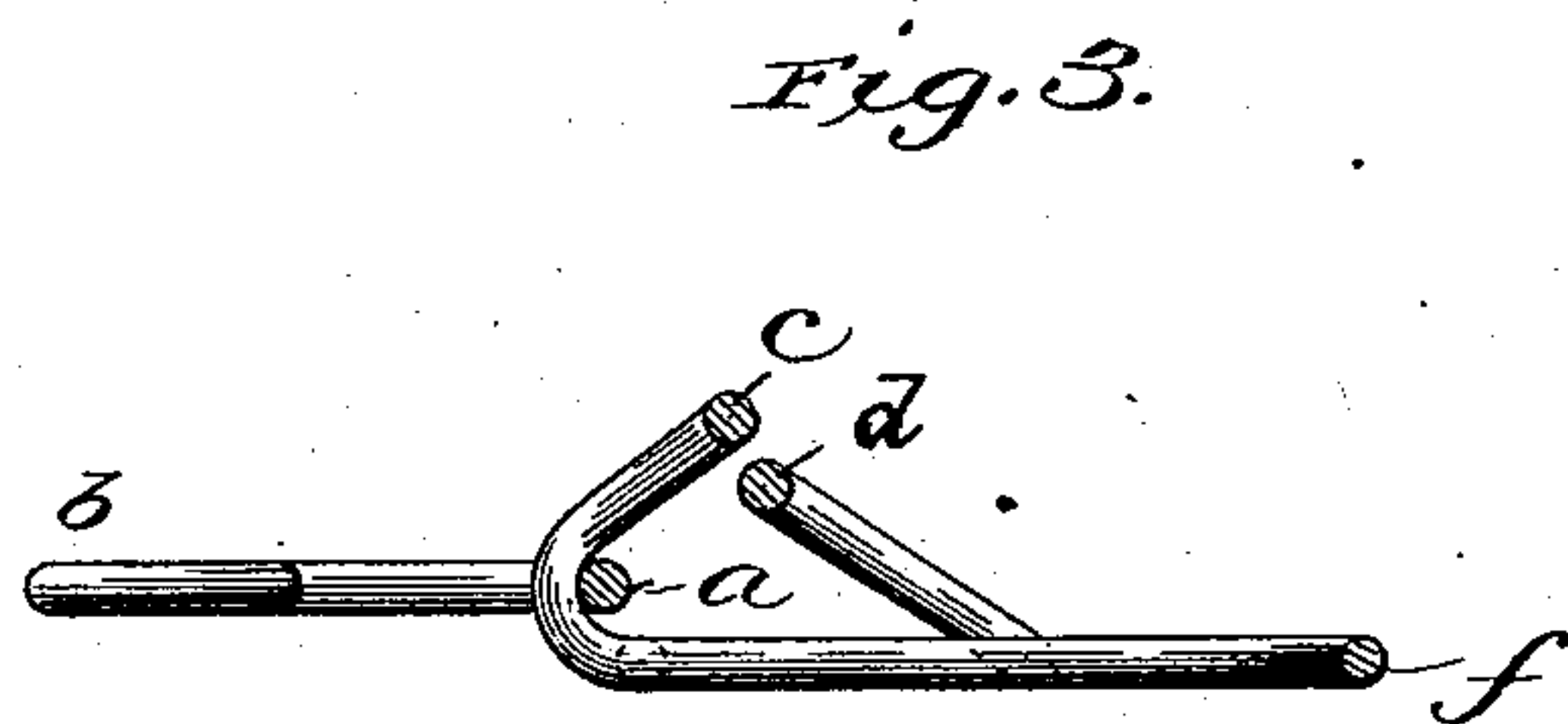
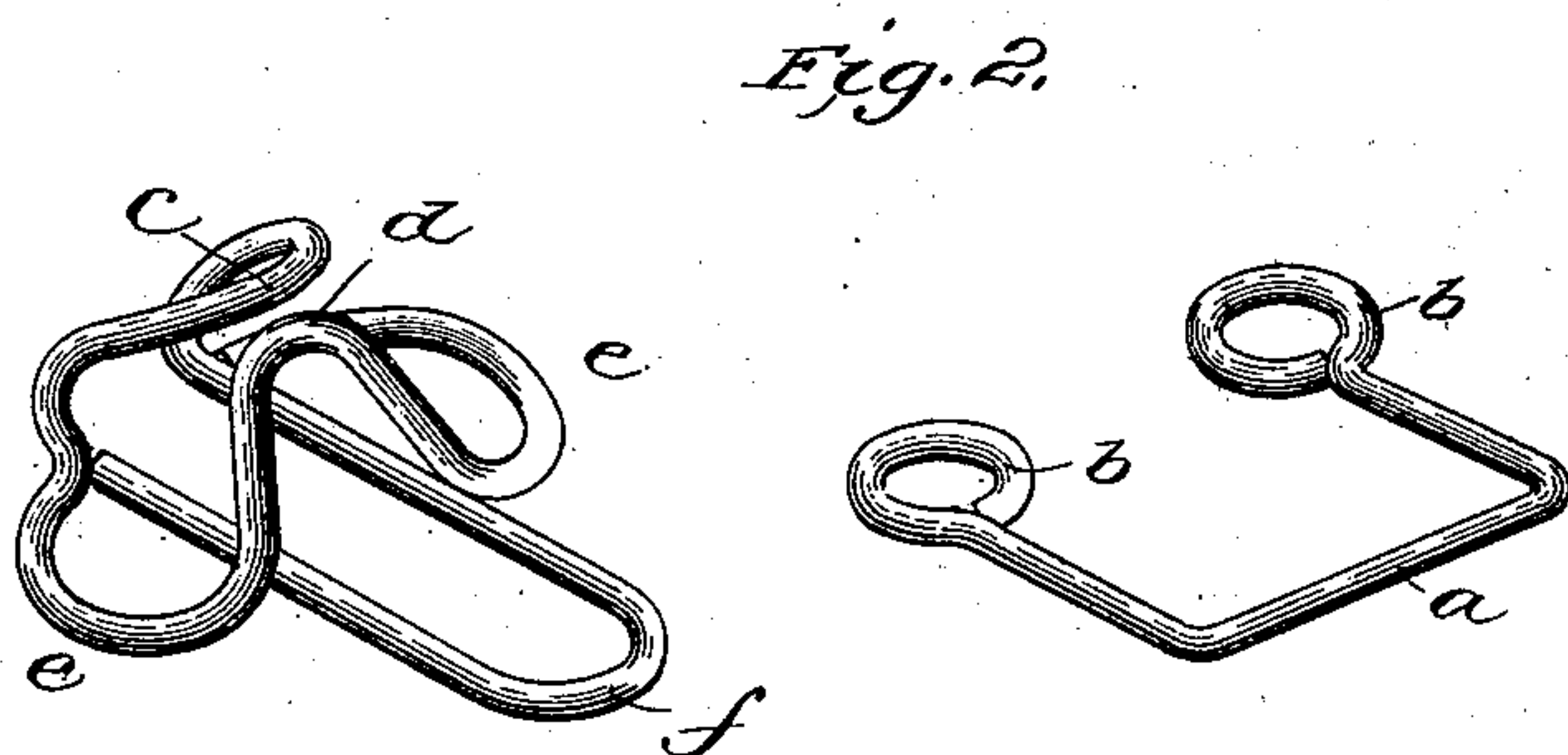
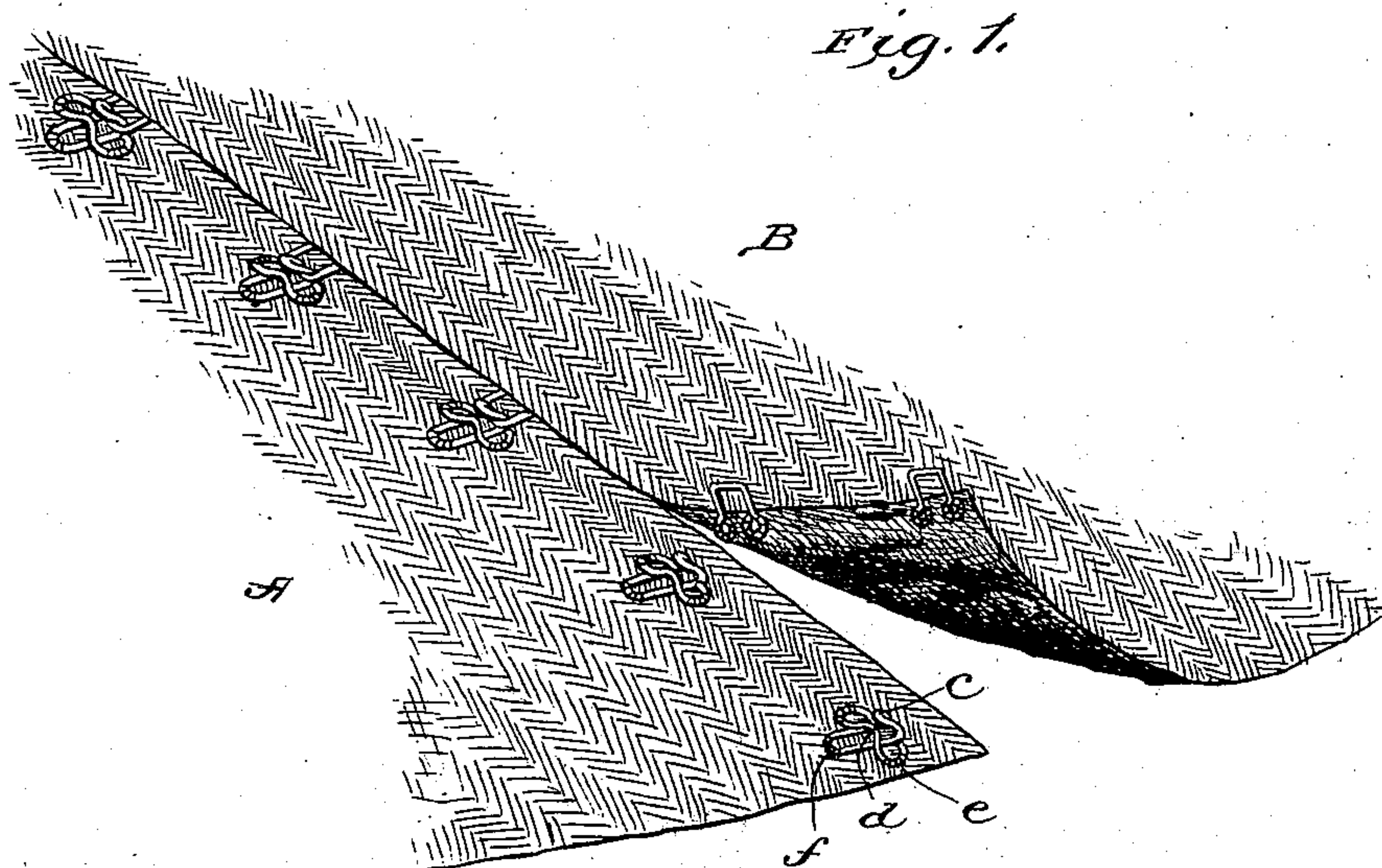


(No Model.)

W. S. SEYMOUR.
HOOK AND EYE.

No. 506,735.

Patented Oct. 17, 1893.



Witnesses:

Henry D. Rohrer.
A. M. Parkins.

Inventor:

William S. Seymour,
By James Goldsmith,
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM S. SEYMOUR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO JOSEPH S. KELLER, OF SAME PLACE.

HOOK AND EYE.

SPECIFICATION forming part of Letters Patent No. 506,735, dated October 17, 1893.

Application filed April 3, 1893. Serial No. 468,802. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. SEYMOUR, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Hooks and Eyes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in hooks and eyes, and has for its object the making of hooks and eyes of such construction that when arranged in manner suitable for uniting the two edges of fabric to be joined, the entire series may be readily stripped or disengaged from each other by a single continuous motion, thereby greatly expediting and facilitating the operation. The present application thus has in view the same object or function subserved by the hooks and eyes shown in my former application, Serial No. 437,197. It embodies however a different or modified specific construction and is one of the preferred forms in which I contemplate putting the invention upon the market.

In the accompanying drawings, Figure 1 represents a view of two pieces of fabric provided with my improved hook and eye. Fig. 2 represents in perspective separate views of the hook and eye on an enlarged scale; and Fig. 3 represents a longitudinal section of the two assembled, also on an enlarged scale.

Similar letters of reference indicate similar parts throughout the several views.

Referring to the drawings A, B, indicate two pieces of fabric, or the like, adapted to be fastened together along their edges by means of my hook and eye connection. The eye preferably consists of a bow *a* of general rectangular contour provided at its ends with the re-entering loops *b*, as shown, whereby said eye may be sewed in the usual manner to the fabric so as to anchor the eye thereto.

The hook has the characteristic feature of embodying in its construction a bill *c* and co-operating guard *d* whose proximate curves are adapted to admit between them the bow *a* of the eye, and which overhang the eye af-

ter its admission, preventing it from being extricated in any other way than by a side-wise tilting movement of the eye with respect to the hook. All other movements of the eye and hook with respect to each other result merely in causing the eye to move more or less within the space beneath the bill *c* and guard *d* but without issuing therefrom, the said bill and guard acting as safeguards against the disengagement of the hook and eye in any other than the normal manner intended.

I prefer to construct the hook from a single piece of wire, as shown, having anchoring loops *e* in close proximity to the bill *c*, and on opposite sides thereof, and having at its rear an anchoring loop *f*, these several anchoring places enabling the hook to retain a fixed relationship to the face of the fabric, and to thereby facilitate the stripping operation.

In Fig. 3 is shown clearly the preferred relative arrangement of the bill *c* and guard *d* which, it will be noted are therein shown as normally separated at their proximate edges by a space of less width than the diameter of the wire of the bow *a* of the eye. It will also be observed that the summit of the guard *d* is somewhat lower than the summit of the co-operating bill *c*. The function of these specific arrangements will be apparent. Thus, in assembling the hook and eye, the bow *a* is brought over the bill *c* and resting momentarily upon the guard *d* is caused to depress the guard *d*, moving it downwardly away from the bill *c* until the interval is sufficient to admit the bow *a* into the space beneath. The guard *d* thereupon immediately springs back to its normal position, all as shown in Fig. 3. The eye is thus securely held in place within the hook, having all the freedom of play incident to the space beneath the bill *c*, and curve *d*, but being prevented from leaving that space, by reason of the said overhanging bill and guard, the ordinary movements to which either the hook or eye is subjected when in use having no tendency to disassemble them. An entire series of the hooks and eyes may, however, be disassembled, when it is desired to do so, by a single continuous stripping motion readily applied. This is

effected by taking hold of one end of one of
 the pieces of fabric, the corresponding end of
 the other piece of fabric being held station-
 ary, and causing the eyes *a* to be tilted side-
 wise one after the other and forced sidewise
 in the tilted position between the bill and
 guard, which have sufficient resiliency to
 yield and permit the passage and disengage-
 ment of the eyes. The beginning of this move-
 ment of separation or disengagement is illus-
 trated in Fig. 1, and it will be evident that
 by a continuous pull upon the fabric B in the
 manner indicated, the entire series of hooks
 and eyes may be successively disassembled
 at a single operation. The peculiar construc-
 tion of the hook also permits the series to be
 disassembled from either one end or the other
 of the meeting edges of the fabrics, accord-
 ing to the wish or convenience of the user, it
 being noted that the bill and guard are ex-
 actly homologous with respect to a line drawn
 longitudinally through the hook. It will be
 observed that the bill has an angular incline
 from its base upwardly to the point of nearest
 approach of the guard, the function of which
 incline is to cause the eye when being tilted
 to slide up along it and out through the in-
 terval between the bill and guard. Further-
 more, the width of the eye is greater than the
 length of the bill, which has the important
 function of permitting the eye when tilted
 sidewise to rise upon the incline of the bill
 and become entirely disengaged from the hook
 without leaving the fulcrum upon which said
 eye is tilted. These features of my invention
 are not dependent upon the fact that the guard
 itself overhangs the eye-receiving space and
 I desire to be understood as claiming them
 broadly.
 Having thus described my invention, what
 I claim is—

1. In a hook and eye, a hook having a guard
 and provided with a bill having an angular
 incline from its base upwardly to the point
 of nearest approach of the guard, whereby
 on tilting the eye sidewise it will be caused
 to ascend the incline and pass out between
 the bill and guard, substantially as described.

2. In a hook and eye, a hook having a guard
 and provided with a bill having an angular
 incline from its base upwardly to the point
 of nearest approach of the guard; whereby
 on tilting the eye sidewise it will be caused
 to ascend the incline and pass out between
 the bill and guard, the length of the bill be-
 ing less than the width of the eye; substan-
 tially as described.

3. In a hook and eye, a hook having a guard
 and provided with a bill having an angular
 incline from its base upwardly to the point
 of nearest approach of the guard; whereby
 on tilting the eye sidewise it will be caused
 to ascend the incline and pass out between
 the bill and guard, and outlying anchorages
 at opposite sides of the bend of the bill; sub-
 stantially as described.

4. In a hook and eye, a hook having a rear-
 wardly-extending bill or projection, and a co-
 operating forwardly extending projection,
 said projections being separated from each
 other by an interval less than the diameter
 of the eye-bar, a free space being provided at
 each side of said interval, whereby the eye
 may be tilted sidewise to disengage it from
 the hook; substantially as described.

In testimony whereof I affix my signature in
 presence of two witnesses.

WILLIAM S. SEYMOUR.

Witnesses:

JOHN HAVERSTICK,
 JAS. F. NEALL