

(No Model.)

R. S. MANCHESTER.  
GAGE COCK.

No. 272,286.

Patented Feb. 13, 1883.

Fig. 1.

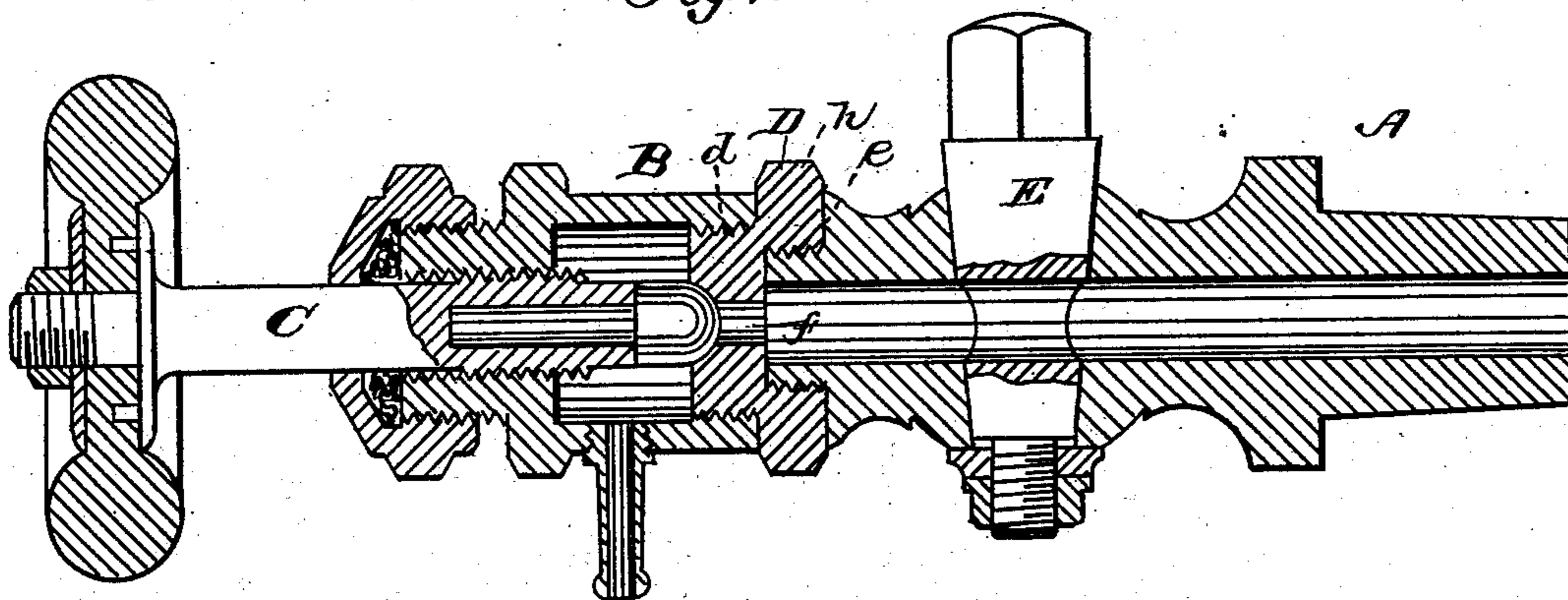


Fig. 2.

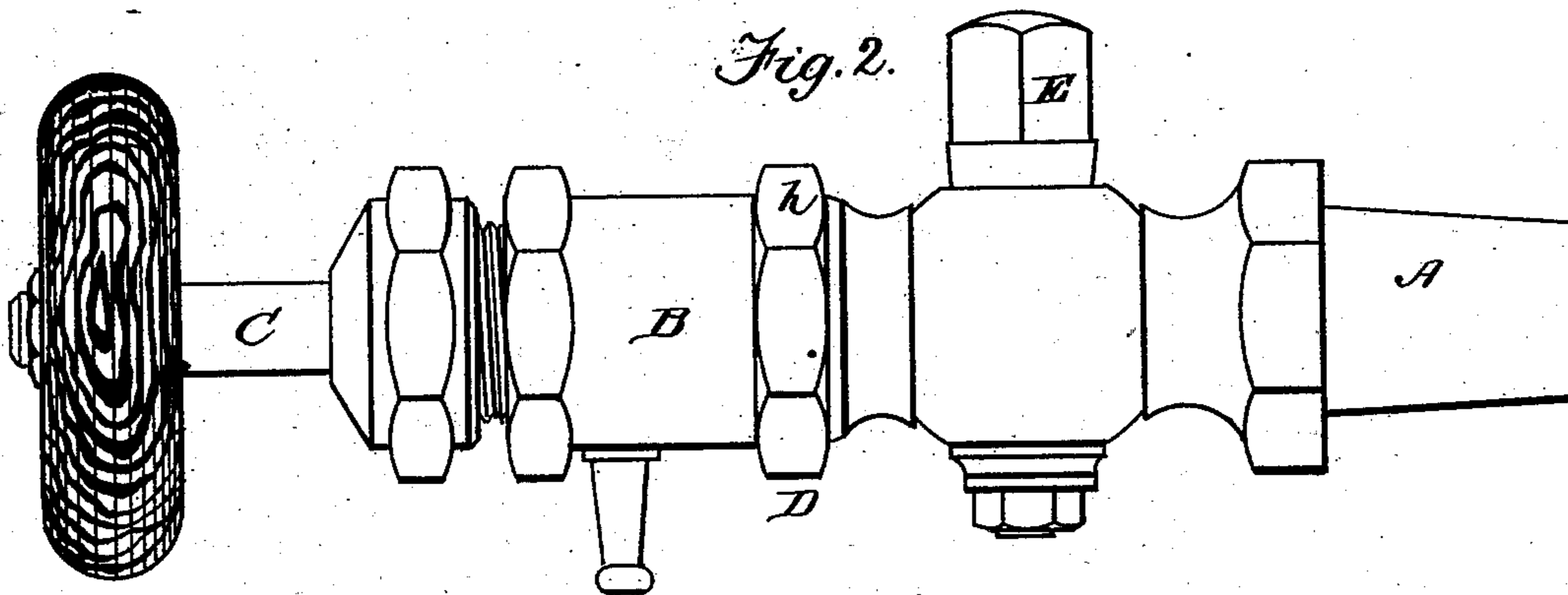


Fig. 3.

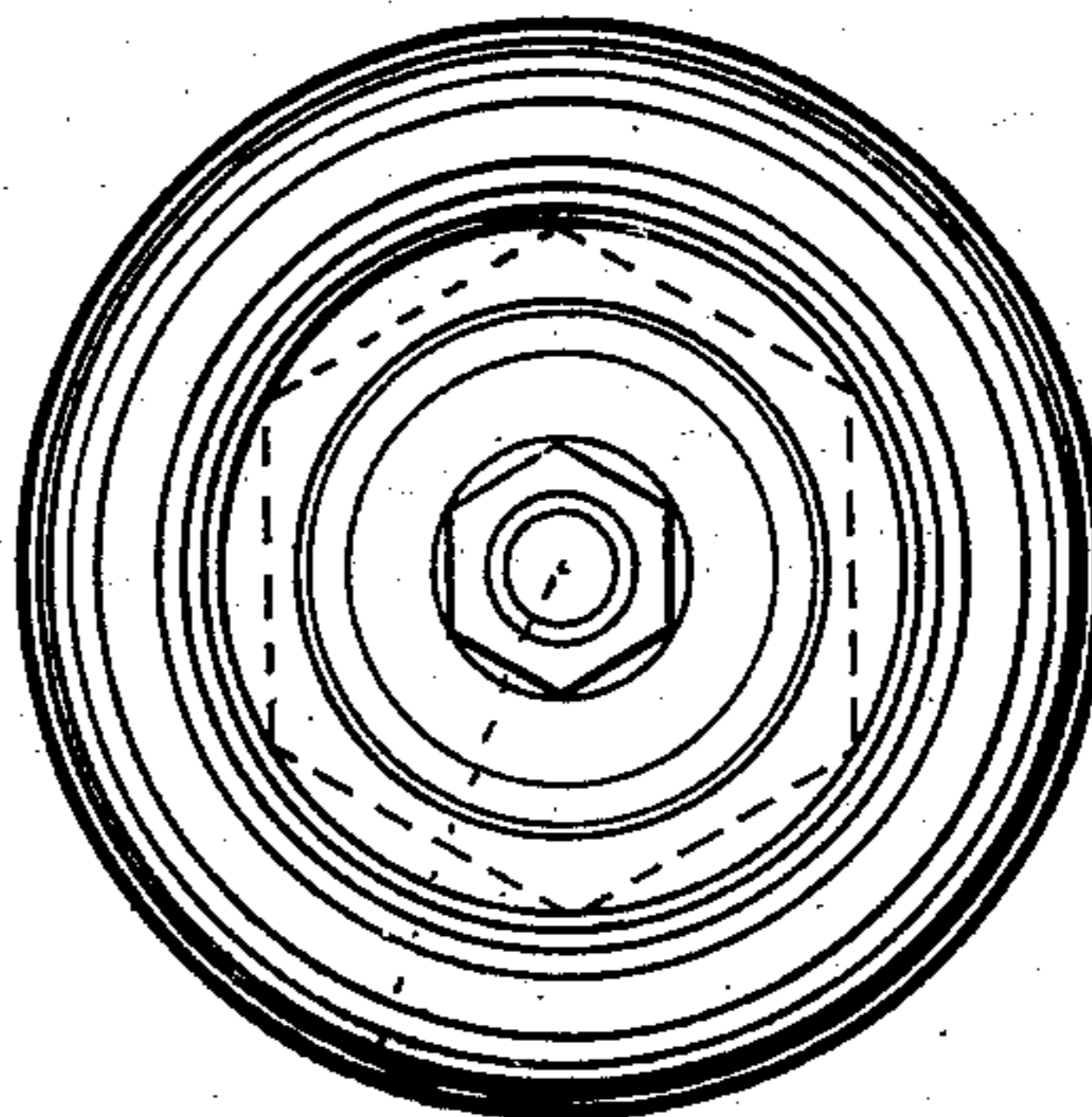


Fig. 4.

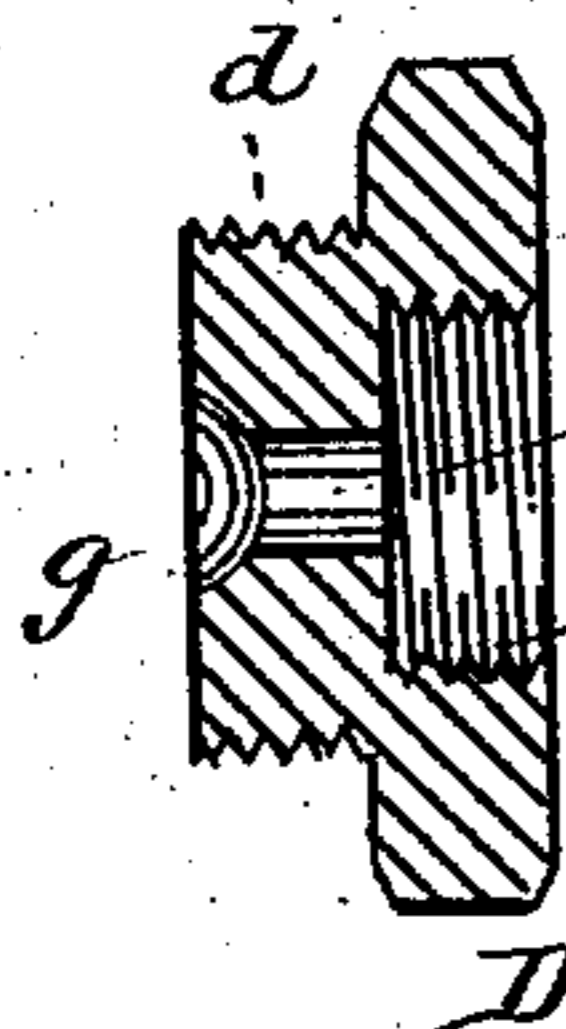
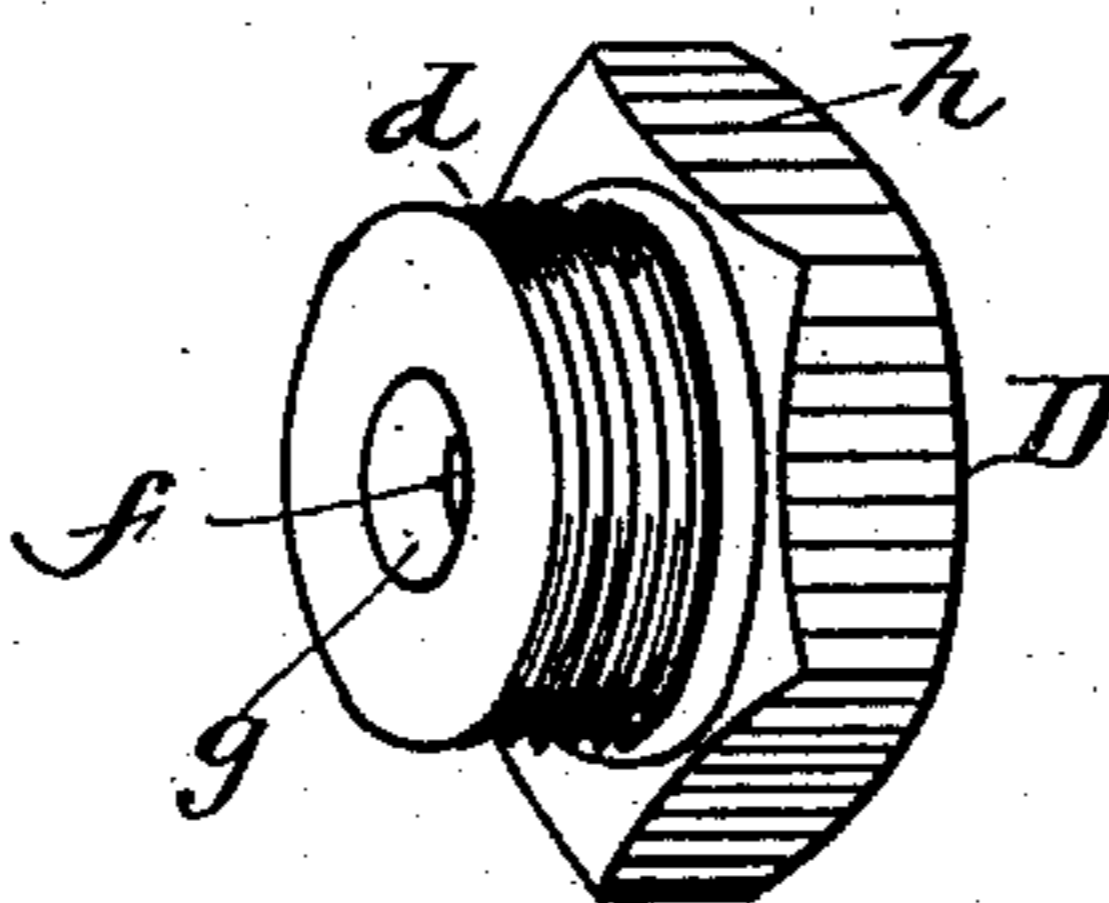


Fig. 5.



Witnesses,  
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# UNITED STATES PATENT OFFICE.

RICHARD S. MANCHESTER, OF DAYTON, OHIO, ASSIGNOR OF ONE-HALF TO  
WILLIAM WATTS LAKE, OF SAME PLACE.

## GAGE-COCK.

SPECIFICATION forming part of Letters Patent No. 272,286, dated February 13, 1883.

Application filed November 24, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD S. MANCHESTER, of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Gage-Cocks; 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 part of this specification, and to the figures and letters of reference marked thereon.

My invention has for its object to provide an improved gage-cock for use in connection with locomotive and other steam-boilers, soda-fountains, gas-tanks, and similar structures; and it consists in certain improvements in construction whereby said gage-cock is enabled to be taken apart and access had to its valve and valve-seat without entirely disconnecting it from the boiler or other structure, and without affecting the internal pressure in the latter.

Referring to the accompanying drawings, Figure 1 represents a longitudinal vertical section of my improved gage-cock. Fig. 2 is a side elevation of the same. Fig. 3 is an end view, and Figs. 4 and 5, respectively, a sectional view and a perspective view of the coupling which connects the two parts of the cock, and serves also as the valve-seat.

Similar letters of reference in the several figures denote the same parts.

The letter A designates the stem of the gage-cock, which is inserted in the boiler or other structure, while B represents the cylinder of the cock, in which works the valve-stem C, said cylinder B and stem A being connected together by a coupling, D. This coupling D has an exteriorly-threaded portion, *d*, which engages with a correspondingly-threaded portion of the cylinder, and with an interiorly-threaded portion, *e*, which co-operates with a

corresponding screw-threaded portion on the stem. There is an opening, *f*, passing centrally through the coupling and enlarged at the outer side, as shown at *g*, to form the seat for the valve. The exterior *h* of the coupling is made polygonally shaped, in order that it may readily be screwed on or off the sleeve by the application of an ordinary wrench. Arranged within the stem, at any suitable point between the coupling and the boiler, is a valve, E, which may consist of an ordinary plug-valve, as shown.

It is obvious from this construction that when for any purpose it is desired to examine or repair the valve or its seat, it is only necessary to shut off communication with the boiler by closing the plug-valve E, and then unscrewing the cylinder from the coupling, or unscrew the coupling bearing the cylinder from the stem, and afterward unscrewing the coupling from the cylinder to accomplish the object. In this way the taking apart of the gage-cock enables the pressure within the boiler to be maintained, as usual.

The invention may be applied to steam-boilers of every description, soda-fountains, and elsewhere where applicable.

Having thus described my invention, I claim as new—

The herein-described gage-cock, consisting of the stem A, having the valve E, the cylinder B and its valve-stem, and the coupling D, externally and internally screw-threaded, and having the perforation through it, and the seat for the valve-stem, the whole constructed and arranged substantially as described, for the purpose specified.

RICHARD S. MANCHESTER.

Witnesses:

SIBYL C. OBENCHAIN,  
WILLIAM W. LAKE.