

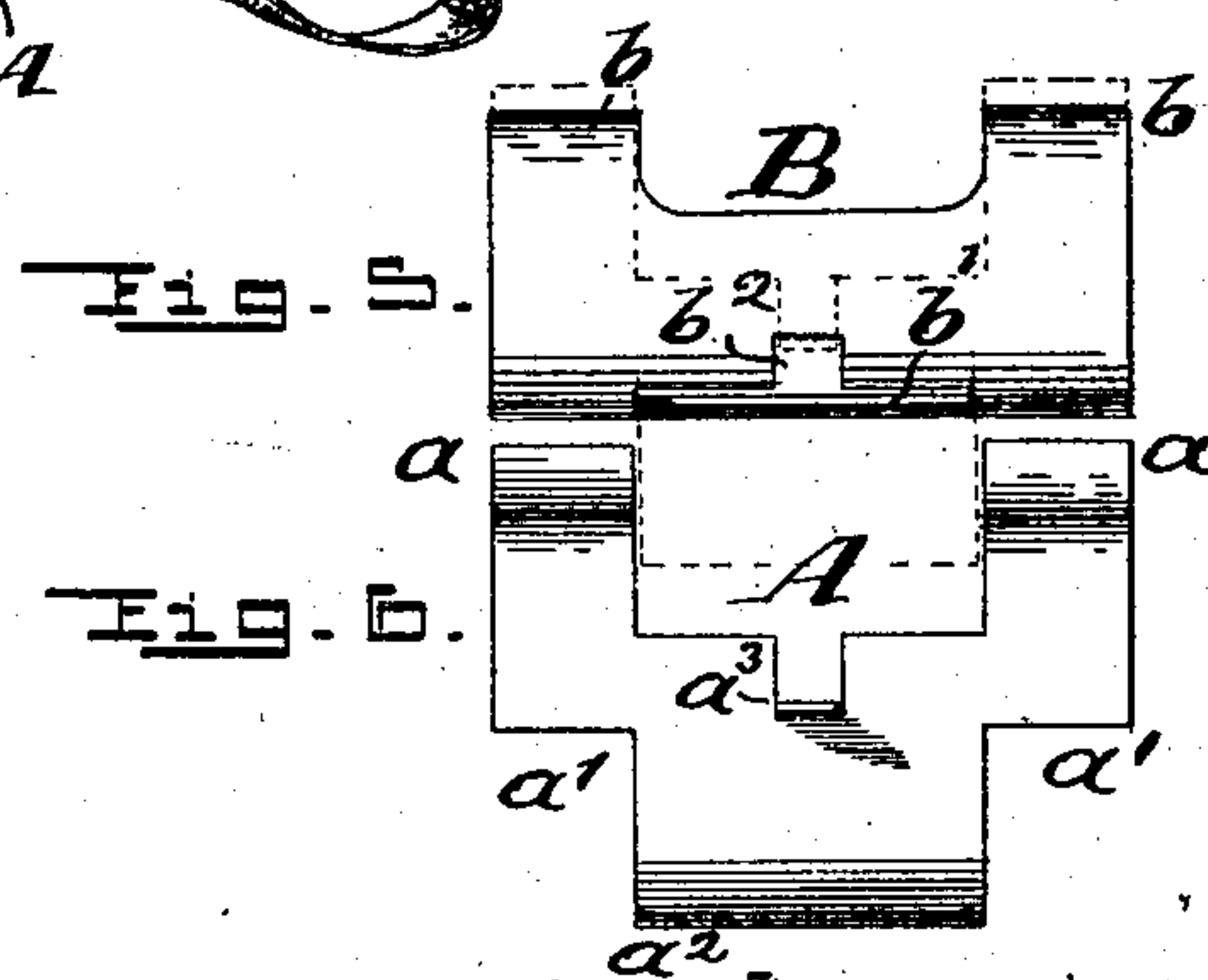
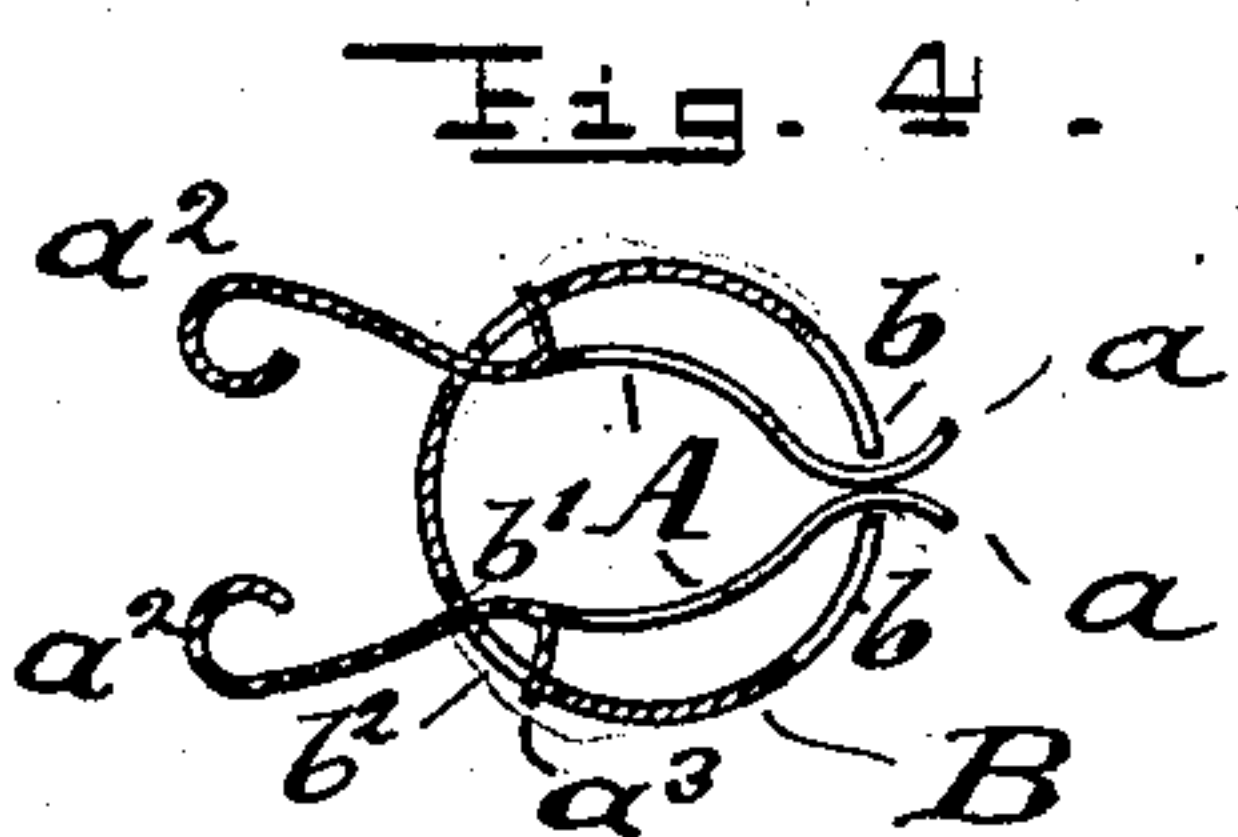
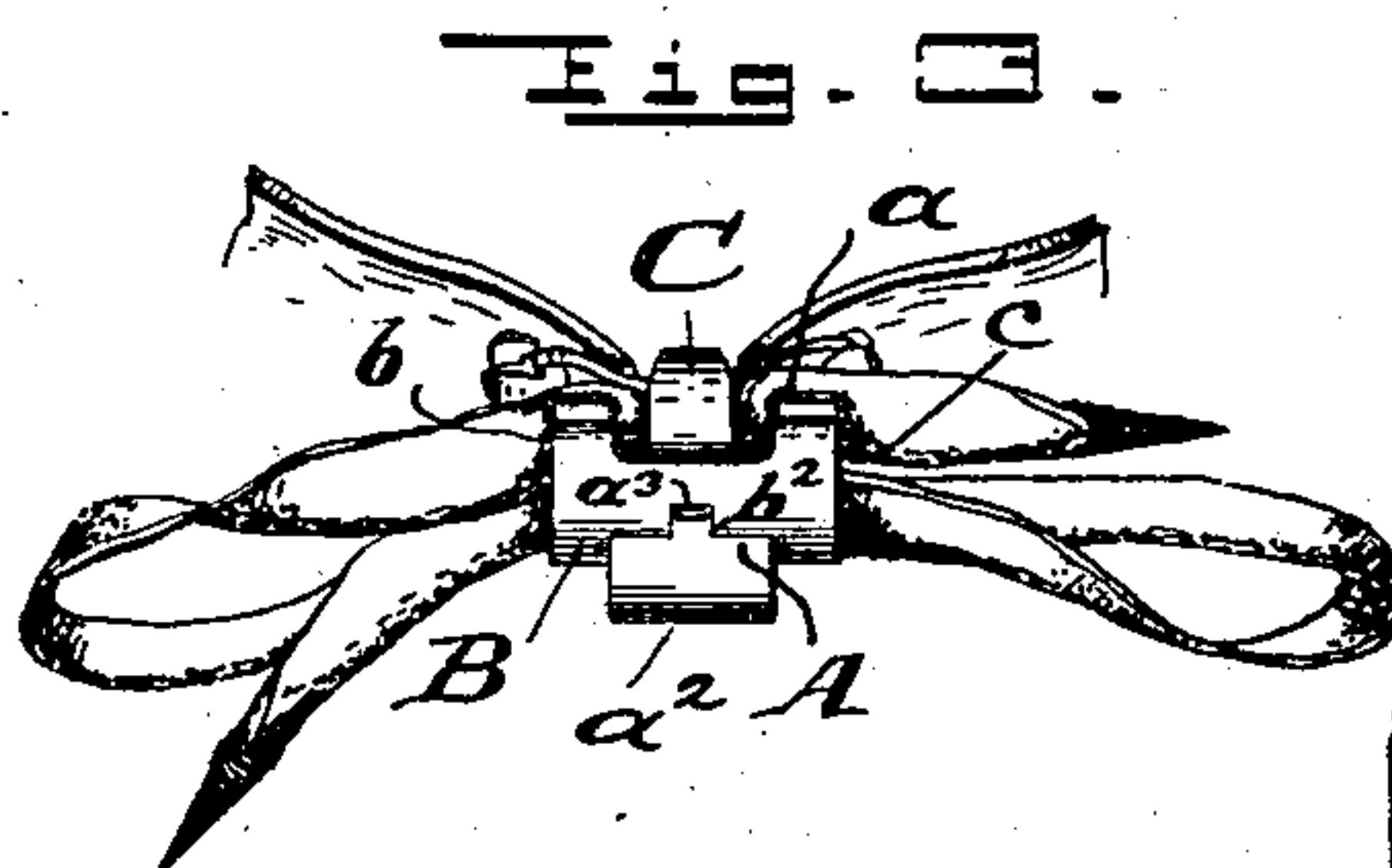
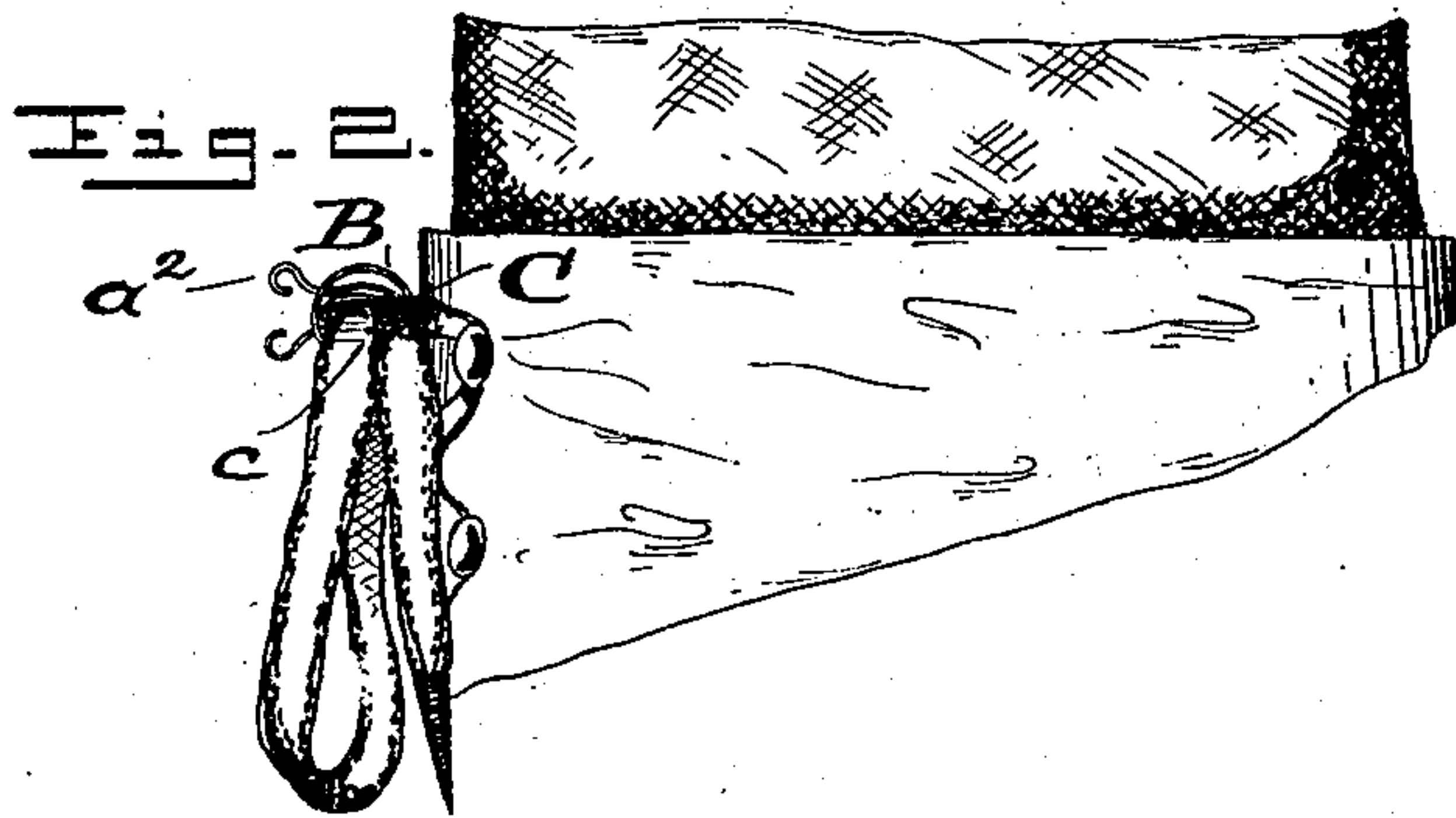
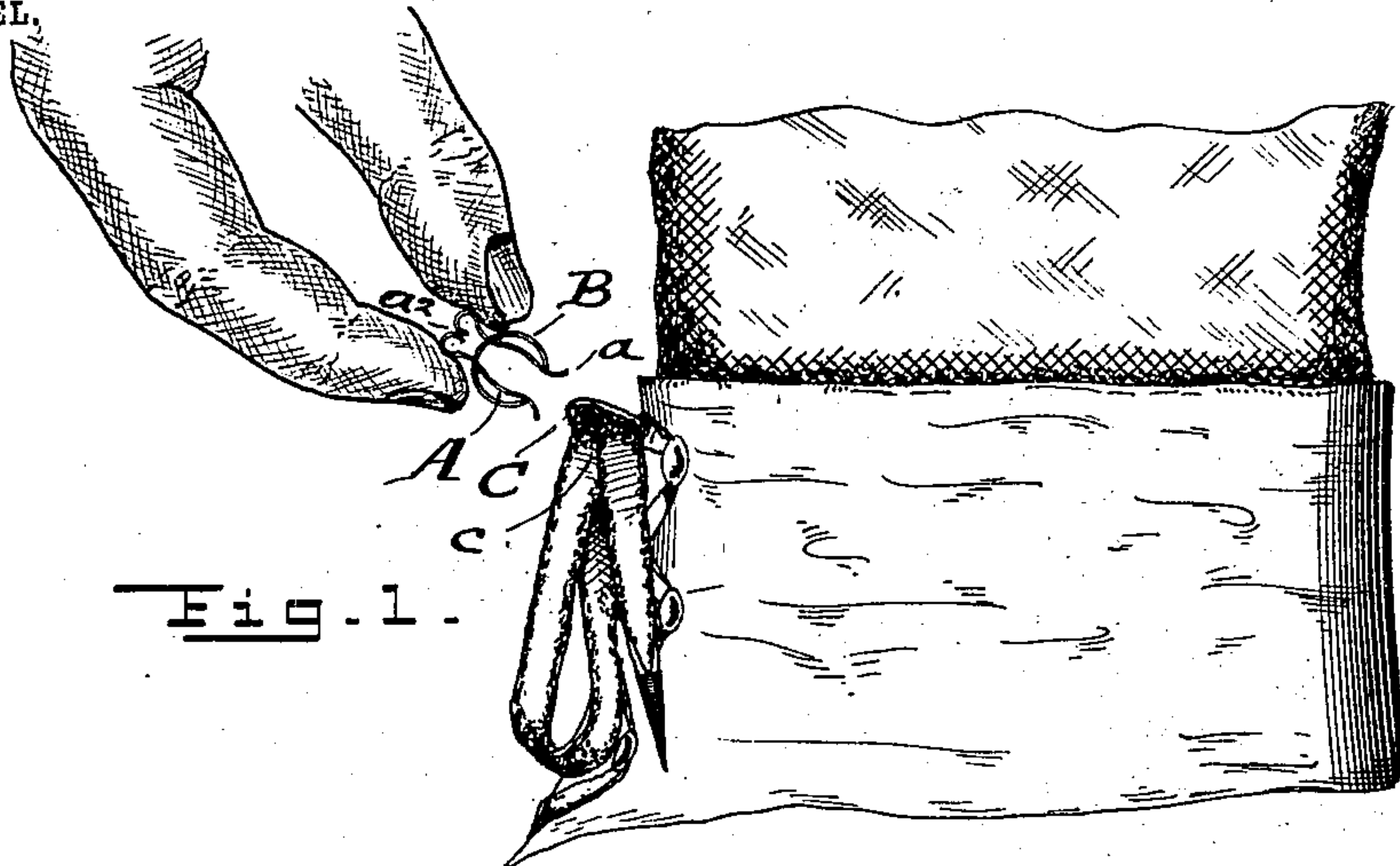
No. 724,502.

PATENTED APR. 7, 1903.

A. B. RHINOW.
SHOE LACE CLASP.

APPLICATION FILED AUG. 9, 1902.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR B. RHINOW, OF CINCINNATI, OHIO.

SHOE-LACE CLASP.

SPECIFICATION forming part of Letters Patent No. 724,502, dated April 7, 1903.

Application filed August 9, 1902. Serial No. 119,046. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR B. RHINOW, a citizen of the United States, and a resident of the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Shoe-Lace Clasp; and I do declare the following to be a clear, full, and exact description thereof, attention being called to the accompanying drawings, with the reference-letters marked thereon, which form also a part of this specification.

This invention relates to a device for positively securing by mechanical means the lace of a shoe after the same has been tied into the customary bow-knot.

The object is to prevent the accidental disarrangement, loosening, or untying of such knot while walking, for instance.

The device is so constructed as to permit it to be readily placed in position after the knot is tied, it being removable with equal facility when it becomes desirable to untie the lace and take off the shoe.

The invention consists of the construction of the device as the same, together with its parts and manipulation, is described and claimed in the following specification and as illustrated in the accompanying drawings, in which—

Figure 1 shows the device in side view and also the manner of its manipulation for placing it in position, the upper part of a lace-shoe being shown for such purpose. Fig. 2 shows in a similar view the engagement complete. Fig. 3 is a top view of the preceding figure. Fig. 4 is an enlarged cross-section of the device. Fig. 5 shows a top view of the spring-barrel, and Fig. 6 a similar view of one of the clamping-jaws.

The device consists, primarily, of two clamping-jaws A A, supported in a barrel B, which is of resilient material—like steel, for instance—and, by which the clamping-jaws are engaged in a manner to have imparted to them a normal tendency to approach each other. This spring-barrel is open on one side throughout its entire length and also cut out thereat between its ends, leaving projecting parts b at such ends. Each clamping-jaw has on one of its sides two lips a, one at each of its ends, and each of a complementary pair curled outwardly from the other one oppo-

site it. (See Fig. 4.) The engagement of the spring-barrel and application of its pressure is by said ends b, which form pressure-bearings and act against lips a in a manner to cause them to normally approach each other. Each clamping-jaw has, further, a shoulder a', one at each end of its other side and back of each lip thereat, and between them there is on each jaw a thumb-lever handle a². These jaws are carried on the spring-barrel, being supported, one each, in one of two parallel slots b', each slot being occupied by a lever-handle a², which projects outwardly therefrom and at its outer end is curled in a direction opposite to that of the lips—that is, inwardly and toward the other handle—to obviate the presence of a sharp edge to come in contact with the fingers. The jaws are confined against displacement in an outward direction by shoulders a', which rest against the inner side of the spring-barrel beyond the ends of each slot b' therein, while against displacement inwardly they are confined by a stop a³, turned up from the inner edge of the jaws and occupying a notch b², extending laterally from each slot b' midway its ends.

The device is applied as best shown in Fig. 1, it being grasped with the lever-handles between thumb and index-finger, so that pressure being applied jaws A readily open and permit the separated lips to be passed over the lace at c on each side of the tied knot C. This latter then occupies a position between the lips a a of the clamping-jaws at each end of the device, with a pair of these lips engaging the lace on each side of the knot. This latter is thus prevented from keeping the jaws apart, which are now free to close down upon the inner parts of the loops of the lace, where these parts come close together to form the knot and on either side of which they are thus pinched. Lips a are thereby also permitted to approach each other and to close around the pinched lace and over the outside thereof, thus preventing the device from slipping off or from being shook off by the motion during walking. The removal of the device is therefore not possible until these lips are separated, which may be done by applying pressure upon the curled ends of the lever-handles. The removing operation may

also be simplified by merely pulling the device off, since upon sufficient force exerted the lips readily yield and separate under the limited pressure of the spring-barrel.

5 It will be noted that this device is simple and efficient, and its use and application are not interfered with by complicated constructions and laborious manner of manipulation.

Having described my invention, I claim as
10 new—

In a clasp for securing the tied knot of a shoe-lace by engaging the lace on each side of the knot, the combination of a tubular spring-barrel which is open lengthwise and
15 has at each end of the resulting parallel edges projecting complementary pressure-bearings *b*, there being a pair of them at each end of the barrel, said barrel being further provided with
20 two slots parallel to each other and to the open edges mentioned, each slot having a notch extending from between its ends outwardly toward the open edges, two clamping-jaws having each two lace-engaging lips, the lips of

one jaw forming complementary pairs with those of the other jaw, each jaw back of its
25 lips being curved outwardly to afford space for receiving the lace inside of these lips and permit them to approach each other with the lace between, a lever-handle on each jaw, each occupying one of the slots in the barrel
30 with the lips of the jaws between and engaged by the pressure-bearings of the barrel, the ends of the lever-handles being curled toward each other while the lips of each complementary pair are curved in opposite direction
35 and a stop projecting from between the lips of each jaw and occupying the notches extending from the slots mentioned so as to retain the jaws in position.

In testimony whereof I hereunto set my signature
40 nature in the presence of two witnesses.

ARTHUR B. RHINOW.

Witnesses:

C. SPENGEL,
ARTHUR KLINE.