(No Model.)

P. N. BARDO & T. FORD.

HYDRANT.

No. 365,896. Patented July 5, 1887.

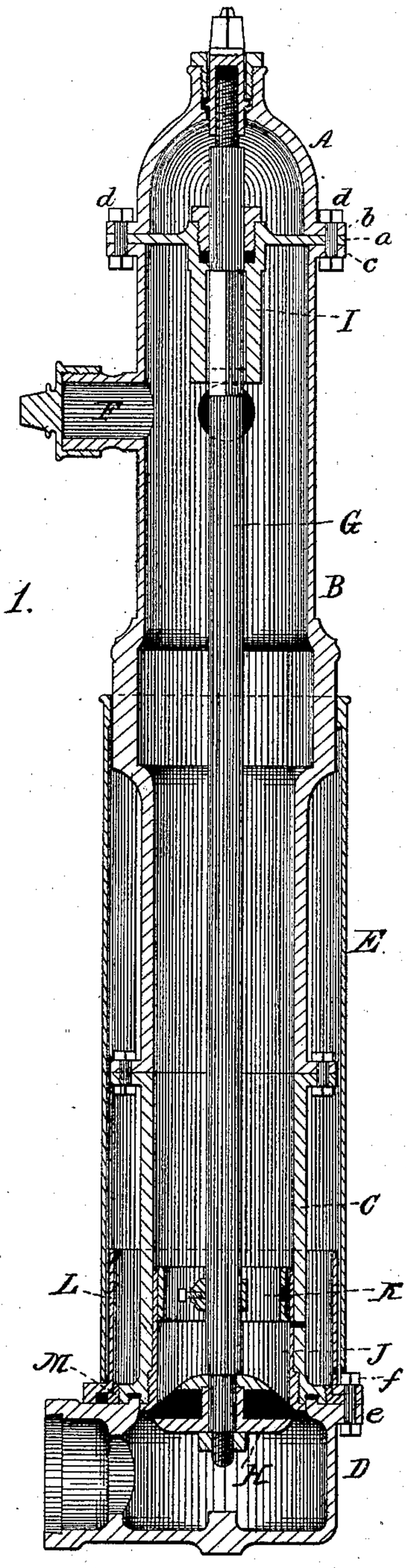


Fig. 1.

Fig. 3.

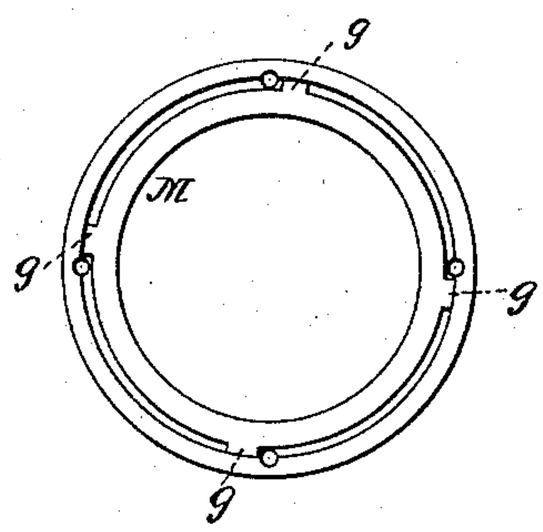


Fig. 2.

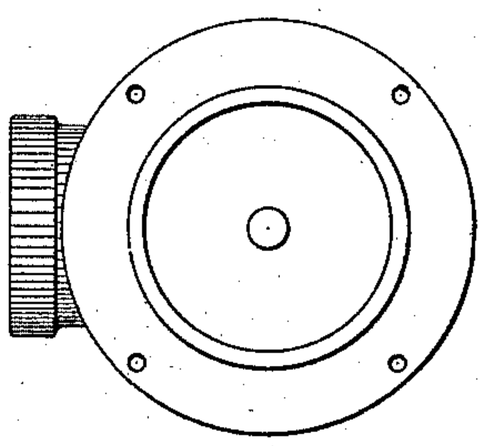
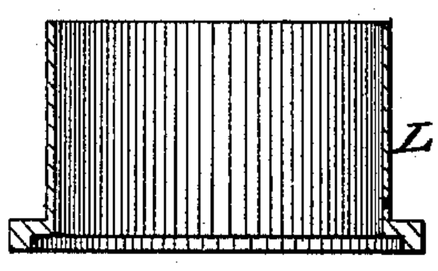


Fig. 4.



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UNITED STATES PATENT OFFICE.

PETER N. BARDO AND THOMAS FORD, OF NEWPORT, KENTUCKY, ASSIGNORS TO THE BOURBON COPPER AND BRASS WORKS, OF CINCINNATI, OHIO.

HYDRANT.

SPECIFICATION forming part of Letters Patent No. 365,896, dated July 5, 1887.

Application filed December 10, 1886. Serial No. 221,210. (No model.)

To all whom it may concern:

Be it known that we, PETER N. BARDO and THOMAS FORD, citizens of the United States, residing at Newport, in the county of Campbell and State of Kentucky, have jointly invented certain new and useful Improvements in Hydrants, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

Our invention relates to that class of hydrants generally known as "fire-plugs" or "street-washers," and has for its object the improvement in construction and efficiency of operation of this class of hydrants. It is, moreover, an improvement upon Patent No. 352,288, issued to us November 9, 1886.

The novelty of our invention will be hereinafter set forth, and specifically pointed out in the claim.

In the accompanying drawings, Figure 1 is a longitudinal central section in elevation of a hydrant containing our invention and with the valve closed. Fig. 2 is a plan view of the shoe or valve-case. Fig. 3 is an inverted plan view of the sand-guard and adjustable ring. Fig. 4 is a sectional elevation of the sand-guard.

The same letters of reference are used to indicate identical parts in all the figures.

With the exceptions to be pointed out, the construction may be substantially that of the patent above referred to, and it is only necessary here to state that A is the cap; B, the body; C, the waste-chamber; D, the valve chamber or shoe; E, the frost-jacket; F, the nozzle; G, the valve-rod; H, the valve, and I the guide for the valve-rod. Instead of recessing the flange *a* of guide I, as in the patent above referred to, it may extend out, as shown, and be clamped between the flanges *b c* of the cap and body, respectively, and be held from turning by the bolts *d*, which pass through and unite the parts. Again, to form the valve-seat, we provide an easily-removable sleeve, J, with an outwardly-projecting bottom flange, which sleeve is screwed into the bottom of the waste-chamber and extends up sufficiently to form a bearing for the waste valve K. In this way, in case of wear of the valve-seat, the sleeve J may be readily removed and a new one substituted. Again, to prevent the sand or dirt from getting in around the stock and into the valve-chamber when the stock is disconnected, we provide a guard, L. (Shown more particularly in Fig. 4, and consisting of a sleeve having its lower end flanged outwardly and downwardly.) This guard rests upon and is bolted to the flange *e* of the shoe by means of bolts *f*, and serves to confine between itself and the shoe an internally-threaded ring, M, provided with lugs *g*, and into which ring the lower end of the stop or waste chamber C is screwed. The lugs *g* of the ring M bear against the bolts *f*, and thus prevent the ring from turning, while at the same time the ring is capable of adjustment to permit the nozzles F to come properly over the street. The frost-jacket E fits snugly over the sand-guard L, as shown in Fig. 1, and forms a telescopic joint, which prevents the entrance of any sand or other dirt when the frost-jacket is raised by the action of frost, or when the stock is removed, as will be readily understood.

Having thus fully described our invention, we claim—

In a hydrant, the combination of the valve chamber or shoe D, the waste-chamber C, frost-jacket E, sand-guard L, bolted to the shoe and extending up within the frost-jacket, and ring M, provided with stop-lugs *g* and clamped between the sand-guard and shoe, the parts constructed and united substantially in the manner and for the purpose specified.

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Witnesses:
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