

No. 641,998.

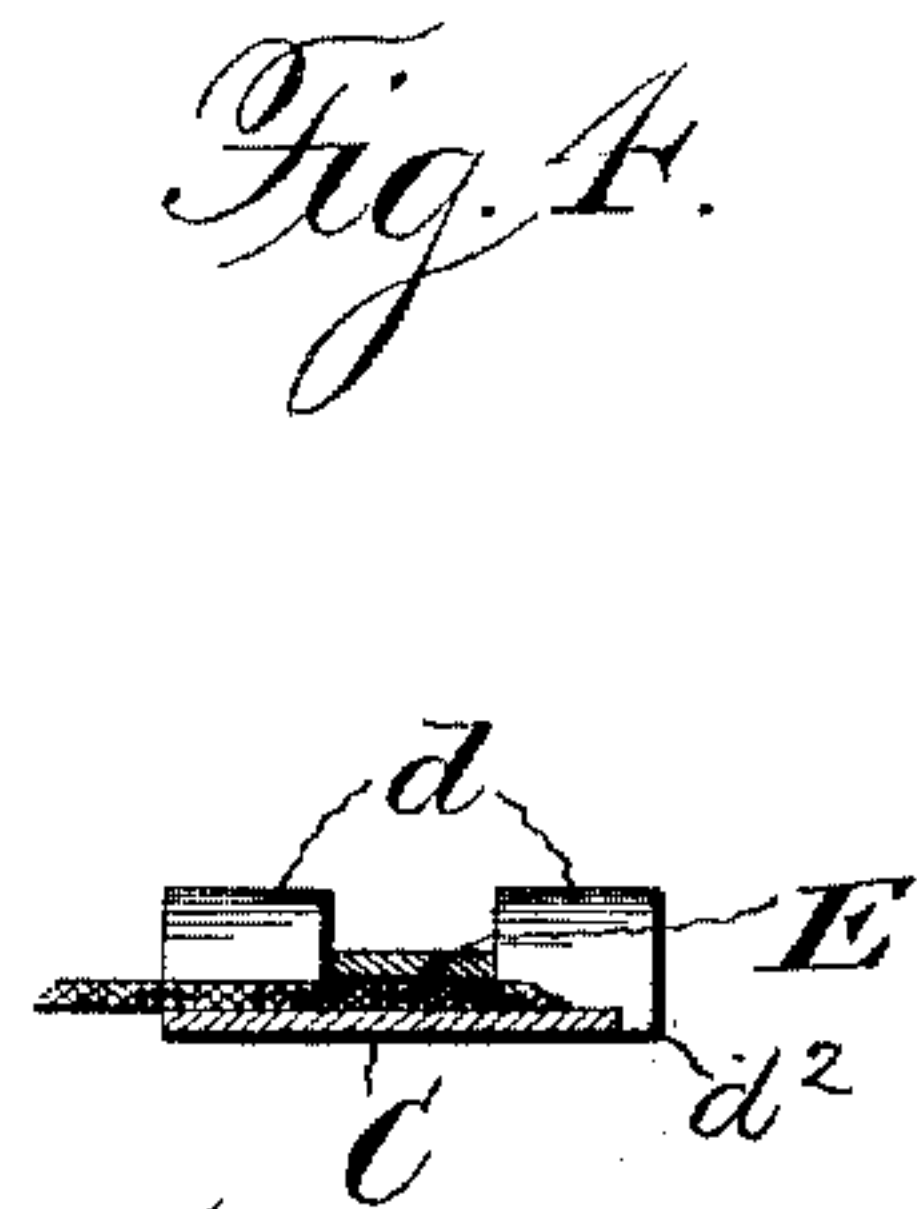
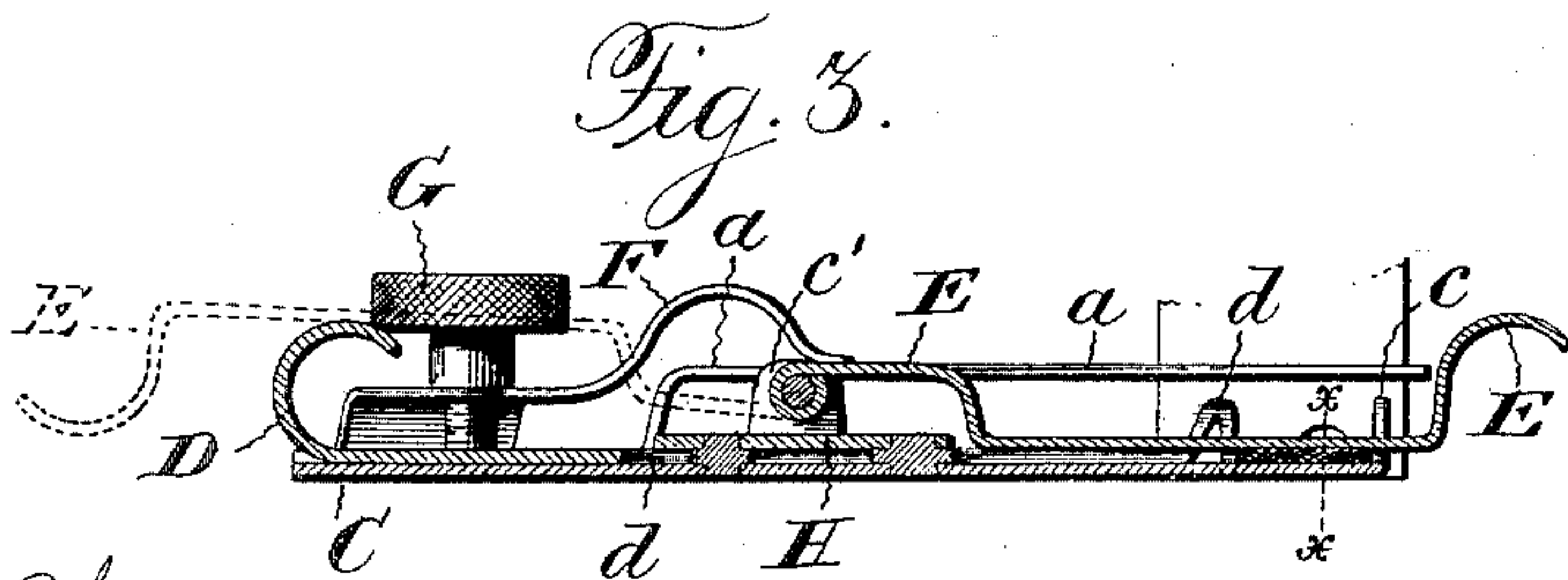
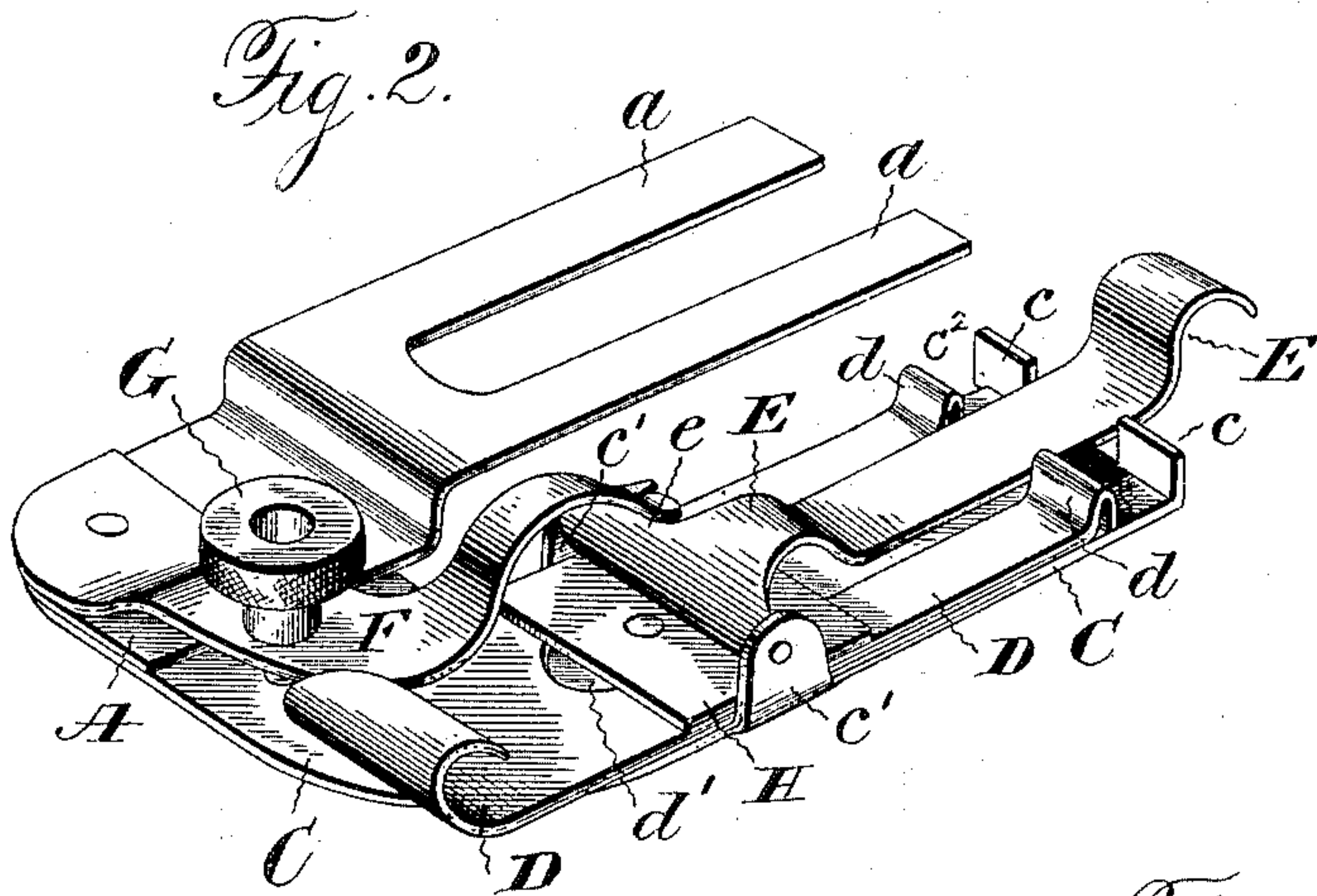
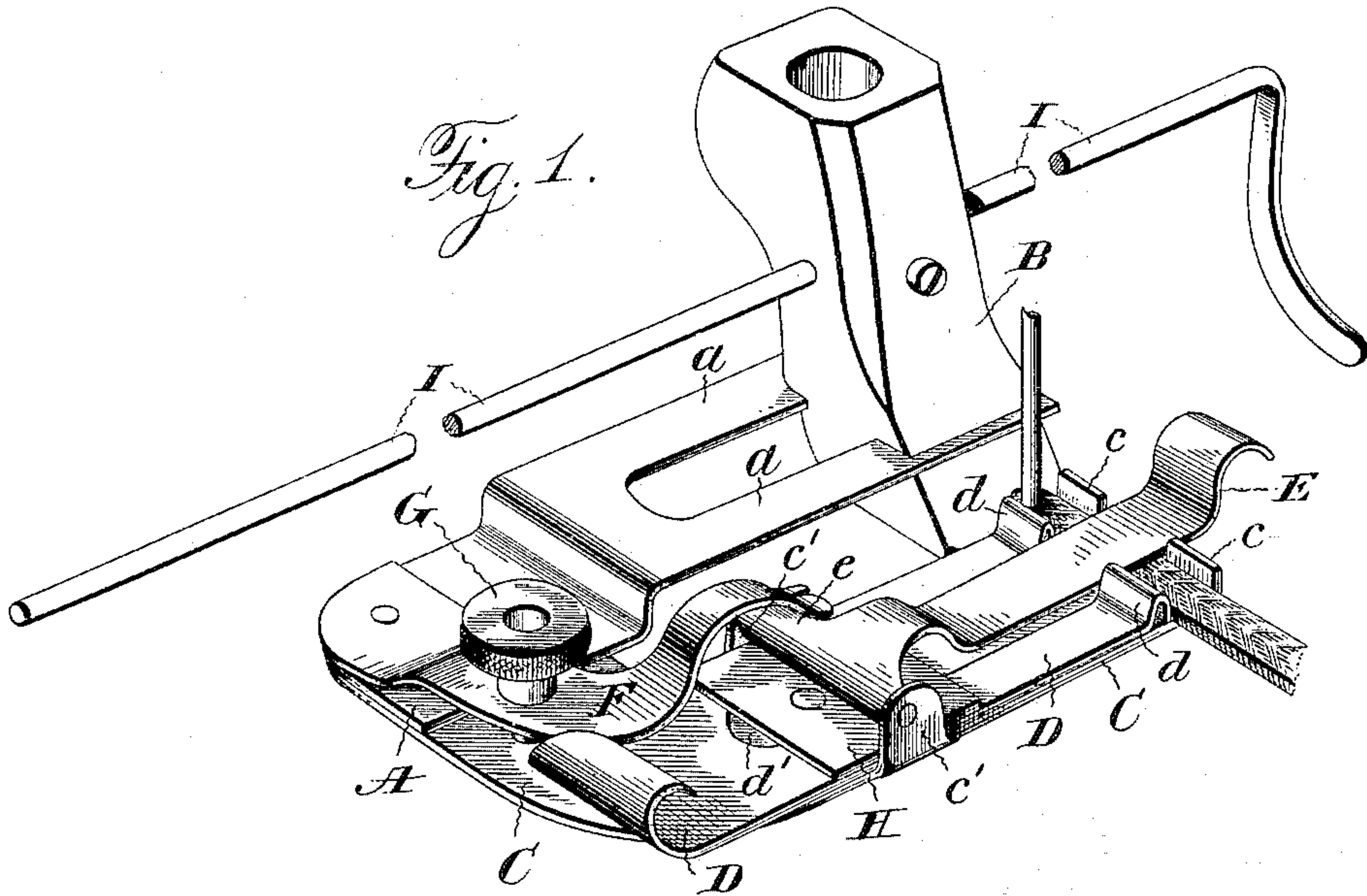
Patented Jan. 23, 1900.

W. E. PRINDLE.

BRAIDER ATTACHMENT FOR SEWING MACHINES.

(Application filed Nov. 22, 1898.)

(No Model.)



Witnesses:
Jas. Hutchinson
Henry C. Hazard.

Inventor.
William E. Prindle, by
Prindle and Russell, his Attys

UNITED STATES PATENT OFFICE.

WILLIAM E. PRINDLE, OF ELGIN, ILLINOIS.

BRAIDER ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 641,998, dated January 23, 1900.

Application filed November 22, 1898. Serial No. 697,172. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. PRINDLE, of Elgin, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Braider Attachments for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my attachment arranged for use; Fig. 2, a like view of the attachment by itself; Fig. 3, a longitudinal section thereof, and Fig. 4 a section on line *x x* of Fig. 3.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to provide a braider attachment for sewing-machines which will enable the braid in the act of sewing to be upon the upper side of the goods to which it is being sewed, apply a perfect tension to the braid, and be adapted for use with braid of different widths; and to this end said invention consists in the braider having the features of construction substantially as hereinafter specified.

In the carrying of my invention into practice I employ a plate A, that is slotted longitudinally to form parallel fingers *a* and *a*, by which the braider may be attached to the presser-foot B of a sewing-machine, the fingers *a* and *a* being slid into horizontal slits, respectively, in the front and back sides of the presser-foot. To the unslotted portion of the plate A, which is depressed to lie in a lower plane than the fingers, is attached a plate C, that thence extends forward and then laterally in front of and close to the presser-foot and the needle. At its free end said plate is slotted, and the two portions on opposite sides of the slot are bent upward to form two shoulders or lips *c* and *c*, that constitute a guide for one side of the braid, while shoulders or lips *d* and *d* on the end of a plate D upon the upper side of the plate C form the guide for the other side of the braid. The side of each of the lips *c* and *d* nearest the needle is carried below the upper surface and preferably to the level of the lower surface of the plate C at *c*² and *d*².

To apply the necessary tension to the braid, a bar E is pivoted at one end between lugs or

ears *c'* and *c'* at opposite sides of the plate C, that, at or near its free end, passing between the two pairs of lips *c c* and *d d*, is held by a spring F yieldingly upon the braid, pressing it against the surface of the plate C. One end of the spring F is fixed to the plate A and its free end bears upon the upper side of a lateral extension *e* of the bar E near its pivot. The tension of the spring, and hence the degree of pressure upon the braid, is regulable by means of a nut G, that bears upon the upper side of the spring and engages a screw that is attached to the plate C and extends through an opening in the spring. The free end of the spring, except the very extremity thereof, is arched on a curve of greater radius than the radius of the curve which is the path of the bearing *e*, so as to permit the bar to be swung freely upward and backward without impediment from the contact of the bearing *e* with the spring, said bearing *e*, after a short upward movement, passing out of contact with the extremity of the spring. The bar is thrown up and backward, as described, from the space between the guides *c c* and *d d* to permit the placing of braid therein.

To enable braid of varying width to be used, the plate D is slidingly attached to the plate C, so that the distance between the two pairs of guides may be altered by moving the plate D. A convenient way of so mounting said plate D is to place over its upper side a short plate H, that is riveted to the plate C, distance pieces or washers around the rivets being interposed between the two plates C and H, to pass which the plate D is provided with a longitudinal slot *d'*. Adjustment for fixing the position of the line of stitching transverse or crosswise of the braid is provided for by sliding the whole attachment to one side or the other, as may be necessary, relative to the presser-foot. An ordinary wire-gage I, adjustably attached to the presser-foot, enables the accurate spacing of several lines or rows of braid.

It is thought the mode of use of my braider will be apparent without particular description thereof. It will be seen that the braid in being sewed is applied to the upper side of the goods and is visible and accessible at all times.

Having thus described my invention, what I claim is—

1. A braider attachment for sewing-machines comprising a plate provided with upturned lips or shoulders, a second plate also having upturned lips or shoulders and being movable to adjust the space between its lips or shoulders and those on the first-mentioned plate, and a pivoted spring-pressed braid-engaging bar constituting with the opposing plate a tension device for the braid, substantially as and for the purpose described.

2. A braider attachment for sewing-machines comprising a plate provided with upturned lips or shoulders, a sliding plate mounted on said first-mentioned plate and having upturned lips or shoulders, and a spring-pressed braid-engaging bar constituting with the opposing plate a tension device for the braid pivoted to the second plate, substantially as and for the purpose described.

3. A braider attachment for sewing-machines, comprising a plate slotted to form fingers to engage slits in the presser-foot, a second plate attached to the first-mentioned plate

and provided with lips or shoulders, a sliding plate mounted on the second plate, and having lips or shoulders, and a spring-pressed braid-engaging bar pivoted to the second plate, substantially as and for the purpose described.

4. A braider attachment for sewing-machines, having a guide that is open on one side for a portion of its length, a pivoted arm for bearing upon and causing tension on the braid at said open portion of the guide, a bearing or lug on said pivoted arm, and a spring, one portion of which presses on said bearing or lug and which spring is bent away from said portion in a curve whose radius is greater than the radius of the path of travel of said bearing or lug, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of November, 1898.

WILLIAM E. PRINDLE.

Witnesses:

E. T. PRINDLE,

F. C. PRINDLE.