

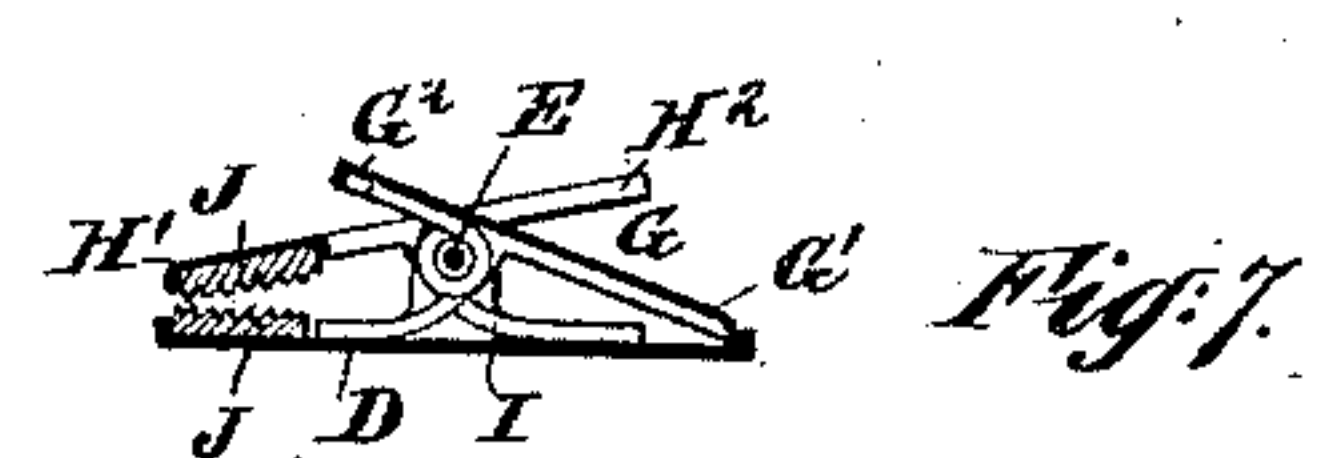
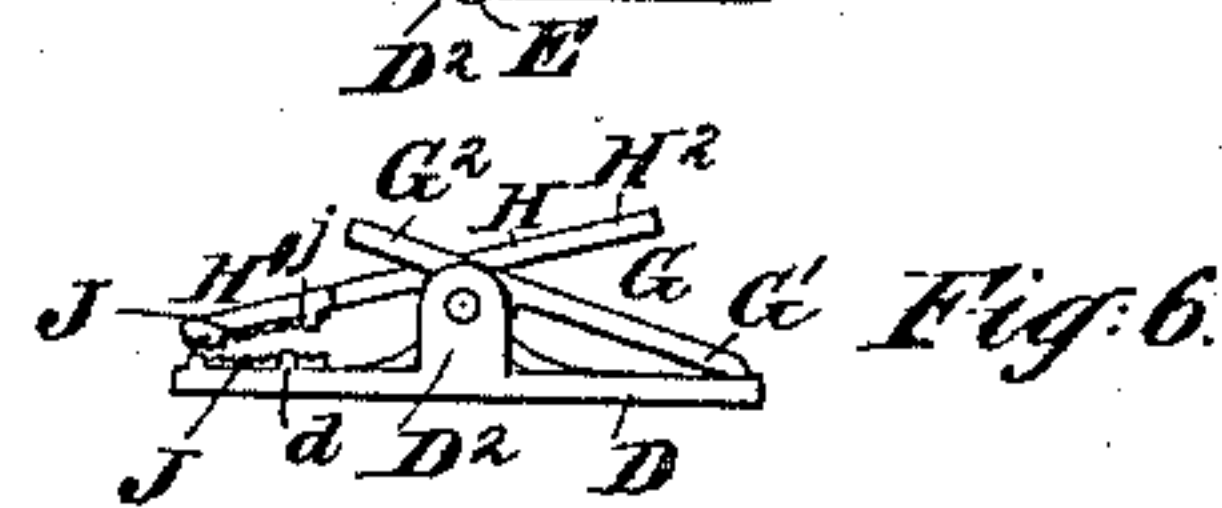
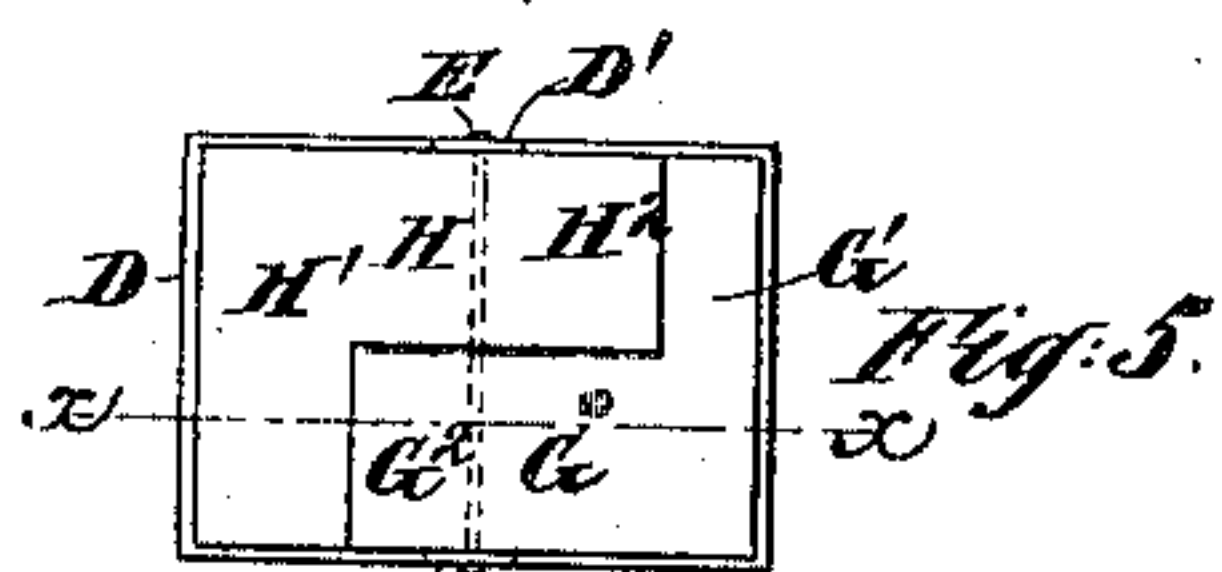
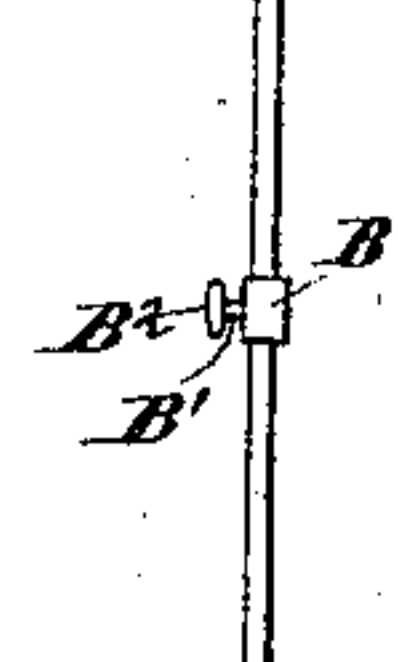
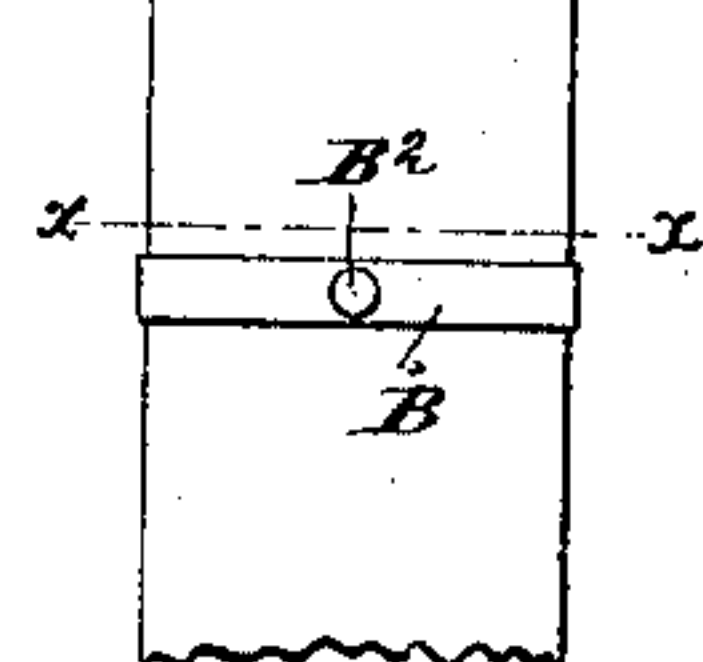
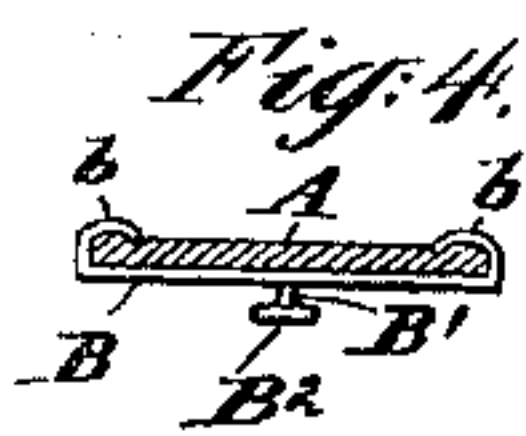
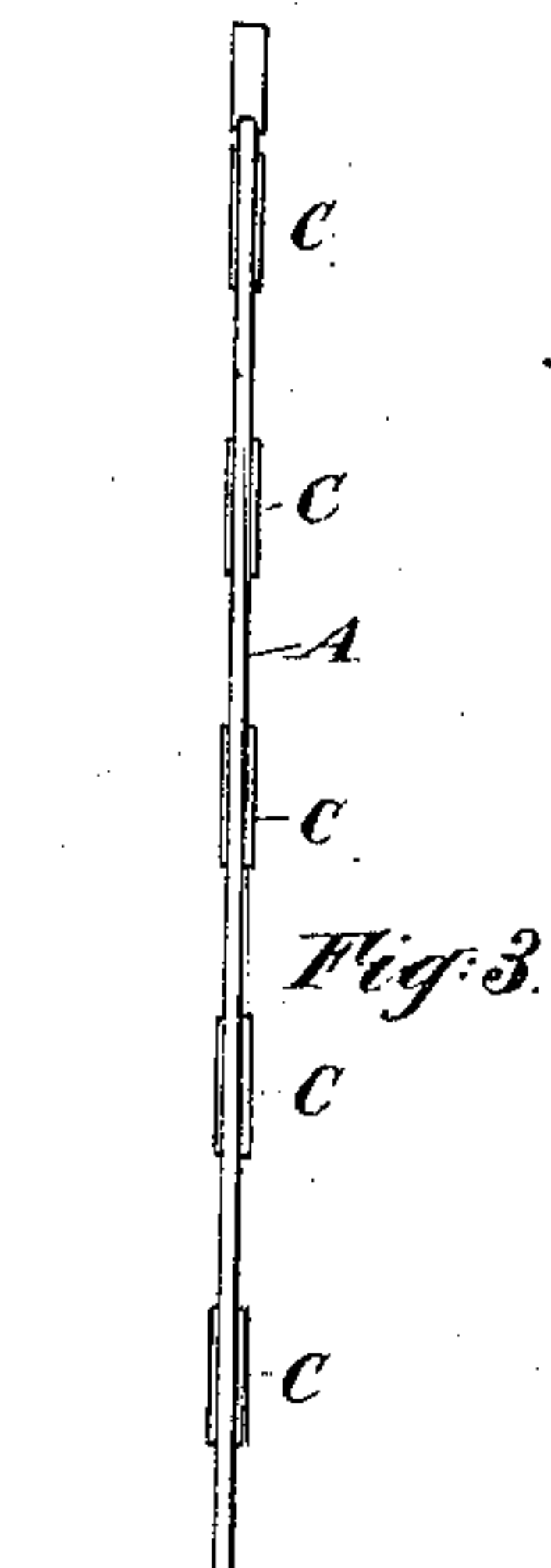
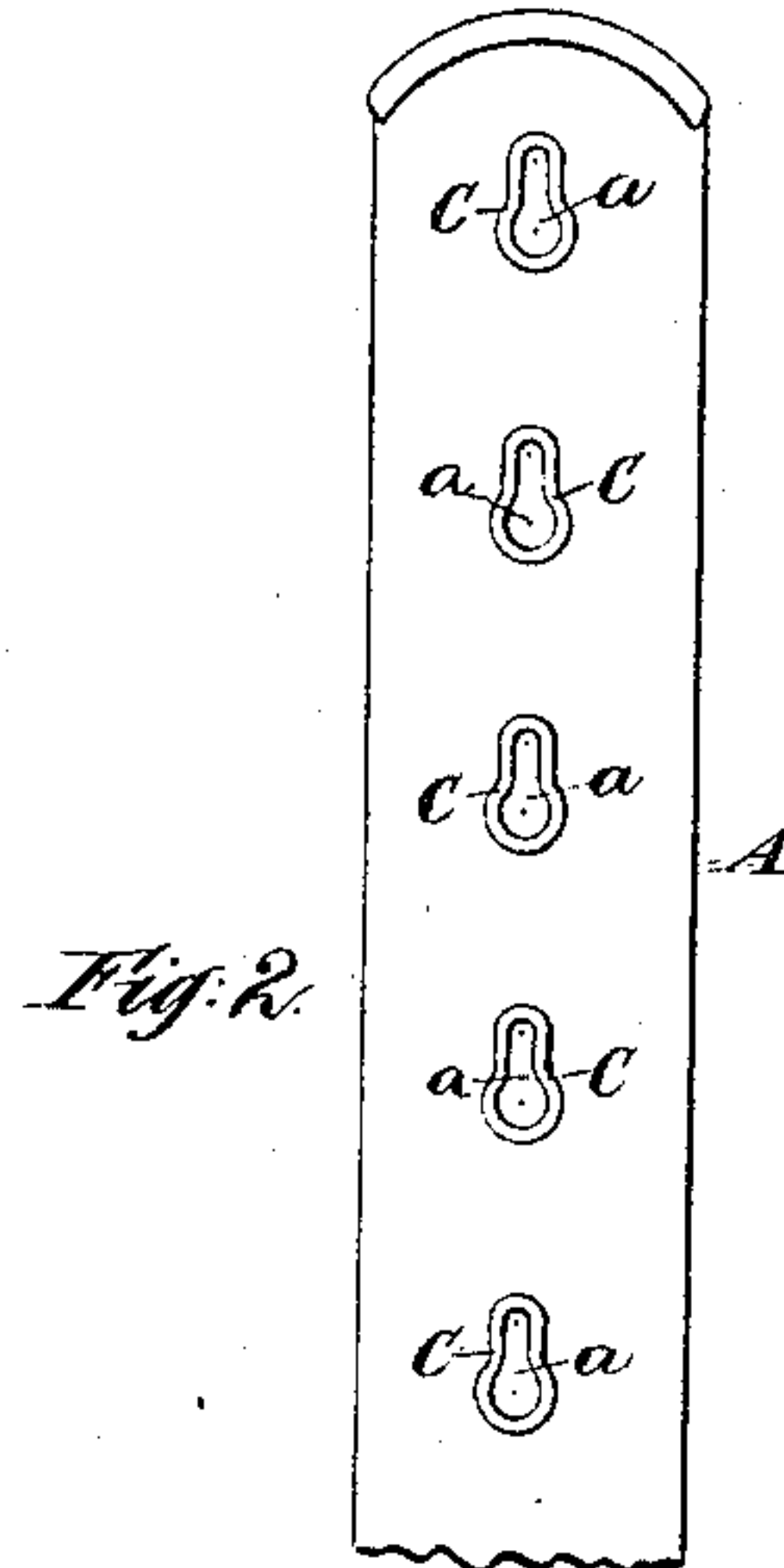
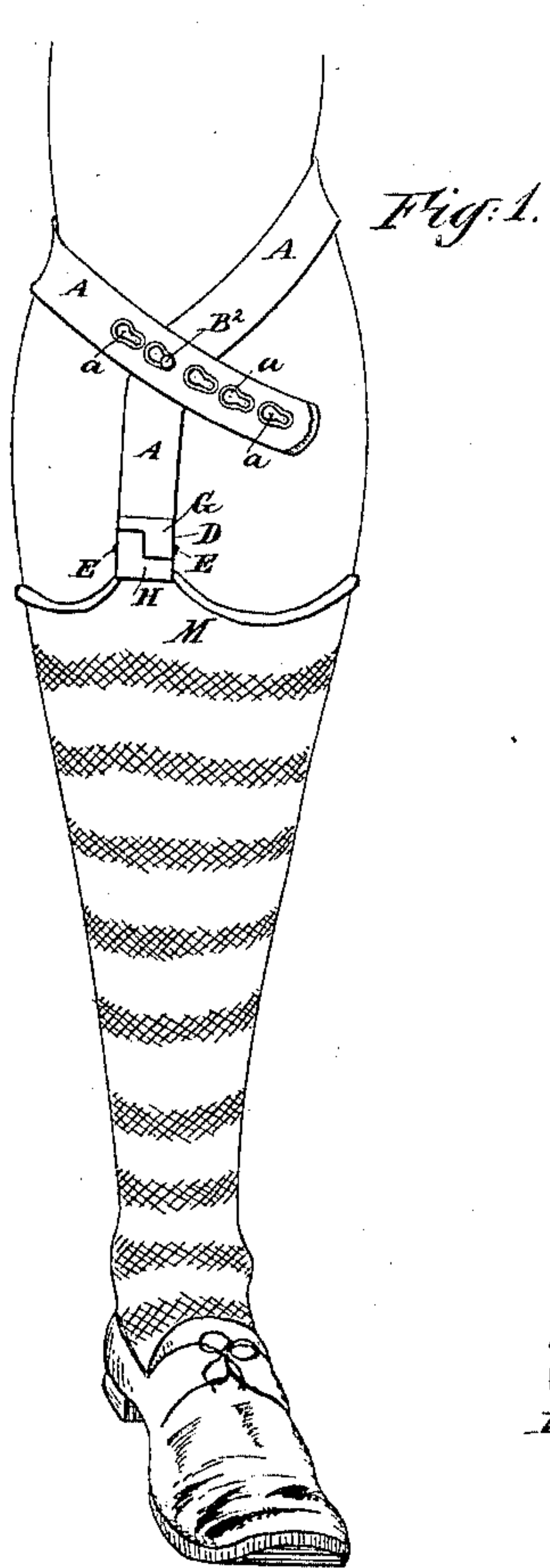
(No Model.)

H. C. FRANK.

GARTER.

No. 302,655.

Patented July 29, 1884.



WITNESSES—
Charles V. Searle,
J. C. Rourke.

INVENTOR—
H. C. Frank
By his attorney, Thomas D. Nelson.

UNITED STATES PATENT OFFICE.

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

GARTER.

SPECIFICATION forming part of Letters Patent No. 302,655, dated July 29, 1884.

Application filed April 18, 1884. (No model.)

To all whom it may concern:

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

The invention relates to that class of garters in which the webbing or other strap encircles the leg not outside of and pressing directly upon the sock, but above it. I employ a peculiarly-formed clasp which can take hold of and release the end of the garter at will, and which also can take hold of and release the edge of the sock at will; but the hold on the garter is more forcible than on the sock. When the clasp has been once attached to the garter, it will remain attached when the garter is detached from the sock and taken off and laid aside. The garter is equipped at a little distance from the clasp with a small permanently-connected knob, and near the other end with a series of small pear-shaped punctures protected by corresponding metallic bushings or eyelets. The garter, either before or after being connected by its clasp to the upper edge of the sock, is passed around the leg and one of its holes engaged on the knob. On liberating it the tension pulls the neck of the knob into the small part of the hole, and it remains reliably engaged.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawings form a part of this specification.

Figure 1 represents the device for use. The succeeding figures are on a larger scale. Fig. 2 is a face view of the two ends and a portion of the mid-length. Fig. 3 is a corresponding edge view. Fig. 4 is a cross-section on the line *xx* in Fig. 2. Figs. 5, 6, and 7 represent the clasp detached. Fig. 5 is a face view; Fig. 6, an edge view; and Fig. 7, a longitudinal section on *xx*, Fig. 5.

Similar letters of reference indicate corresponding parts in all the figures.

A is a piece of webbing or other flexible material; B, a sufficient piece of sheet metal, nickel-plated or otherwise smoothly surfaced, and firmly engaged, by clinched claws *b* or otherwise, with the webbing. This plate B carries on its outer surface, by means of a neck,

B', a smooth head or knob, B². I produce near the other end of the webbing a series of holes, *a*. These holes are not round, but pear-shaped. Each is lined with a metallic eyelet, C, having a corresponding shape.

D is the body of a spring-clasp. It may be of sheet metal, having two ears or lugs, D' D², which receive a cross-bar, E, on which are hinged two peculiarly-shaped levers, G H, each actuated by a spring, I. The lever G grips the end of the webbing A. Its gripping end G' is the full width of the body D. The hinged part which engages with the shaft E is narrower. The lever H grips and releases the sock M. Its gripping end H' is the full width. It is narrower at the hinge and at the other end. The levers G and H are applied together in reversed positions, as shown, so that both turn on the same axis. A separate spring, I, is provided for each. The end G² of the lever G, is short and requires a strong pressure thereon to overcome the force of the spring and lift the end G' and liberate the webbing A. The end H² of the lever H is longer and requires less force to detach the sock. It follows that the wearer may press carelessly upon the whole clasp with sufficient force to detach the jaw H' from the sock M without risk of detaching the clasp from the webbing A. The broad end G' of the lever G is formed with claws which enable it to partially or entirely puncture the webbing A, and thus engage therewith very reliably. The adjacent end of the body D is similarly equipped on its upper face. The claws thus take hold of the webbing A on both sides and make a very secure hold. The broad end H' of the lever H and the adjacent end of the body D may be correspondingly provided with claws; but I prefer to form this end of the clasp with gripping-faces of vulcanized india-rubber J. This material holds the sock with sufficient force by its friction. The pieces of rubber J are secured to the metal by means of claws *j d*, which are formed from the metal by treating in suitable dies, and are pressed down upon and sunk into the rubber. The outer face of each rubber piece is preferably cross-grooved to allow it to take a firmer hold by friction.

Modifications may be made in the forms and proportions. Both ends of the clasp may be

equipped with rubber, or either or both may serve without rubber. In the latter case the metal may take hold with or without claws.

I claim as my invention—

- 5 1. As an improvement in garters, the double clasp described, the arm G^2 being short and requiring great force to detach the jaw G' , while the arm H^2 is longer and allows less force to detach the jaw H' , in combination
10 with the flexible material A, having holes a , and knob B^2 , adapted to engage in said holes, all arranged to serve relatively to each other and to a sock, M, substantially as herein specified.
- 15 2. The webbing or flexible material A, pro-

vided with pear-shaped holes a , corresponding eyelets, C, knob B^2 , neck B' , and plate B, and having suitable means for engaging detachably with the sock M, all combined and arranged to serve substantially as herein specified. 20

In testimony whereof I have hereunto set my hand, at New York city, N. Y., this 10th day of April, 1884, in the presence of two subscribing witnesses.

HENRY C. FRANK.

Witnesses:

HALCYON M. CLOSE,
JOHN L. N. HUNT.