

A. A. COWING.
Jeweler's Clamp.

No. 223,711.

Patented Jan. 20, 1880.

Fig. 1.

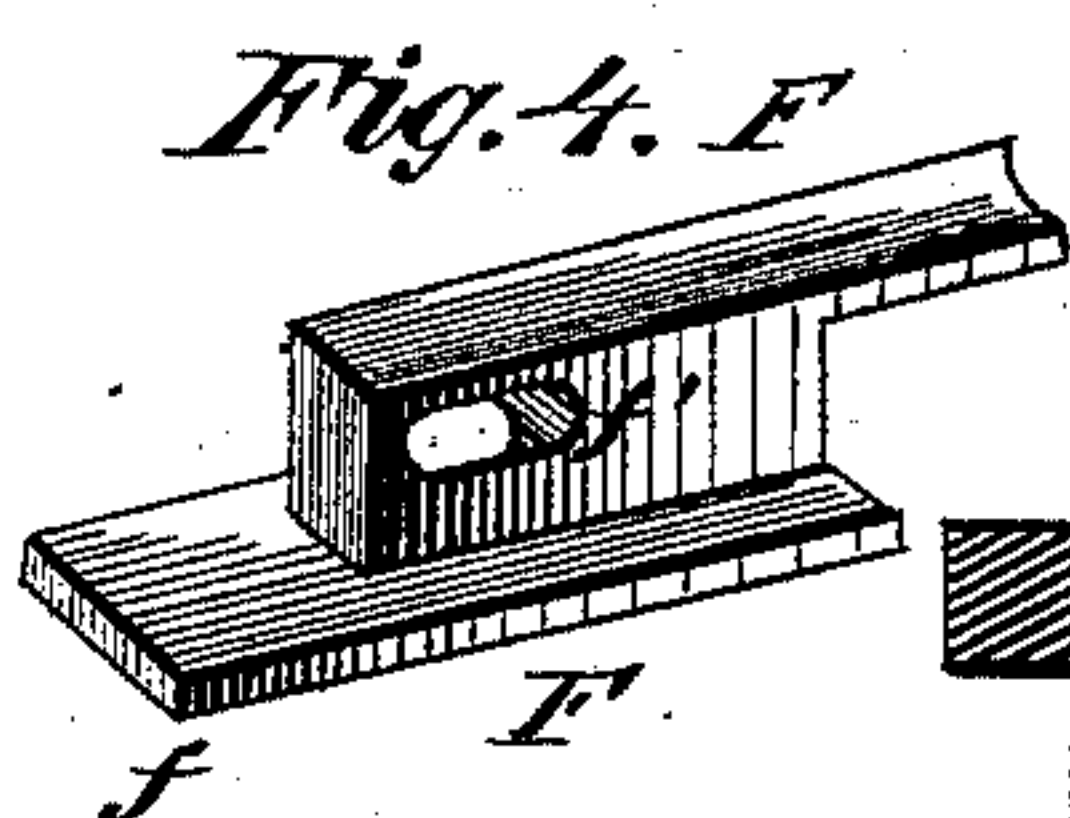
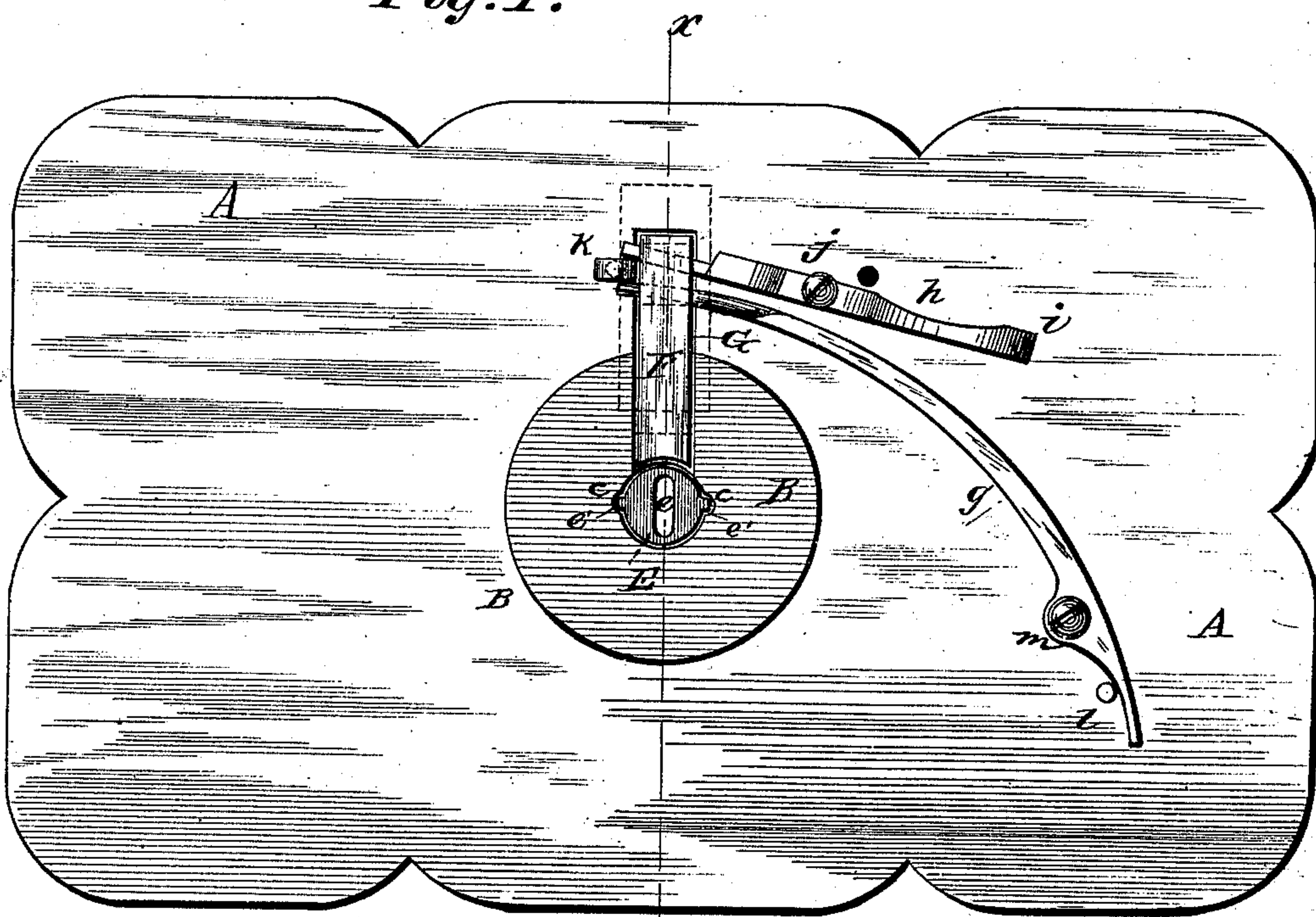


Fig. 2.

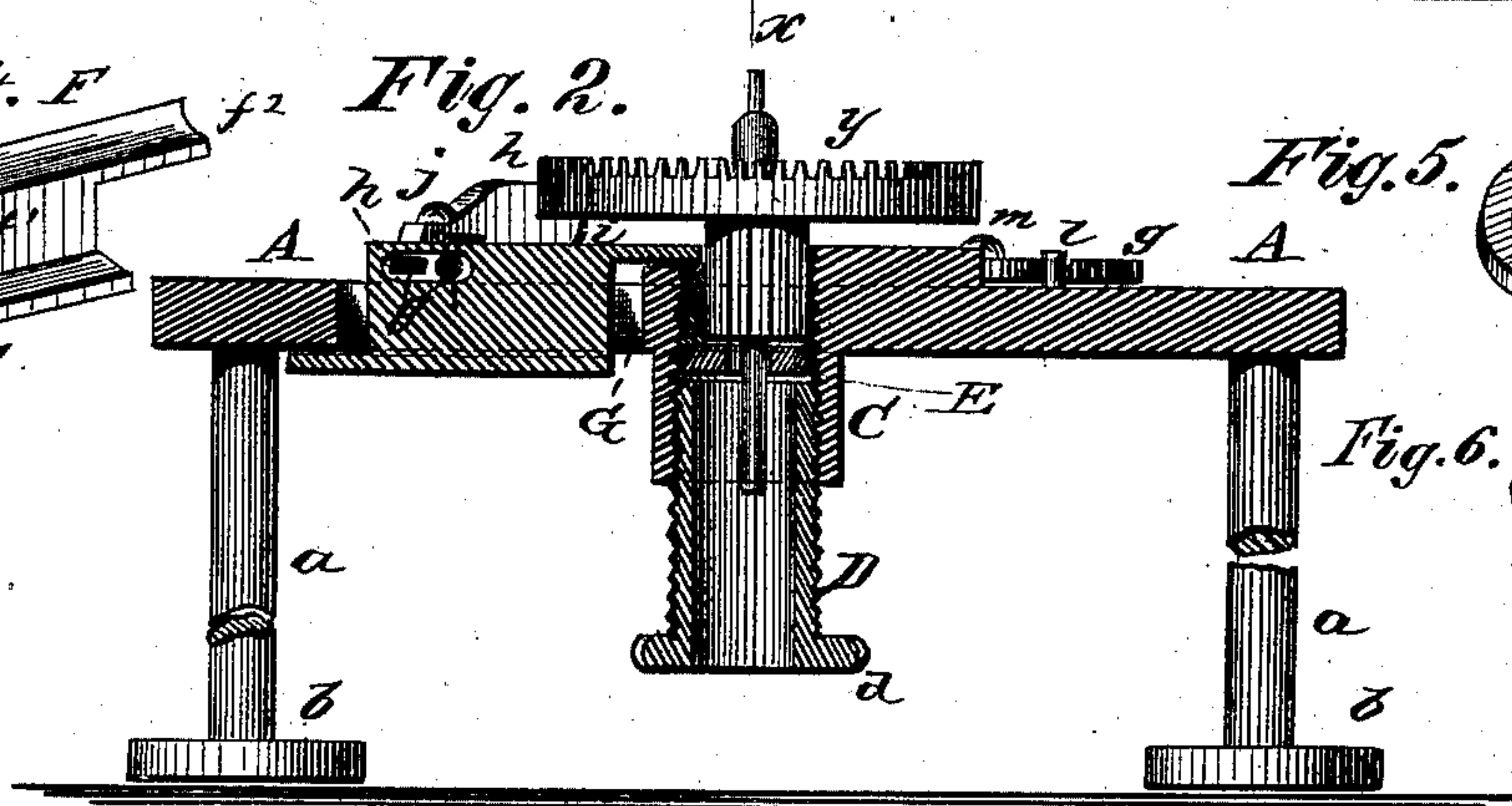


Fig. 5.

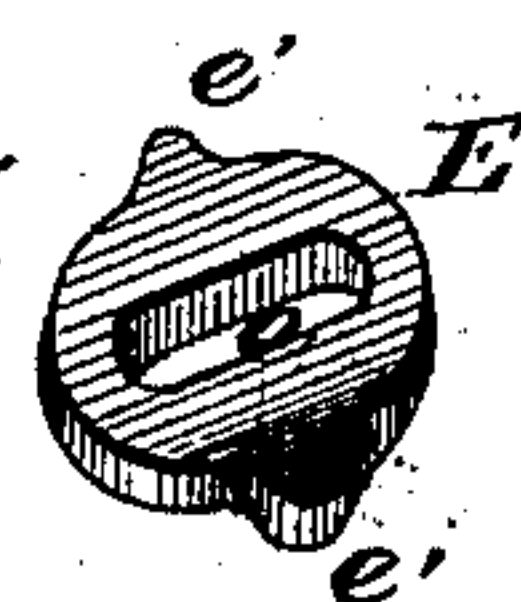
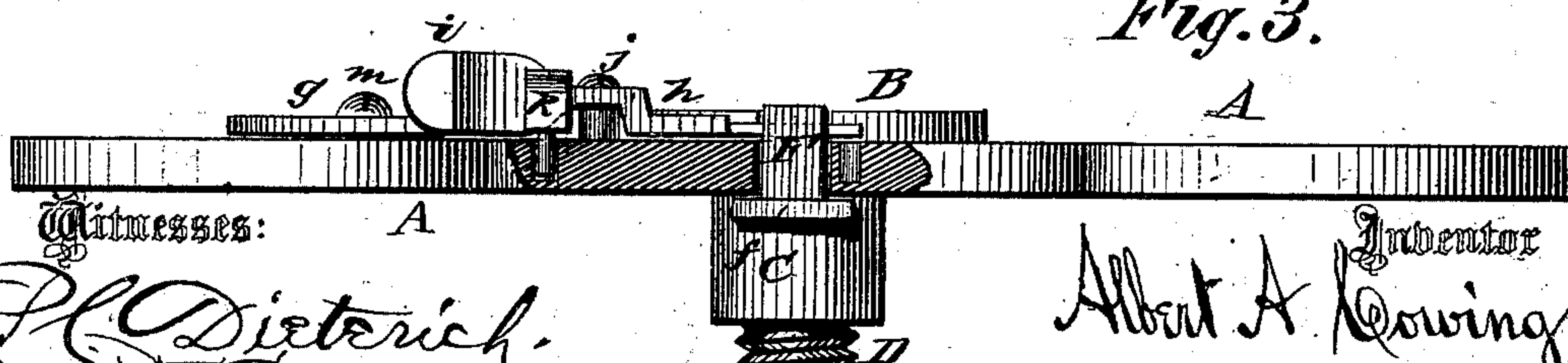


Fig. 6.



Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALBERT A. COWING, OF WATKINS, NEW YORK.

JEWELER'S CLAMP.

SPECIFICATION forming part of Letters Patent No. 223,711, dated January 20, 1880.

Application filed October 11, 1879.

To all whom it may concern:

Be it known that I, ALBERT A. COWING, of Watkins, in the county of Schuyler and State of New York, have invented certain new and useful Improvements in Jewelers' Tools; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in jewelers' tools; and it consists in the construction and arrangement of parts, as will be hereinafter more fully set forth, and pointed out by the claims.

In the annexed drawings, which fully illustrate my invention, Figure 1 is a plan view; Fig. 2, a section on line *x x*, Fig. 1; Fig. 3, an end view; and Figs. 4, 5, and 6 are details.

Like letters of reference indicate like parts.

A represents the table, made of any suitable shape, size, or material, and supported upon the legs *a*, having enlarged bases *b*, to render a more even and rigid bearing. In the center of the table A is a raised portion, B, on which the article to be operated on rests. Attached to this raised portion B, and extending downward through the table A, is a hollow tube, C, having on its inside a screw-thread. This tube C is also provided on its inner side with the grooves *c*, for the purpose to be hereinafter referred to.

D represents a hollow tube, having a screw-thread upon its outer side and adapted to fit into the tube C. The base of this tube D is provided with an enlarged milled portion, *d*, to enable it to be easily grasped and adjusted up or down.

E represents a small follower, fitting in the tube C and resting on top of the tube D. This follower is provided with a slot, *e*, and with lugs or ears *e'*. These lugs or ears fit into the grooves *c* in the inner side of the tube C, and prevent the follower from turning, thereby keeping the slot *e* parallel with the working direction of the clamping-jaw.

Near the center of the table, and extending to the center of the raised portion, is an open-

ing, G, in which works the jaw F. This jaw F is provided at its base with a flange, *f*, which extends on either side of the opening on the under side of the table, and with a cut-away portion, *f*², which extends up through the table and projects outward into the raised center portion. There is also an elongated opening, *f'*, made in the rear of the jaw, in which the end of the lever *h* and the end of the spring *g* are placed.

The lever *h* is pivoted upon the upper side of the table at *j*, and is provided with a thumb-piece, *i*. The spring *g* is also attached to the upper side of the table at *m*, its rear end resting against a projection, *l*, on the upper side of the table.

The pin *k* is used for holding the jaw open, as shown, when desired.

Auxiliary jaws of different shapes to suit the shape of different articles may be used, if desired. Fig. 6 represents a sample of one of such auxiliary jaws. The lower end, *q*, of this auxiliary jaw, when in position, extends down into the tube C on a line with the movement of the jaw F. The projection *f*² presses against the part *q* actuated by the spring, and adapts the opening to clasp smaller articles. The enlarged portion *r* adapts it to hold firmly articles having a small base and widening as they extend upward. The whole inner side of the jaw may be grooved or otherwise adapted to fit the article to be held.

In the drawings I have shown a wheel, *y*, held by the clamp, in order to illustrate the manner of operation.

By this arrangement I provide an easy, safe, and effective manner to hold a pinion or staff while setting a wheel or tightening the same. The pinion being held upright, the wheel is trued to the table with the greatest ease, saving much time and trouble. Other articles, such as hands, screws, &c., are as easily held.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The table A, raised center portion, B, and tubes C and D, in combination with the jaw F, spring *g*, and lever *h*, substantially as and for the purposes set forth.

2. The table A, raised center portion, B, tube C, having the groove *c*, and tube D, in

combination with the follower E, having slot e and ears or lugs e' , and the clamping-jaw F, substantially as and for the purpose set forth.

3. The jaw F, having slot f' , projection f^2 ,
5 and flange f , in combination with the table A, having opening G and raised center portion, B, the spring g and lever h , substantially as and for the purpose set forth.

4. The table A, tubes C and D, and follower
10 E, in combination with the lever h , spring g ,

pin k , and jaw F, constructed and arranged substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ALBERT A. COWING.

Witnesses:

A. W. GRAY,
E. INGALLS.