

(No Model.)

C. P. HIGGINS.

GAGE COCK.

No. 280,176.

Patented June 26, 1883.

FIG. 1.

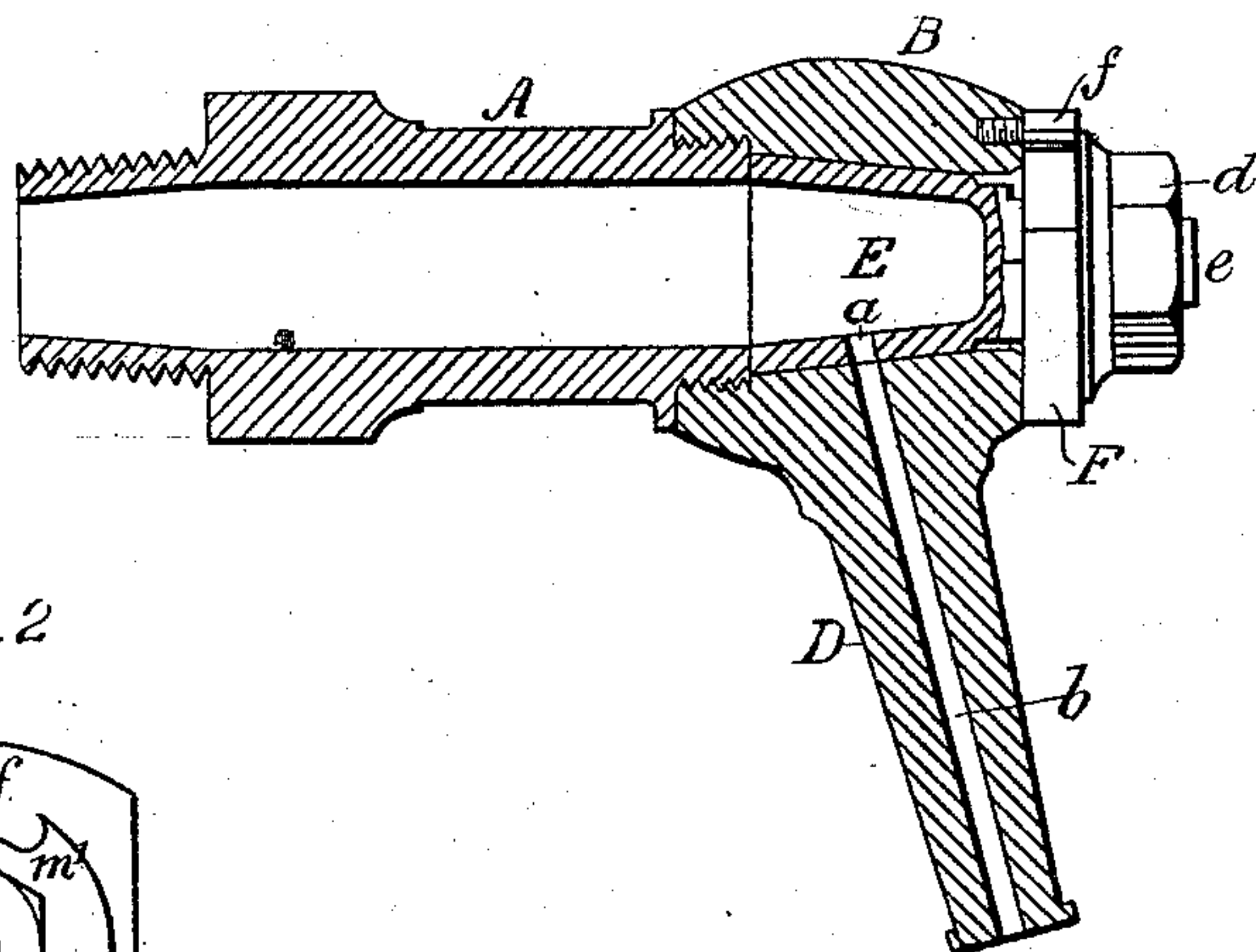


FIG. 2.

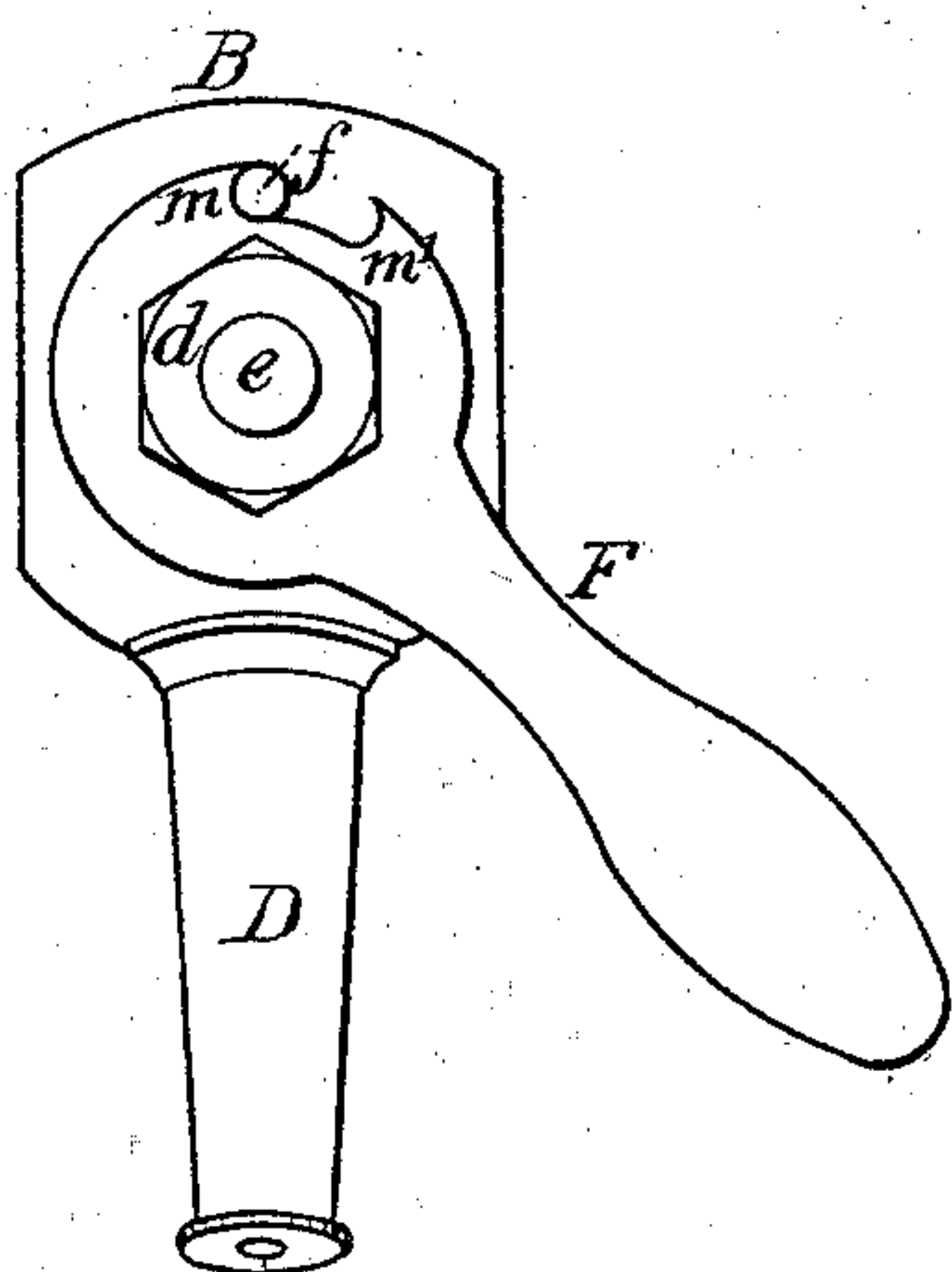


FIG. 5.

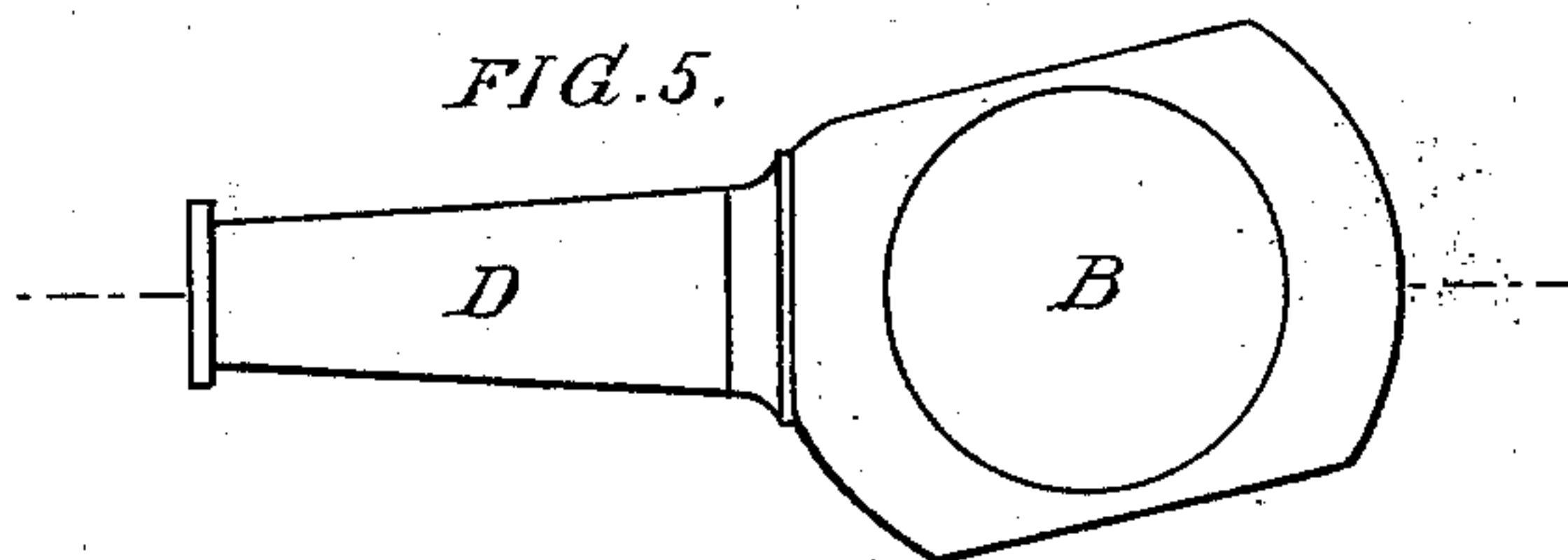


FIG. 3.

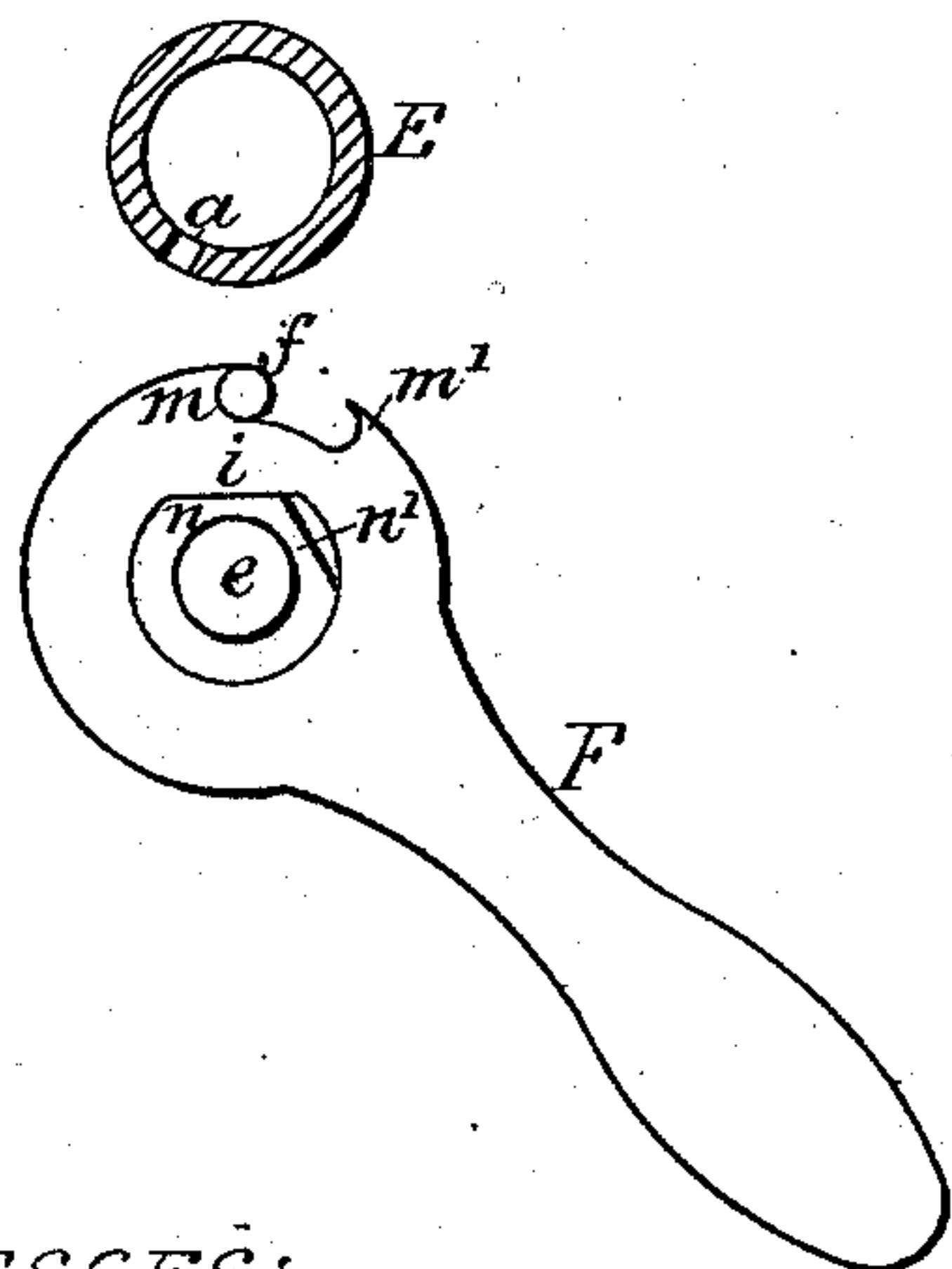
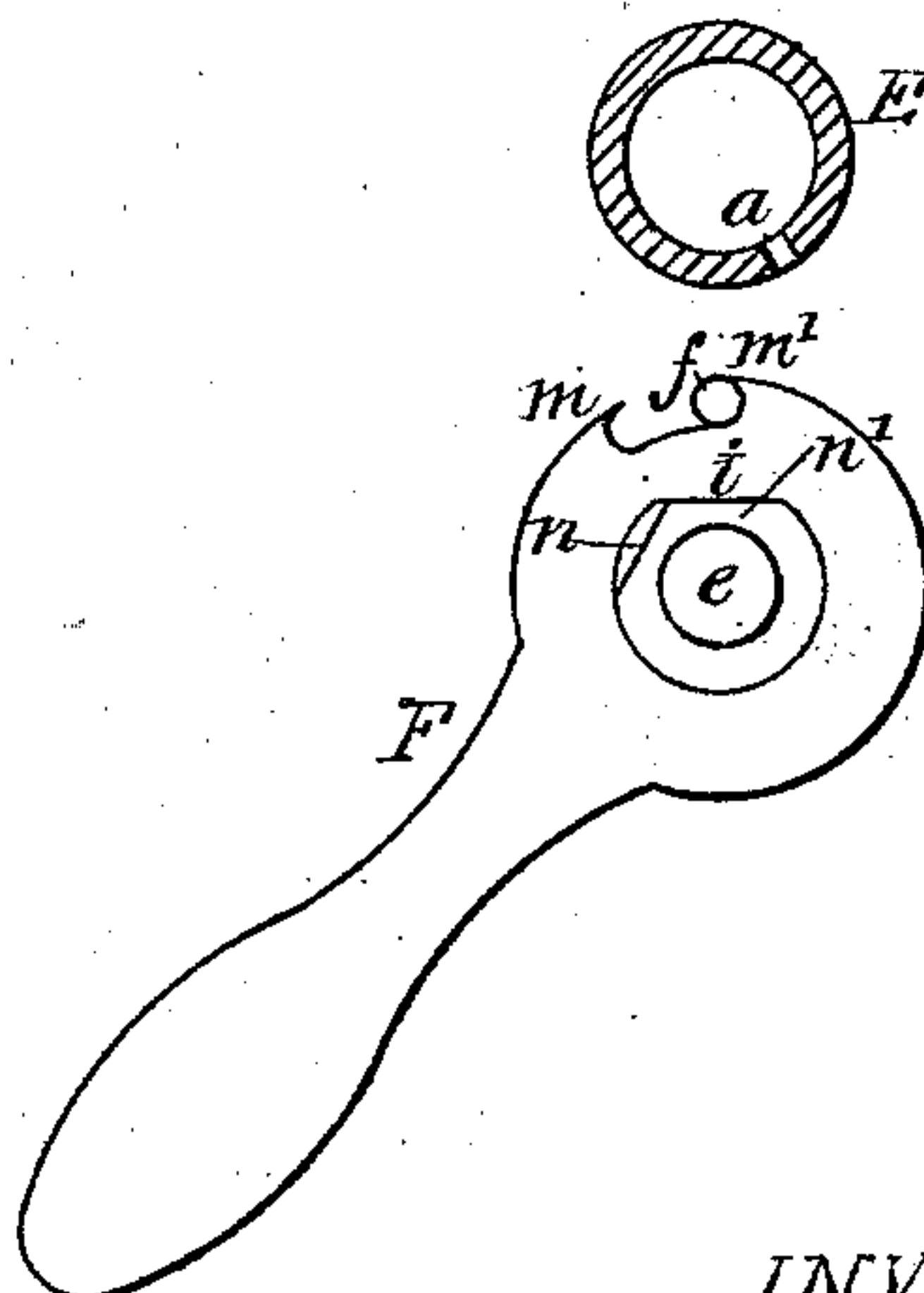


FIG. 4.



WITNESSES:

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CAMPBELL P. HIGGINS, OF PHILADELPHIA, PENNSYLVANIA.

GAGE-COCK.

SPECIFICATION forming part of Letters Patent No. 280,176, dated June 26, 1883.

Application filed February 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, CAMPBELL P. HIGGINS, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain
5 Improvements in Gage-Cocks, of which the following is a specification.

My invention relates to certain improvements in that class of gage-cocks using plug-valves, the objects of my invention being to
10 facilitate the manufacture of the cock, to permit the use of either a right-hand or left-hand operating-lever, and to provide for regrinding of the valve when necessary.

In the accompanying drawings, Figure 1 is
15 a longitudinal section of my improved gage-cock; Fig. 2, an end view of the same; Figs. 3 and 4, diagrams showing how either a right-hand or left-hand lever can be used on the cock; Fig. 5, a view of the valve-casing and
20 nozzle, showing one of the features of my invention.

A is the stem of the cock, threaded for application to the shell of the boiler, and B is the valve-casing, secured to the stem, and having a nozzle, D, and a tapering seat for the
25 plug-valve E, the latter having an opening, *a*, which, by a partial rotation of the valve, can be caused to open communication between the hollow stem A and the discharge-passage
30 *b* of the nozzle, or can cut off said communication. The stem *e* of the valve projects beyond the casing B, and has a nut, *d*, which confines the operating-lever F, the movement of which is limited by contact of a stop-pin, *f*,
35 with shoulders *m m'* on the hub of the lever. The opening in the lever has a flat side, *i*, and the projecting stem of the valve has two flat sides, *n* and *n'*, which bear the relation shown in Figs. 3 and 4 to the opening *a* of the valve.
40 When the lever is right-handed, as shown in Fig. 3, the faces *i* and *n* coincide with each other and the opening *a* is to the left of the center line of the valve, while when the lever

is left-handed, as shown in Fig. 4, the faces *i* and *n'* coincide with each other and the opening
45 *a* is to the right of the center, so that in either case the elevation of the outer end of the lever will bring the opening *a* into line with the passage *b* of the nozzle. The pin *f* is central, and the shoulders *m m'* are so located
50 in respect to the flat side of the opening in the lever F that said lever can be used either in the right-hand or left-hand position, as desired.

By removing the pin *f* the valve may be rotated by means of the lever, so as to grind said
55 valve to its seat when it becomes leaky.

On reference to Fig. 5 it will be observed that the casing B forms a segment of a sphere, one axis of which passes through the valve-
60 opening and the other through the inclined nozzle D. By this means the casing can be partly finished at the same time that the nozzle is being turned, the nozzle and casing being held between the centers of the lathe, as
65 shown in Fig. 5.

I claim as my invention—

1. The combination of the casing B, the hollow tapering plug-valve E, kept to its seat in the casing by internal pressure, the operating-
70 lever F on the end of the plug, and the detachable stop-pin *f*, on the removal of which the lever and the valve are free to be rotated, as set forth.

2. The casing B, having the central valve-
75 opening and inclined nozzle D, the said casing having one of its axes parallel with the axis of the nozzle, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two sub-
80 scribing witnesses.

CAMPBELL P. HIGGINS.

Witnesses:

HARRY SMITH,
HENRY HOWSON, Jr.