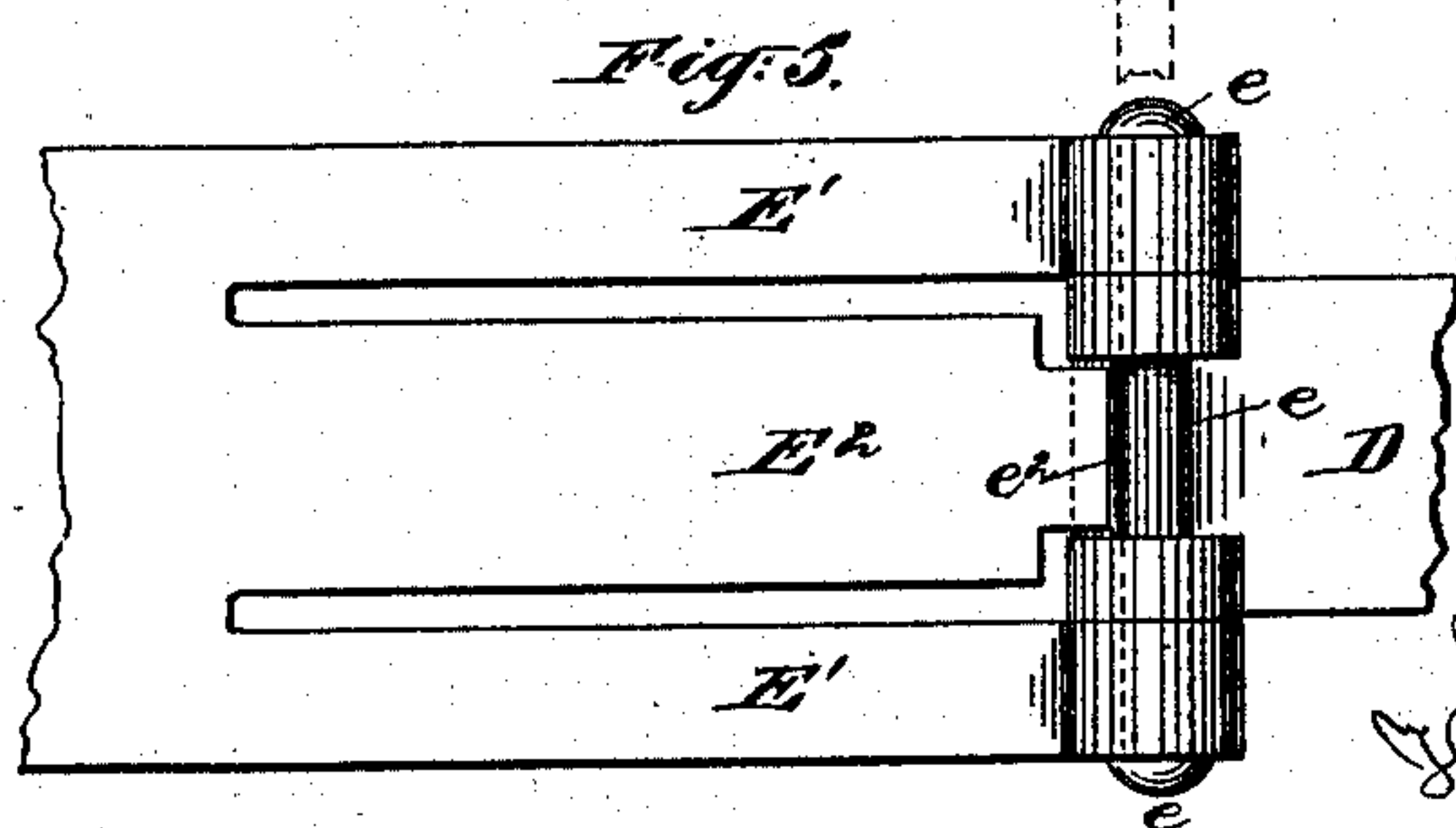
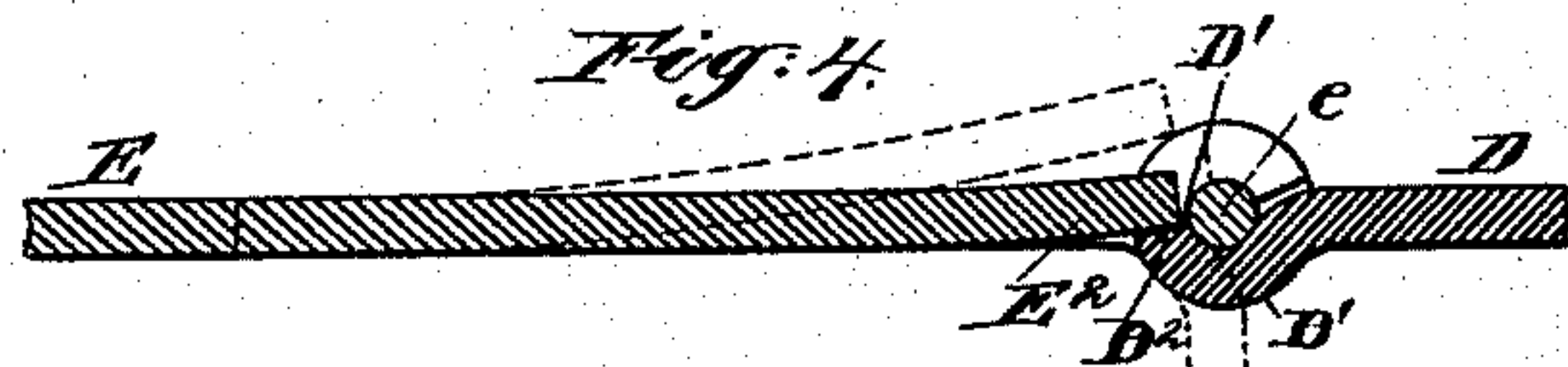
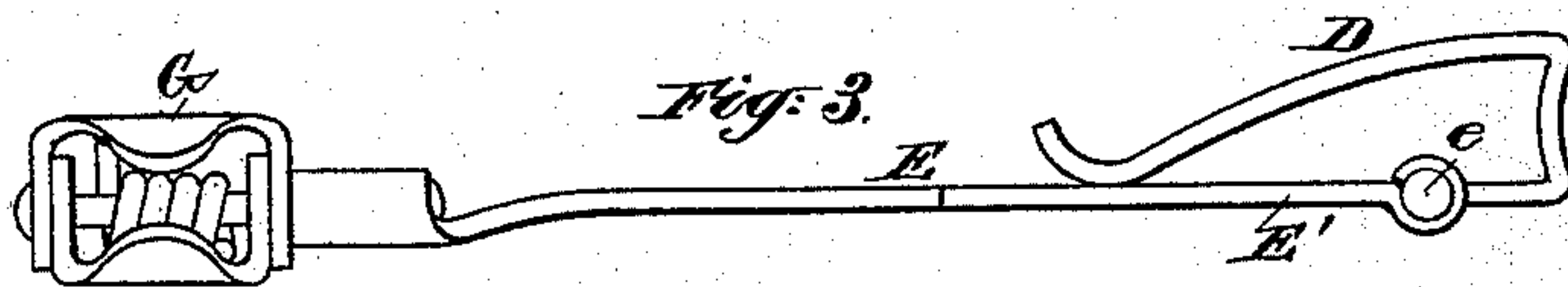
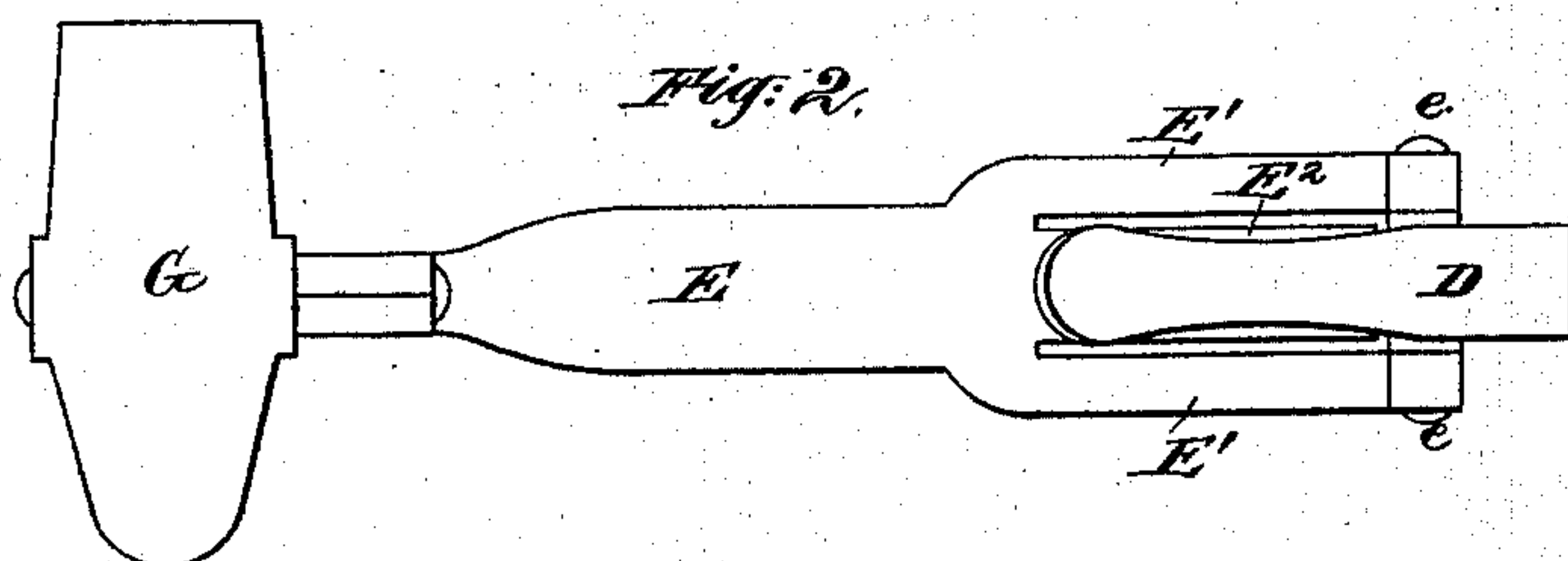
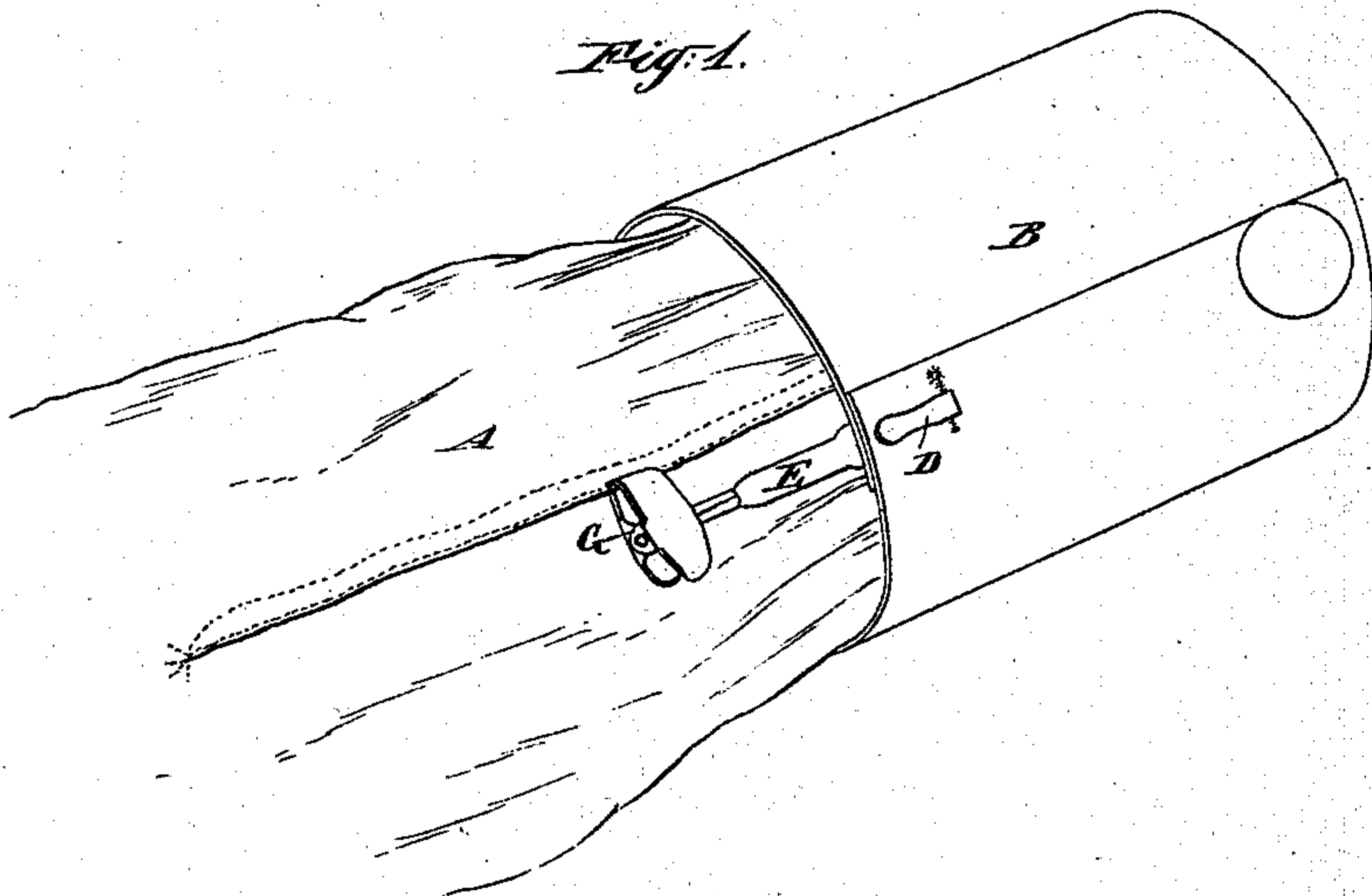


(No Model.)

H. C. FRANK.
CUFF FASTENER.

No. 413,441.

Patented Oct. 22, 1889.



Witnesses:
Charles H. Searle,
Chas. F. Barter.

Inventor:

H. C. Frank
by his attorney
Thomas S. Jones

UNITED STATES PATENT OFFICE.

HENRY C. FRANK, OF NEW YORK, N. Y.

CUFF-FASTENER.

SPECIFICATION forming part of Letters Patent No. 413,441, dated October 22, 1889.

Application filed July 3, 1889. Serial No. 316,365. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. FRANK, of the city and county of New York, in the State of New York, have invented a certain new and useful Improvement in Cuff-Fasteners, of which the following is a specification.

I have in a patent to me, dated February 5, 1889, No. 397,119, set forth styles of cuff-fasteners provided with a spring-clasptaking hold of the edge of the opening in the sleeve above the wristband and with the other end provided with a spring-hook engaging the cuff by the nearest button-hole. It is found in practice with the previous invention referred to that the end of the spring is liable to injure the cuff in the act of engaging the fastener therewith. I have discovered that the parts may be so arranged that the end of the spring may be practically covered, so that the material of the cuff is shielded and protected from abrasion; and I have further discovered that the spring may be made in one piece with the body of the fastener.

The invention cheapens the construction, reduces the chance of derangement by rendering it impossible that the spring can become loose, and increases the value of the fastener by avoiding the risk of abrasion.

The accompanying drawings form a part of this specification and represent what I consider the best means of carrying out the invention.

Figure 1 is a perspective view showing the fastener in use. Figs. 2 and 3 are on a larger scale and show the fastener detached. Fig. 2 is a face view, and Fig. 3 is an edge view. The remaining figures are on a still larger scale. Fig. 4 is a central longitudinal section through a portion, and Fig. 5 is a corresponding face view.

Similar letters of reference indicate like parts in all the figures where they occur.

My fastener is shown as employed to engage the cuff B to the shirt-sleeve A. The hook D turns on a transverse pin or hinge *e*, supported in eyes formed in the end of the two branches *E'* *E'* of the body E. The central branch *E*² serves as a spring. The metal

is cut by dies or otherwise with the branches *E'* so much longer than the central branch *E*² that when the eyes are formed and the parts are applied together the end of the central part *E*², which serves as a spring, reaches only to a point a little short of the periphery of the pin *e*. The hook D is formed with a cam *D'* *D*², which receives the action of the end of the branch *E*², which serves as a spring. The cam receives the elastic force of the spring on the surface *D'*, so as to allow the hook to remain in the open position, as indicated by the dotted lines in Fig. 4, to allow its easy engagement in the button-hole, and then when a slight force is applied to the hook by the fingers to cause it to turn on the pin *e* and assume the closed position shown in Fig. 3, and in the strong lines in Fig. 4 the force of the spring is exerted on the surface *D*² and holds the hook with firmness in the closed position. Care must be taken in the selection of the sheet-brass from which the main part E is cut to secure sufficient flexibility to allow the eyes to be formed by bending the ends of the arms *E'*, and yet sufficient hardness and elasticity to allow the central arm *E*² to serve as a spring. I have determined by experiment that this is practicable.

The spring-clasp G may be of any ordinary or suitable construction. I prefer that it be swiveled on a rigid extension of the body E.

I claim as my invention—

In a cuff-fastener, the body E, having two branches *E'* *E'*, formed with eyes, and an intermediate branch *E*², formed of the same metal, adapted to serve as a spring, in combination with the pin *e*, hook D, having the cam-surfaces *D'* *D*², and a suitable clasp G, adapted to serve in engaging the cuff with the sleeve, substantially as herein specified.

In testimony whereof I have hereunto set my hand at New York city, New York, this 1st day of July, 1889, in the presence of two subscribing witnesses.

H. C. FRANK.

Witnesses:

CHAS. F. BARTER,
CHARLES R. SEARLE.