification:

This hydrant is designed to improve upon the arrangement and combination of the parts necessary to open and close the valve, the valve itself and the shell or standing column being similar to other hydrants in use.

Figure 1 is a sectional elevation, and Fig. 2 is a plan of sleeve and stuffing-box.

In Fig. 1, A is an elbow, connecting with the street-main. B is the standing column or body of the hydrant. C is a cap or cover bolted thereto. D is a nozzle for the escape of the water when the valve is open, and to which fire-hose may be attached. E is the valve, having a metal seat, F, held securely in the recess formed to receive it by lead packing. G is the valve-stem, secured in ordinary manner to the valve, but screwed into the sleeve H above, and afterward pinned by the pin *p*. This sleeve H is not made with its exterior perfectly round, except for about one-half an inch at its upper end, but should be octagon-shaped, as shown in dotted lines, Fig. 2, so that it may not revolve in the stuffing-box I when the screw-spindle J is turned around. The stuffing-box I is screwed into the annular flange K, cast to the interior of the hydrant-column.

The gland L may be round where it fits the stuffing-box, but partakes of the shape of the exterior of the sleeve H where it rests against it. The screw-spindle J screws into the sleeve H, and passes out through the cap of the hydrant C, terminating in a pentagon-shaped end, upon which a wrench or spanner may be applied. This spindle J has a collar, M, upon which the gland N is screwed down, so that it may be held from moving vertically when turned around. About one-half of an inch of the top of the sleeve H being made round, thus making projecting flanges beyond its octagon-shaped sides, it can never entirely pass through the stuffing-box gland, but will be stopped when these projections strike upon the gland. There is no danger therefore of winding the screw altogether out of the sleeve.

Near the bottom of the hydrant, at O, a screw-plug may be provided, to draw off the water from above the valve when the hydrant is not in use. This precaution is only necessary in cold, freezing climates.

The sleeve H should be lubricated internally as well as externally. For this purpose an oil-hole is provided at *o*.

The operation of the hydrant is as follows: The wrench or spanner being applied to the end of the screw J, the screw is wound out of the sleeve H. Now, as the screw-spindle cannot itself move up or down, it follows that the sleeve H must, carrying with it the valve-stem and valve to which it is attached. Thus the valve is retired from or brought back to its seat, and the water admitted to or shut off from the hydrant, as the case may be, without the necessity of removing the cap.

What I claim as my invention, and desire to secure by Letters Patent, is as follows:

As a means of operating the valve of a hydrant, the combination, with the screw-spindle J, acting as prime mover, of a polygon sleeve or nut, H, guided in a stuffing-box, I, having a gland, L, fitting the exterior of said sleeve H, the said sleeve H being connected with the valve-stem G, as herein set forth, and for the purpose described.

ALVAH C. AUSTIN.

Witnesses:
GEORGE PARDY,
JNO. PARDY.