No. 630,034. Patented Aug. 1, 1899.

B. G. CLARK.

CLASP.

(Application filed Mar. 6, 1899.)

(No Model.)

Fig. 1.

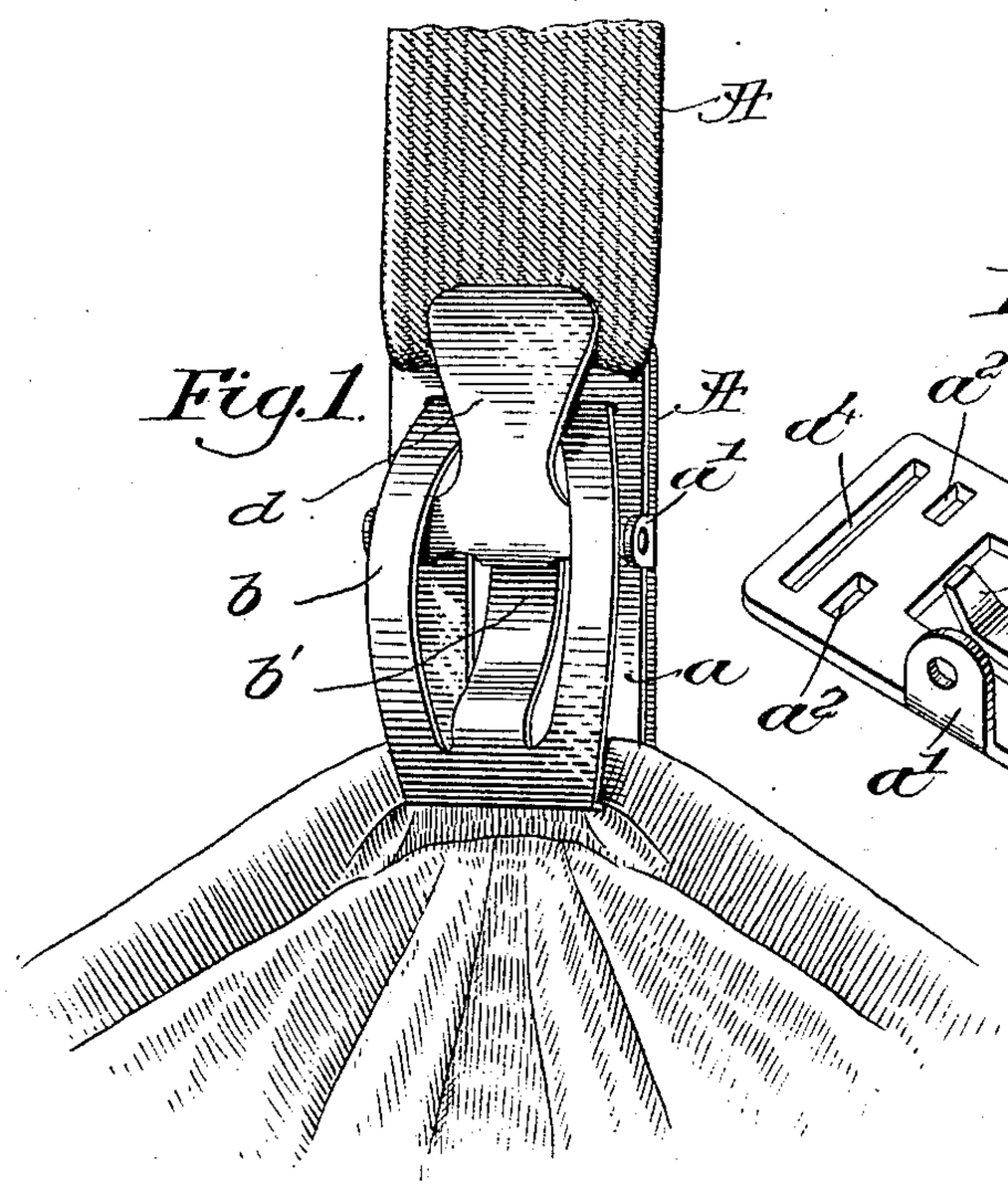


Fig. 4.

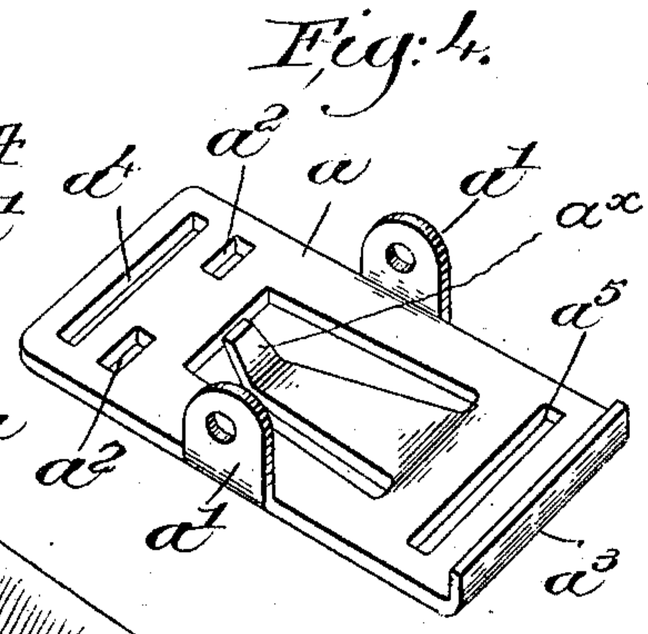


Fig. 3.

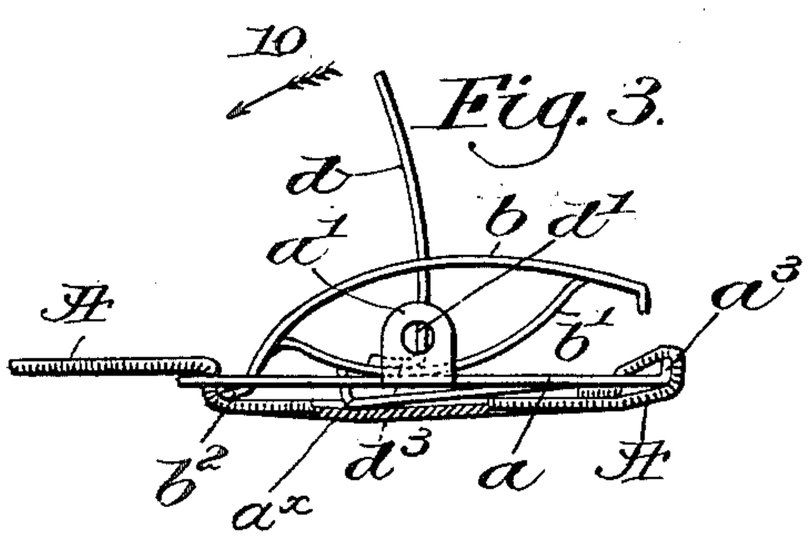


Fig. 2.

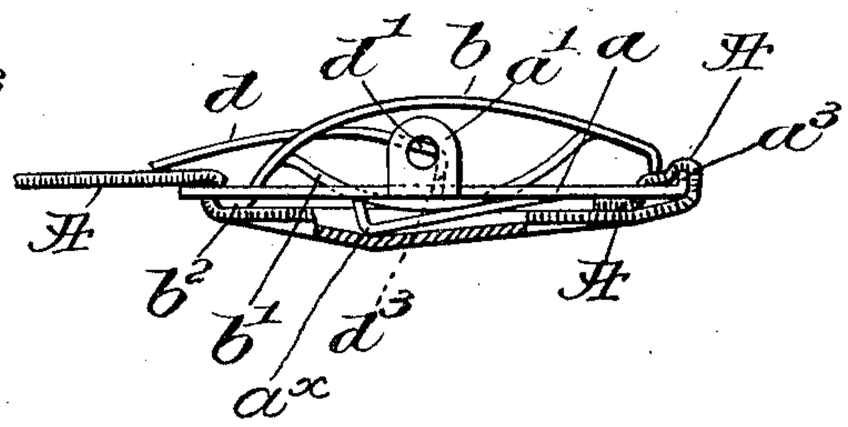


Fig. 6

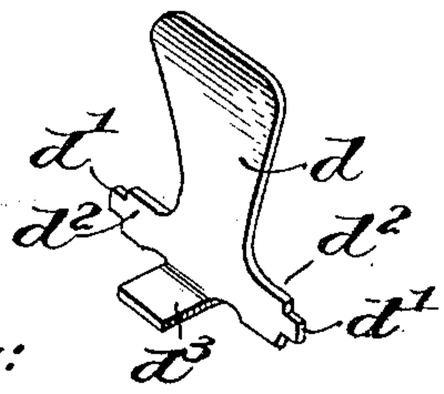
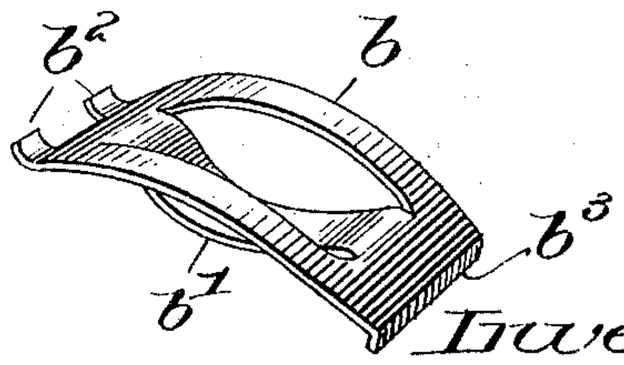


Fig. 5.



Witnesses:
O. C. Harmon
Edward H. Allen.

Inventor.
Byron G. Clark.
by Crosby & Gregory
Atty's.

UNITED STATES PATENT OFFICE.

BYRON G. CLARK, OF BOSTON, MASSACHUSETTS.

CLASP.

SPECIFICATION forming part of Letters Patent No. 630,034, dated August 1, 1899.

Application filed March 6, 1899. Serial No. 707,829. (No model.)

To all whom it may concern:

Be it known that I, BYRON G. CLARK, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Clasps, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to clasps more particularly adapted for use in connection with hose or other garments, although, as will hereinafter appear, my invention is not restricted thereto.

One of the objects of my present invention is to provide a clasp of novel construction which will when closed upon the object firmly clamp the same without any tendency to tear or slip.

Another object of my invention is to simplify and cheapen the construction of the clasp and to provide effective locking means for holding the clasp closed when desired.

Other objects of my invention will be hereinafter described in the following specification, and particularly pointed out in the claims.

Figure 1 is an enlarged perspective view of a clasp embodying my invention and represented as closed or clamped upon a garment. Fig. 2 is a side elevation of the clasp shown in Fig. 1. Fig. 3 is a like view with the coöperating clamping members open. Fig. 4 is a perspective view of one of the clamping members. Fig. 5 is a like view of the coöperating member, and Fig. 6 is a perspective view of the locking-lever.

While I have herein illustrated one practical embodiment of my invention, my invention is not limited thereto as a whole or in part, as various modifications may be made therein without departing from the spirit and scope of my invention.

I have herein shown the clasp as comprising two coöperating members a and b, the former having two upturned ears a' at its sides and transverse slots a^2 at its rear end, said slots receiving therein two slightly-bent prongs b^2 at the end of the member b. These members are preferably stamped or struck up from thin sheet metal and by the construction described are pivotally connected at their inner ends, their separable outer ends forming clamping-jaws to engage the garment or other object to be held. The under or inner member a is upturned or flanged at its outer end at a^3, and long transverse slots a^4 a^5 are made in the member adjacent its ends.

A strap A of elastic or other fabric is passed through the slot a^4, along the under or outer face of the member a and up over the flange or lip a^3, thence down through the slot a^5, the end of the strap being held between the plate a and the portion of the strap A along its under side. The strap thus passing around the jaw portion of the member a forms a yielding surface or grip, and by its somewhat-roughened surface prevents slipping of the object between the jaws, and it also reduces the tendency of the jaws to tear the garment.

The upper member b is shown as bent in the direction of its length, with its convex side out, and it has a lip b^3 at its outer end which engages the garment back of the lip a^3 when the jaws are closed, as in Fig. 2, to further guard against slipping. In making the member b it is longitudinally slotted in two parallel lines to leave an intermediate portion b', which is oppositely curved to the main body of the member to form a bearing for a purpose to be described.

Referring to Fig. 1, the plate or member a is cut out interiorly to leave a spring-tongue $a^\times$, extending longitudinally of the member and having its free end upturned, as at a^6, between the ears a' and the pivotal point of connection between the members a and b, the upturned end of the tongue normally acting directly upon the convex face of the bearing portion b' to lift the member b and thereby maintain the jaws open, as shown in Fig. 3, for the entrance or removal of the garment. A locking-lever d (shown separately in Fig. 6) has laterally-extended portions d^2, provided with pintles d', which have bearings in the ears a' of the member a, the main part of the lever d passing up through the opening in the member b left by bending the bearing portion b', the fulcrum of the lever thus passing between the bearing portion and the main body of the member of which it forms a part and acting to prevent disconnection of the clamping members at their pivotal point. Below the pintles the lever is bent rearwardly

to form a lug d^3, which travels over the concave surface of the bearing b', and when the jaws are open, as in Fig. 3, the action of the spring $a^\times$ upon the bearing b' retains the main lever-arm d outturned. Now when it is desired to lock the jaws together the lever d is swung rearwardly in the direction of arrow 10, Fig. 3, into the position shown in Fig. 2, the lug d^3 as it moves over the bearing b' depressing it and the member b against the action of the spring $a^\times$, and when the lever is in locking position the spring and lug will be on opposite sides of the fulcrum of the lever, (see Fig. 2,) the free end of the lever resting upon the strap A beyond the member a. When the locking-lever is in this position, the pressure of the spring acting upon its lug through direct engagement with the bearing prevents accidental turning of the lever into the position, Fig. 3, to open the clamping-jaws.

In Figs. 2 and 3 a portion of the strap or web A beneath the spring is shown in section in order to more clearly illustrate the position of the spring.

From the foregoing description and the drawings it will be obvious that the suspending-strap A has no other function than to suspend the clasp and to protect or cushion the jaw portion of one of the clamping members.

As soon as the locking-lever is moved past its dead-center from the position shown in Fig. 2 the spring acts to maintain the jaws open ready to receive the garment or other fabric, and this open position of the jaws is maintained entirely irrespective or independent of the nature, construction, or arrangement of the suspending-strap.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A clasp comprising two opposing clamping members pivotally connected at one end, a lever mounted on one member to act upon the other member and lock them in closed position, and a spring integral with one member and independent of the pivotal connection of the clamping members, to normally maintain them open, the spring acting in opposition to the lever and also maintaining the latter in locked position.

2. A clasp comprising two opposed clamping members pivotally connected at one end, one of said members having a longitudinally-curved bearing portion and the other member having a spring to act directly upon the adjacent surface of said bearing portion and normally separate the members, and a locking-lever to engage the opposite surface of the bearing portion and lock said members together, said lever being pivotally mounted on the spring-carrying member.

3. A clasp comprising two opposed clamping members pivotally connected at one end, one of which has an integral, inturned spring-tongue, an inwardly-curved longitudinal bearing on the other member, and a lever pivotally mounted on the tongue-carrying member and provided with a locking-lug to act upon the concave face of the bearing and force it against the spring-tongue, to hold the clamping members locked together in opposition to the tension of the spring-tongue.

4. A clasp comprising two clamping members pivotally connected at one end, means, including a longitudinally-curved bearing portion on one member and a coöperating lever on the other member, to lock said members together, a spring to directly engage the bearing portion on the side opposite the lever and normally hold said clamping members open, and a supporting-strap attached to one member and extended along its outer face around its free end.

5. A clasp comprising two clamping members one of which has a prong at one end to enter a slot in the other member, to pivotally connect them, an integral inturned spring-tongue on one member, a lever transversely fulcrumed on said member and provided with a locking-lug, and an inwardly-curved longitudinal bearing portion on the other member interposed between the spring-tongue and the inner end of the lever, to prevent disconnection of the clamping members, the locking-lug acting upon the concave face of the bearing portion to hold the said clamping members locked together in opposition to the stress of the spring-tongue.

6. A clasp comprising two clamping members pivotally connected at one end, an integral, inturned spring-tongue on one member, and a lever transversely mounted on said member and having a locking-lug, the other clamping member being convexed longitudinally and provided with an inwardly-curved longitudinal bearing portion, the fulcrum of the lever passing between the said bearing portion and the member of which it forms a part, the locking-lug acting upon said bearing portion to hold the clamping members locked together in opposition to the stress of the spring-tongue.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BYRON G. CLARK.

Witnesses:
JOHN C. EDWARDS,
AUGUSTA E. DEAN.