

F. P. BUMP.
Wrench for Inserting Bung-Bush.

No. 214,755.

Patented April 29, 1879.

Fig. 2.

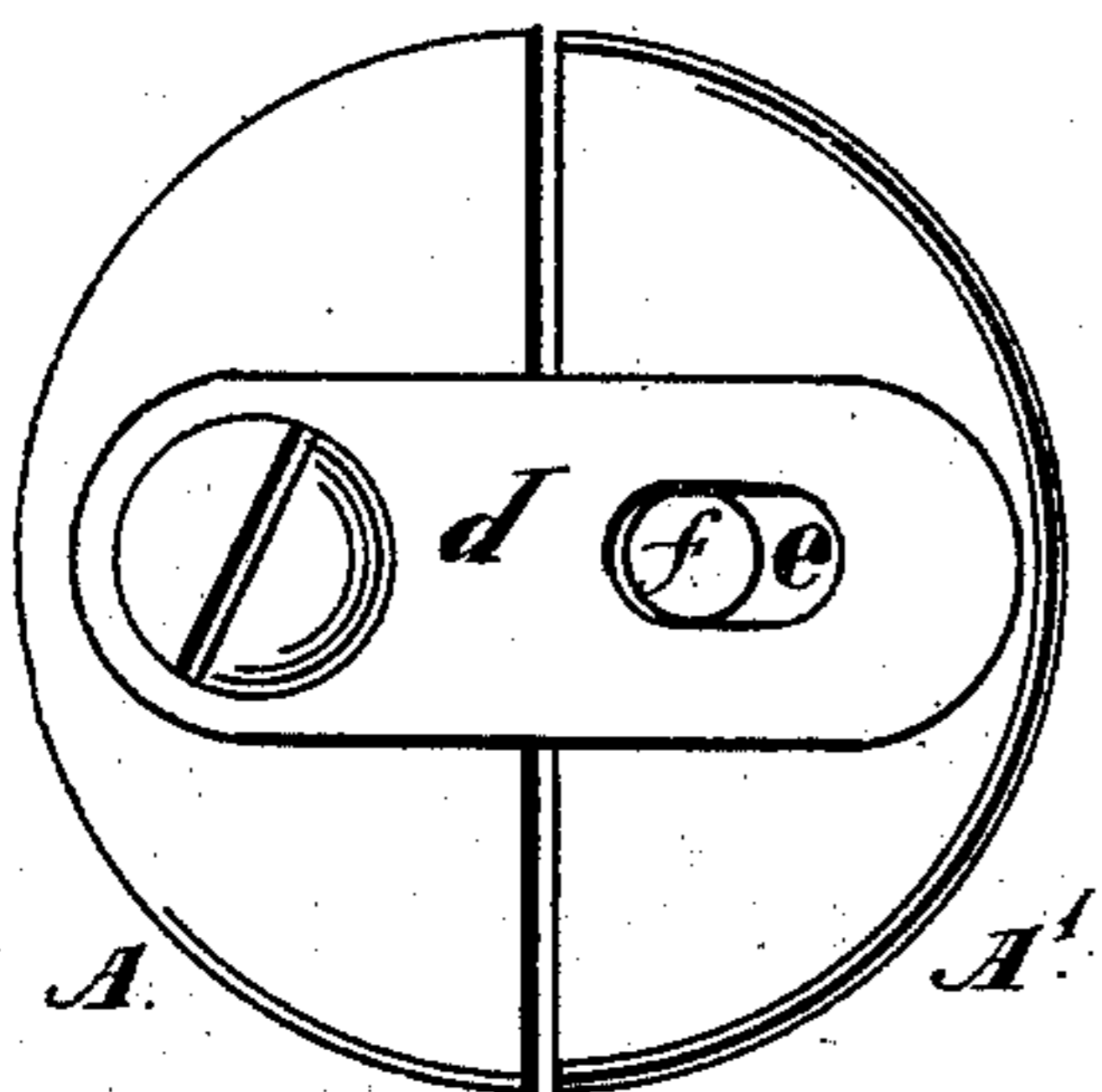


Fig. 4.

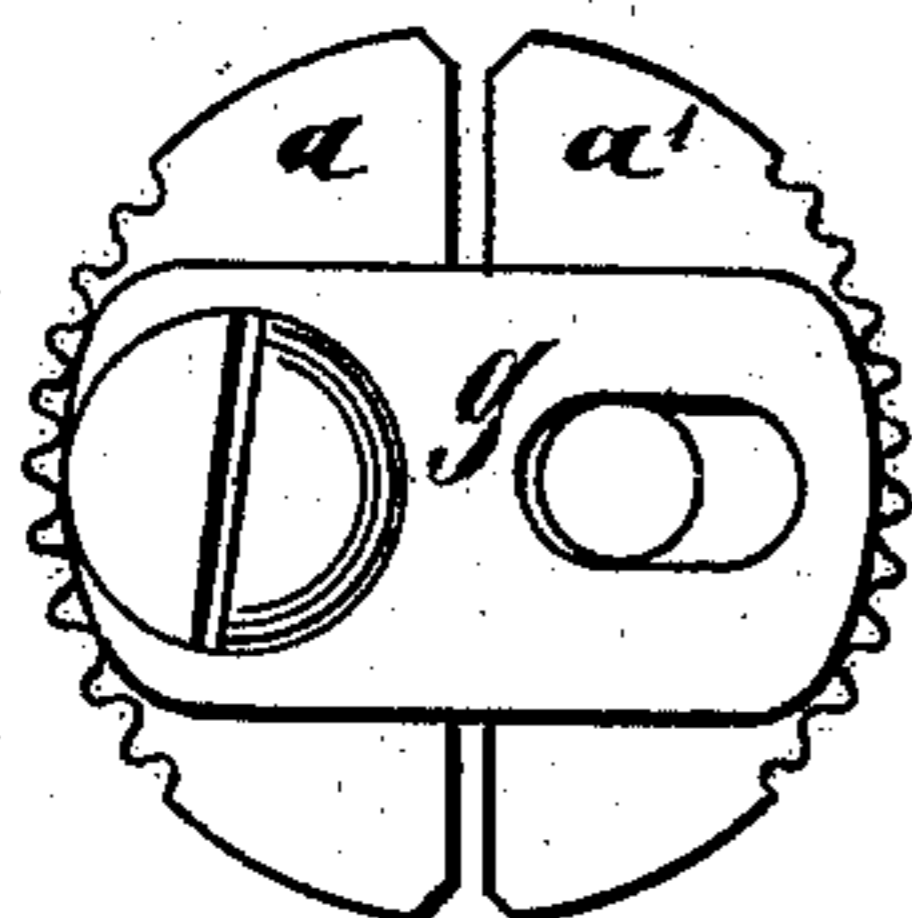
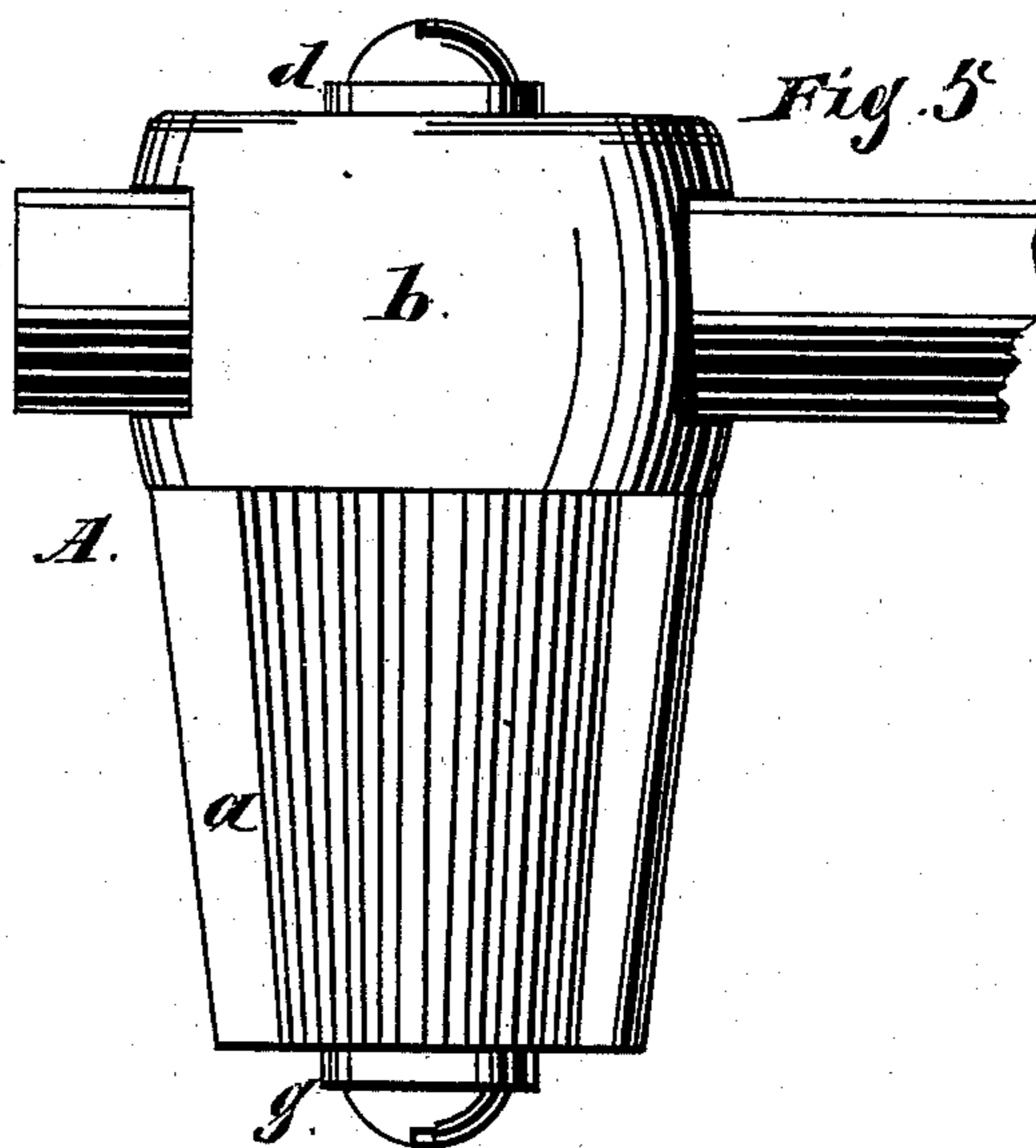
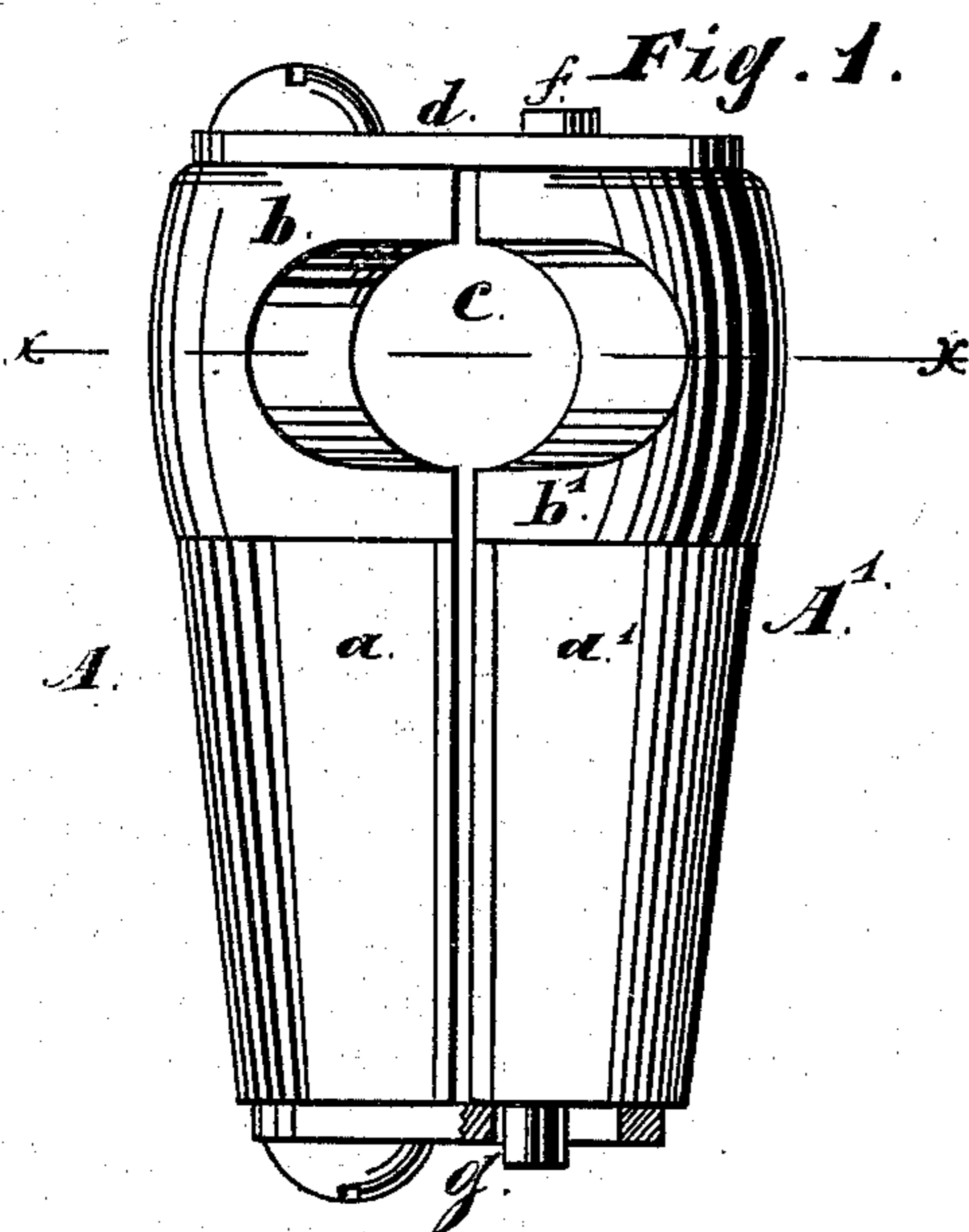
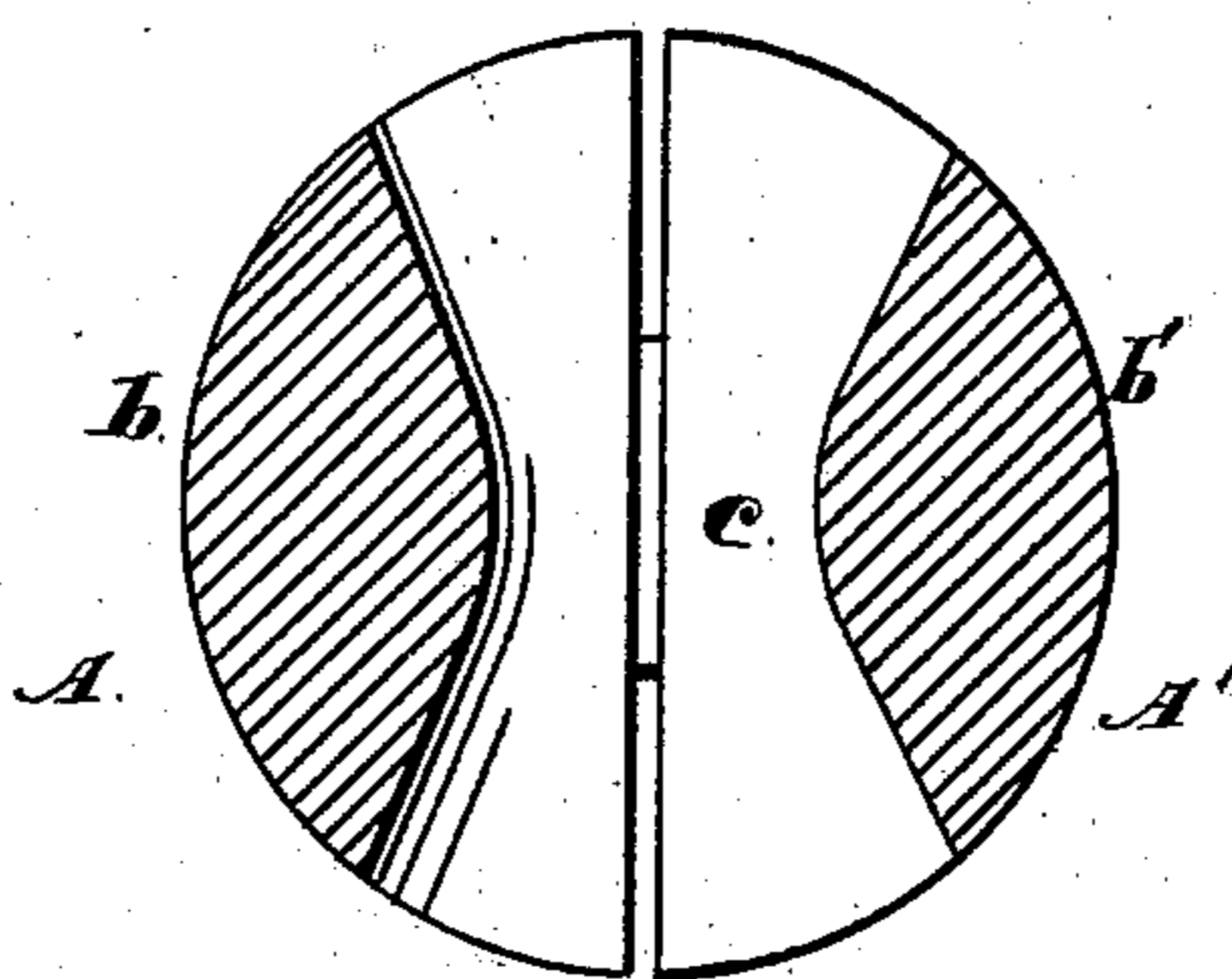


Fig. 3.

Witnesses:
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FRANKLIN P. BUMP, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN WRENCHES FOR INSERTING BUNG-BUSHES.

Specification forming part of Letters Patent No. **214,755**, dated April 29, 1879; application filed December 13, 1878.

To all whom it may concern:

Be it known that I, FRANKLIN P. BUMP, of Chicago, Cook county, State of Illinois, have invented a new and useful Improvement in Wrenches for Inserting Bung-Bushes, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation. Fig. 2 is a top view. Fig. 3 is a view of the bottom. Fig. 4 is a section at line *x* of Fig. 1. Fig. 5 is another elevation, the parts shown in Fig. 1 being turned partly around, and a lever being inserted.

My improvement relates to that class of wrenches which has a supporting-core, which is placed within the bush while it is being inserted.

It is customary to provide such wrenches with a head to receive a lever. Heretofore such head has always been made entire or solid, and frequently leaves have been connected with such head loosely, which leaves or sections have been adapted to be somewhat spread apart in use, so as to completely fill and press against the interior of the bush.

The object of my invention is to make a cheaper and better wrench than those now in use; and it consists in making the head and the body of the core in two parts, each half of the head and body of the core together forming a single piece, the two halves being connected together, as hereinafter described, and each half of the head having a recess on the inside, the two recesses forming a hole to receive a lever, all as hereinafter more fully set forth and claimed.

In the drawings, A A' represent two pieces of metal, of the form shown. The lower parts, *a a'*, together form a core, which is to be inserted in the bush, and the two upper parts, *b b'*, form a head to receive a lever. The parts *a a'* are corrugated vertically, or grooved, so as to hold upon the interior of the bush when expanded. The inside of each of these parts is plain. It is not necessary that the entire outer surface of these parts should be grooved. The two parts *b b'* are each recessed on the inside, so as to form a hole, *c*, for a lever. As shown, these recesses are gradually enlarged from the center outward.

d is a metal bar, one end of which is connected to one part of the head, and on the top thereof, by a screw. In the other end of *d* is a slot, *e*; and *f* is a pin or stud, permanently secured to the other part of the head, which stud extends into the slot *e*. *g* is another bar, similar to *d*. It is connected to *a* by a screw, and in its other end is a slot, into which a stud upon *a'* extends. These two bars *d g* hold the two parts A A' together somewhat loosely, while A is free to turn somewhat, either to the right or left, and the slots in *d* and *g* allow it to have a little lateral movement.

In use, the two parts A A', which together form a core, are to be inserted into the bush which is to be screwed into the barrel; then, by means of the lever, the bush can be turned to its place, the two parts A A' being spread a little apart upon both sides by the power applied to the lever, when the wrench and the bush will rotate together.

The wrench can be used for removing as well as inserting bushes.

The object of making the hole *c* of the form shown and described is to get a shorter leverage and quicker action. This hole might be straight; but I prefer the form shown.

The parts *a a'* are made tapering, to correspond with interior of the bushes with which it is to be used.

The action of the lever spreads the two parts A A' squarely apart, and the pressure on the interior of the bush is very nearly, if not quite, uniform at all points, so that there is no danger of bending or springing the bush while inserting it.

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

The duplicate halves or sections A A', connected together at the top and bottom, and forming both the head and core of a wrench for inserting bung-bushes, such sections being provided with correspondingly-shaped recesses, together forming an opening contracted at its center, adapted to receive an operating-lever, substantially as and for the purposes specified.

FRANKLIN P. BUMP.

Witnesses:

O. W. BOND,
H. F. BRUNS.