

(No Model.)

F. W. MALLETT.
FABRIC CLASP.

No. 433,297.

Patented July 29, 1890.

Fig. 1.

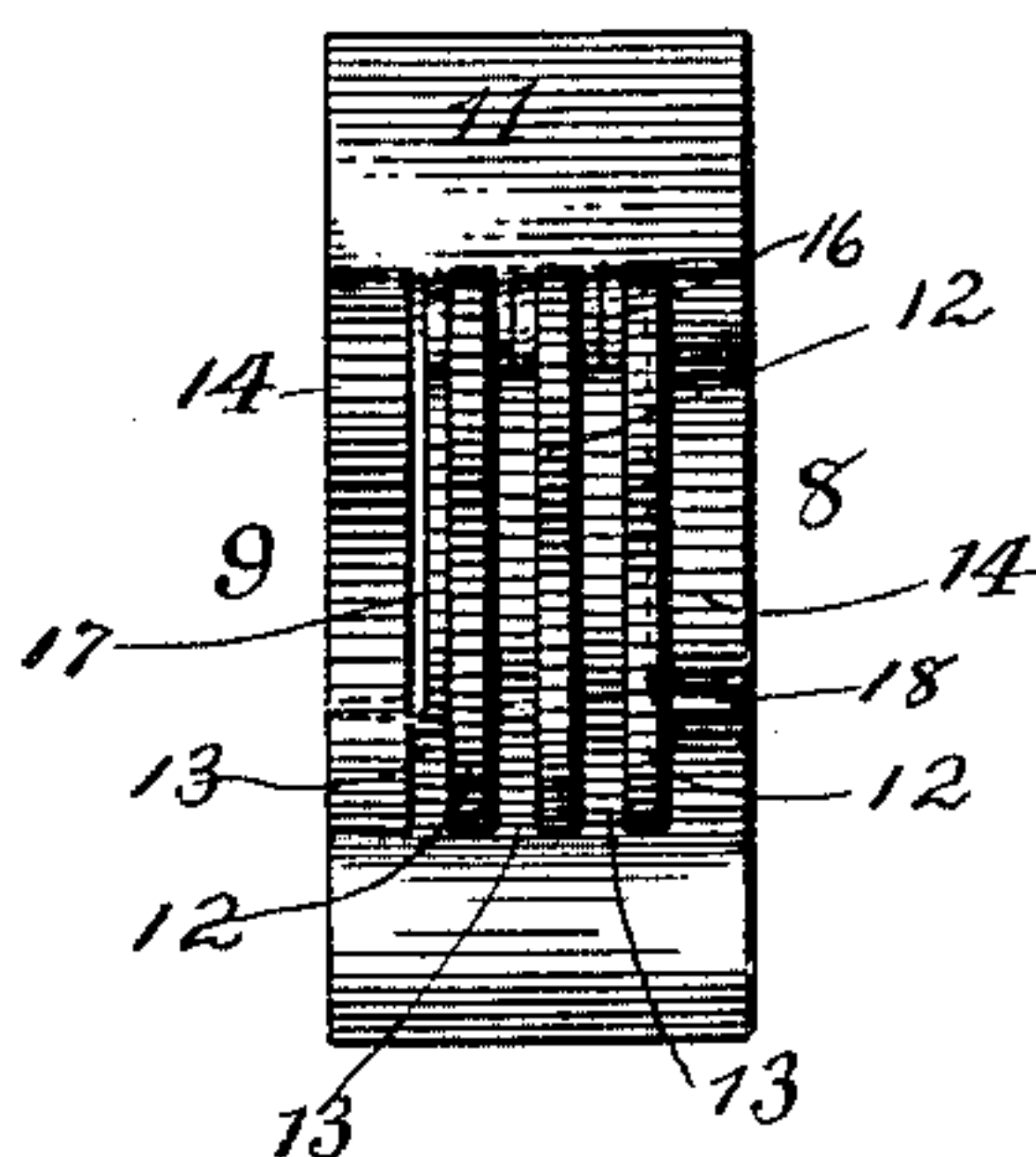


Fig. 2.

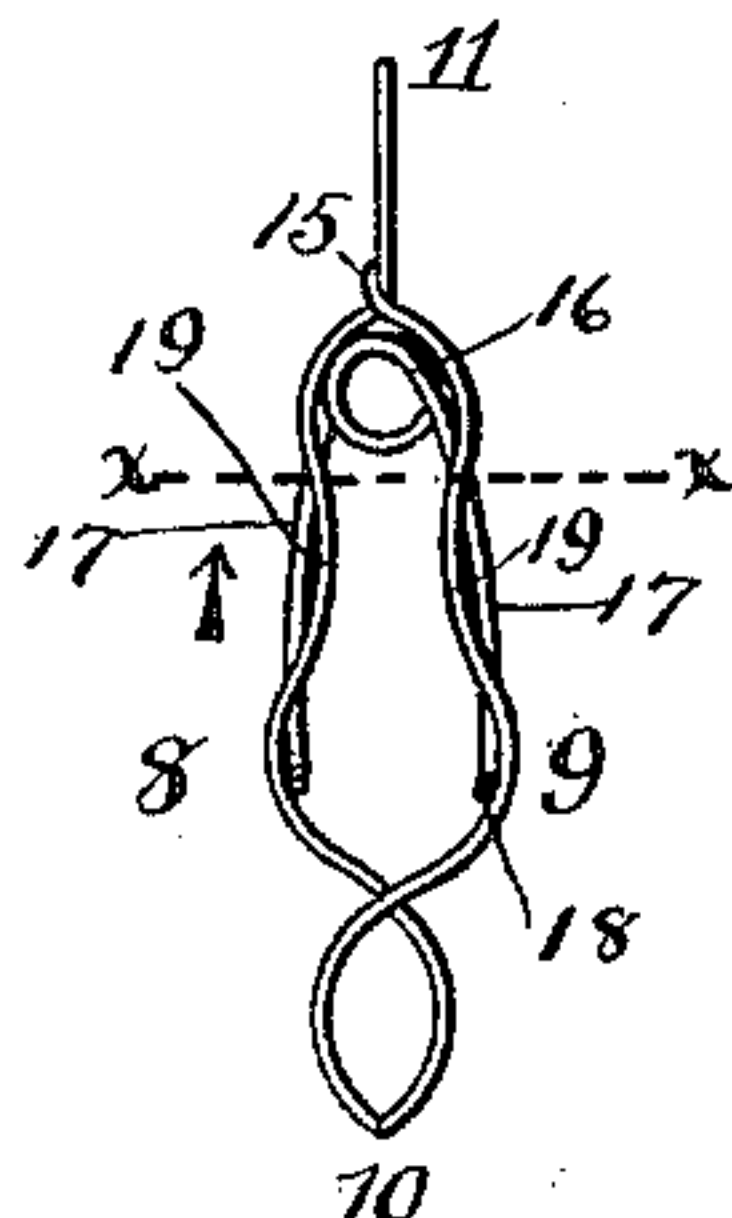


Fig. 3.

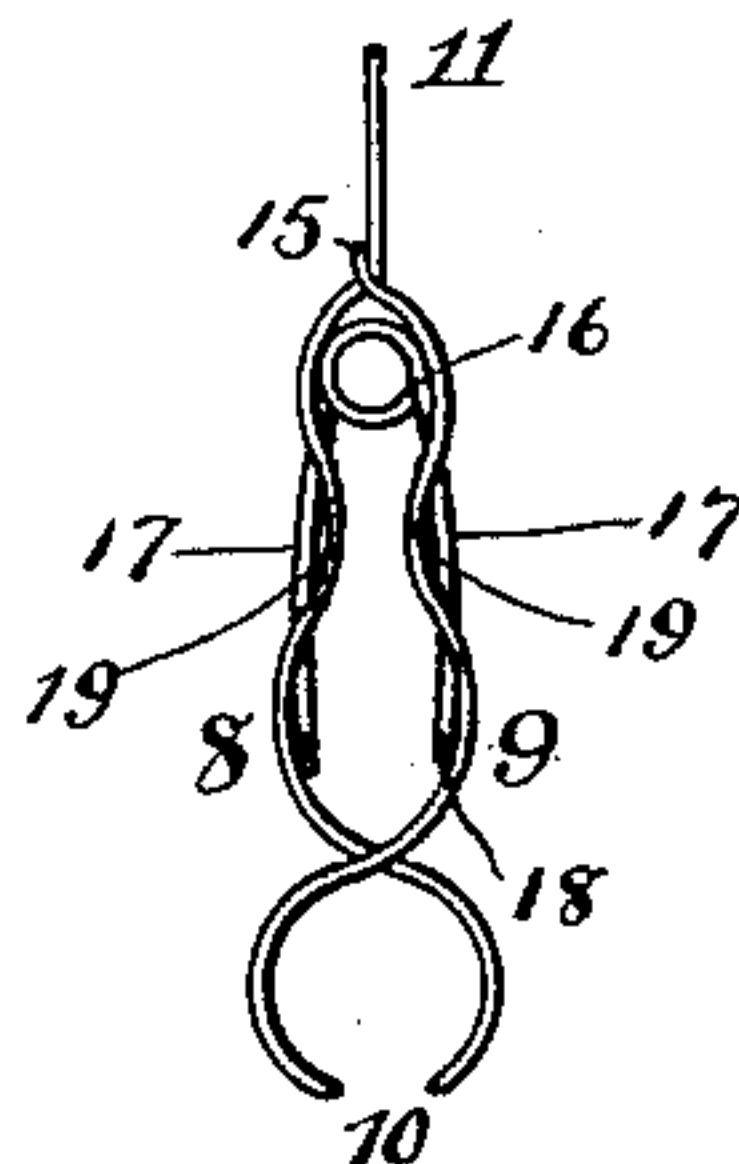


Fig. 4.

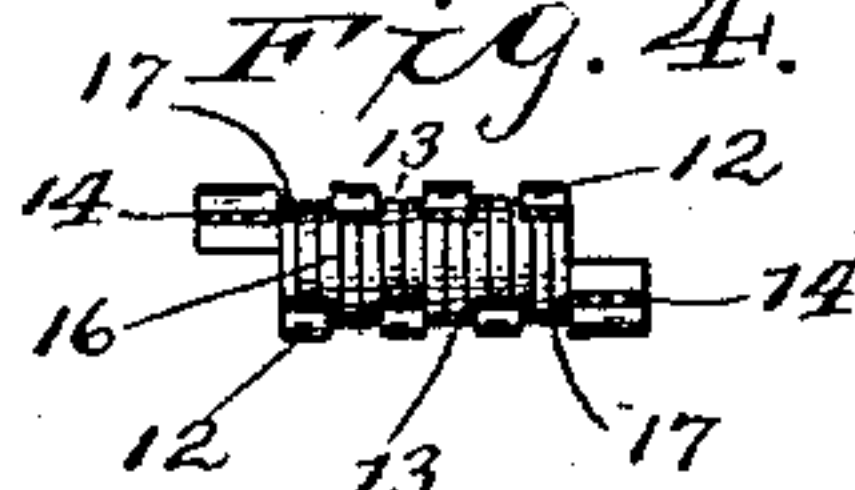


Fig. 5.

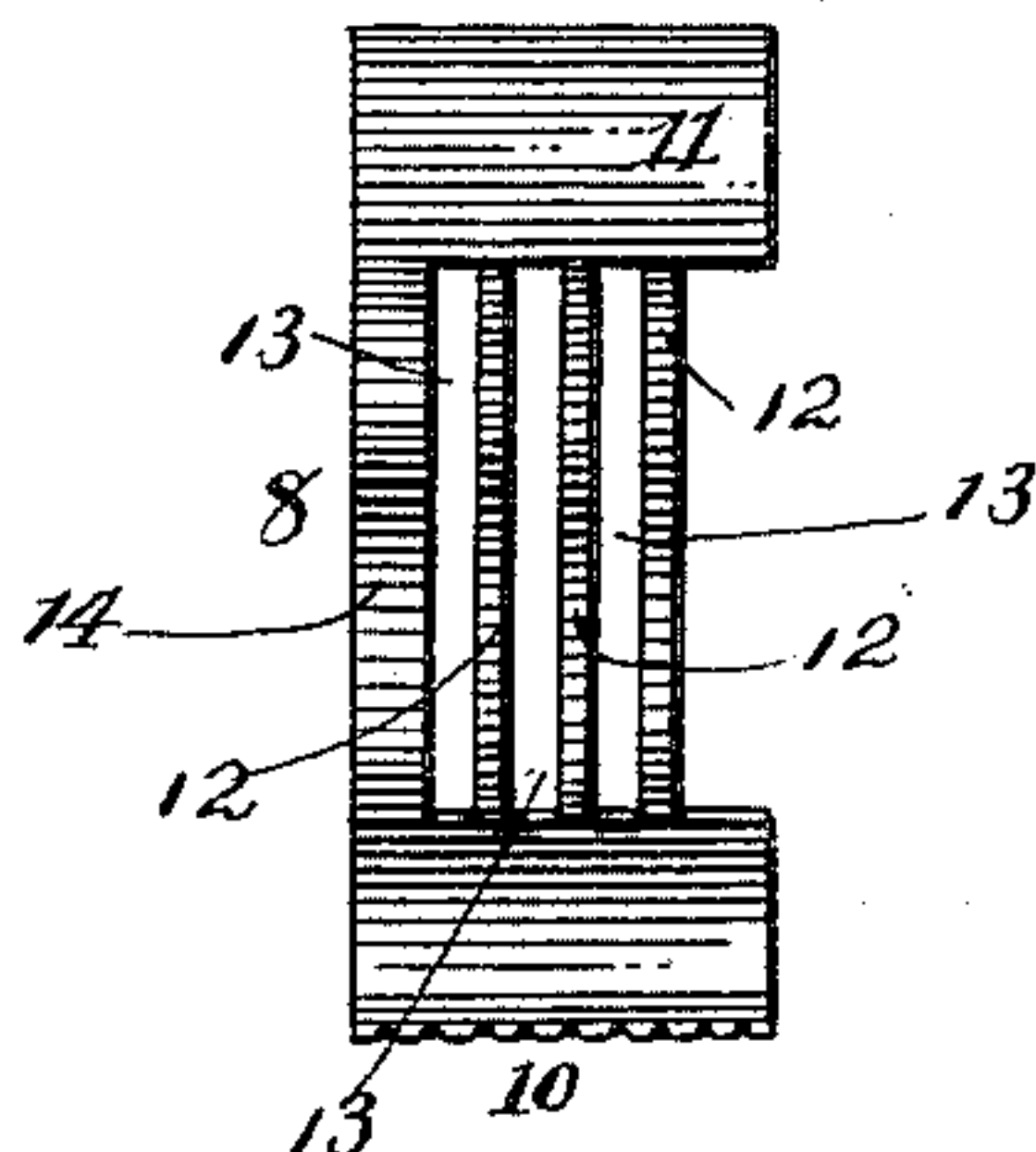


Fig. 6.

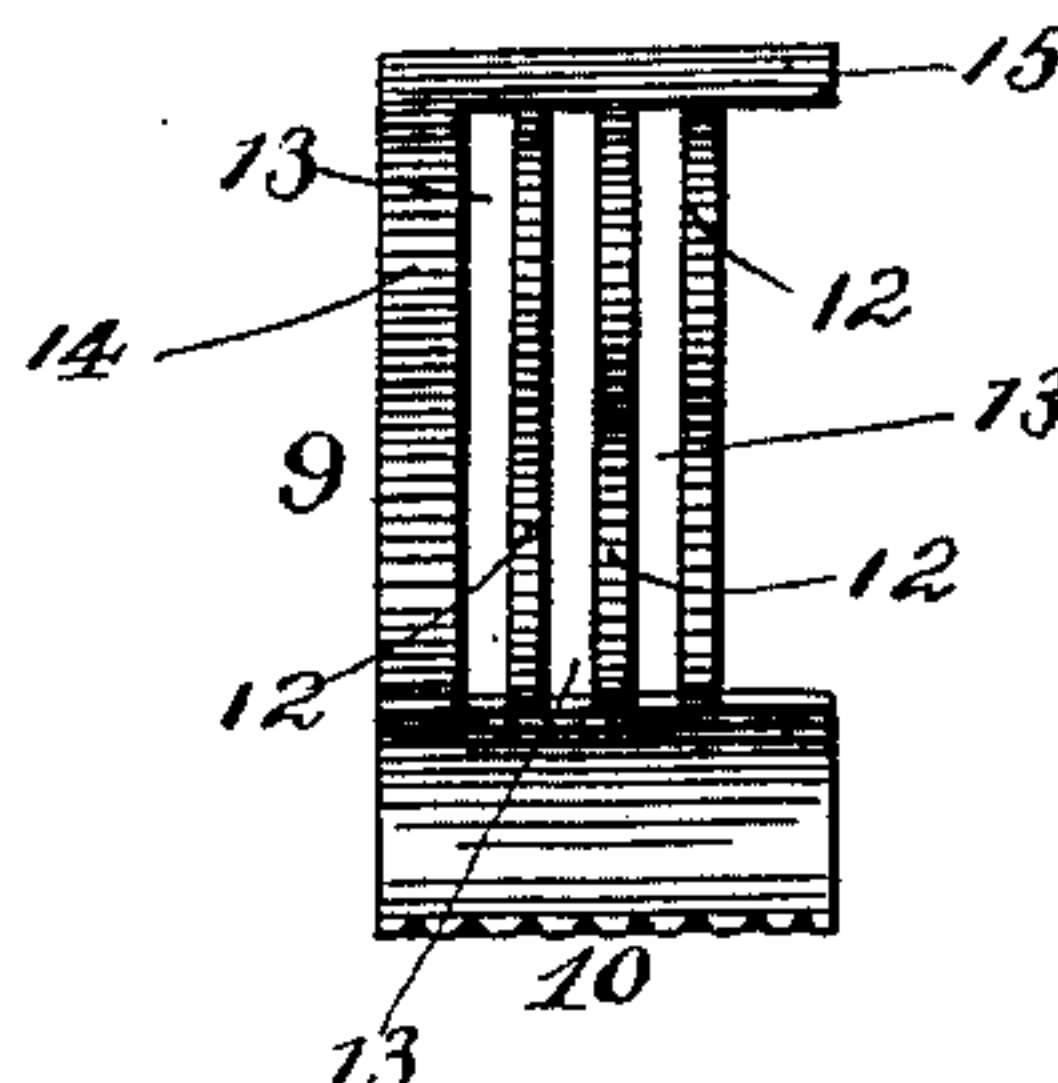
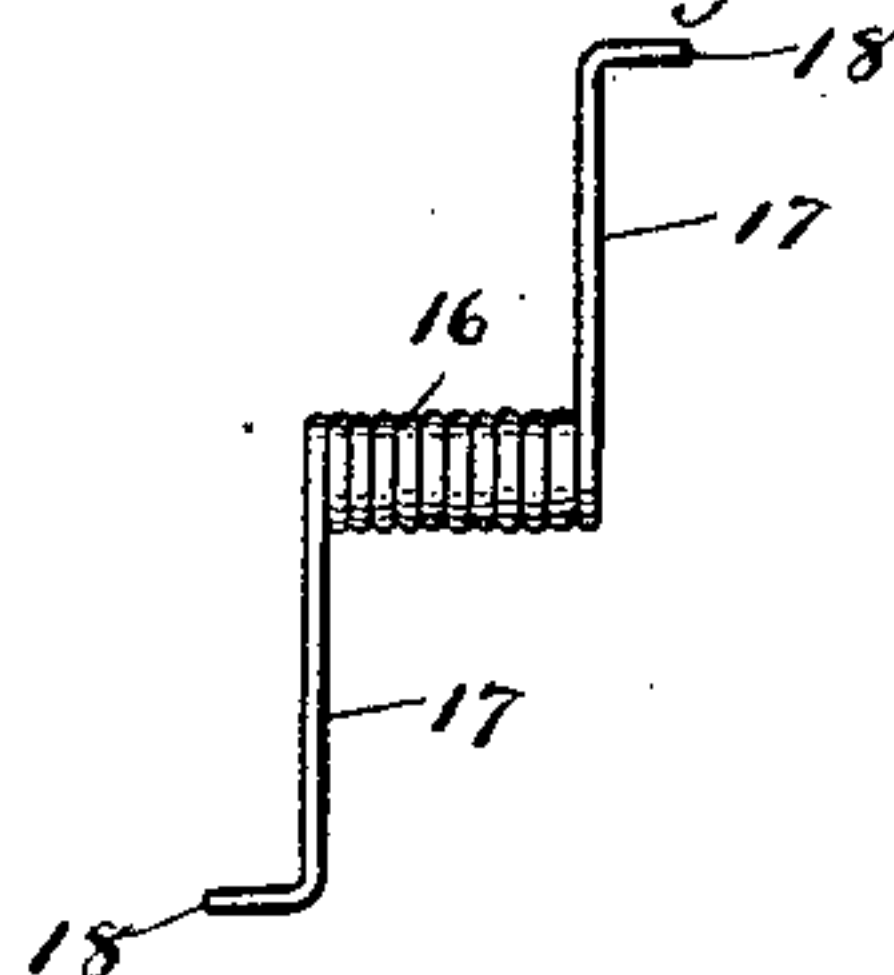


Fig. 7.



Witnesses:

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UNITED STATES PATENT OFFICE.

FRANCIS W. MALLET, OF NEW YORK, ASSIGNOR TO THE BROOKLYN
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FABRIC-CLASP.

SPECIFICATION forming part of Letters Patent No. 433,297, dated July 29, 1890.

Application filed September 19, 1889. Serial No. 324,419. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS W. MALLET, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Fabric-Clasps, of which the following is a specification.

My invention relates to fabric-clasps, and it is adapted for use in all relations in which such articles are now employed.

The object of the invention is to produce a fabric-clasp which may be made at small cost, and which shall comprise a minimum number of parts and involve in its construction neither solder nor rivets.

The invention is described hereinafter, and its novel features are specified in the claims at the end of this description.

In the accompanying drawings, which form a part of this specification, and in which like features are indicated by like figures of reference in the several views, Figure 1 is a plan view of a clasp embodying my invention. Fig. 2 is an edge view of the clasp shown in Fig. 1, the parts being in their normal condition. Fig. 3 is a similar view showing the parts of the clasp in the positions they assume when the gripping-jaws are expanded to receive the fabric to be held or supported. Fig. 4 is a cross-section on the line $x x$ of Fig. 2, looking toward the top of the clasp or in the direction indicated by the arrow. Figs. 5 and 6 are inside plan views of the slotted plates provided at their lower ends with gripping-teeth, which plates coact in the organized clasp in the manner indicated in Figs. 2 and 3; and Fig. 7 is a plan of the coiled spring comprising one of the three elements of which the clasp is composed.

Referring to the drawings, 8 and 9 indicate the two plates provided with the gripping or biting points 10, the said points being at the lower end or bottom of the respective plates. The metal at the top of plate 8 is wider than the metal at the top of plate 9, so as to provide a surface by which the clasp may be secured to a piece of tape or the like, and also to facilitate the handling of the clasp. This widened surface is marked 11. Those ends of the plates 8 and 9 at which the biting-points

10 are formed are approximately semicircular in shape, as shown in Fig. 3. When the clasp is not in use and the biting-points are in contact with each other, the form of the end of the clasp is practically oval, as seen in Fig. 2; but when the clasp is compressed in order to separate its biting-points the cross-section of its end will be substantially circular, as seen in Fig. 3. The plates 8 and 9, which by means of the stamping-die are given the contour shown in the edge views 2 and 3, are formed with a series of longitudinal bars 12, preferably of uniform width, thus providing a corresponding series of longitudinal slots 13, and each plate is also provided with a wider bar 14, as shown.

In assembling the parts of the clasp the plates 8 and 9 are placed with their inner surfaces together, (such surfaces being shown in Figs. 5 and 6,) so that the bars 12 of one plate will coincide with the slots 13 of the companion plate, and the plates are thus interlocked by pushing the bars through the slots, in which position the biting-points 10 come together, and the narrow piece of metal 15 at the top of plate 9 will rest smoothly against the side of the metal piece 11 at the top of plate 8, as seen in Fig. 2. In this position of the parts the hinge upon which the plates vibrate when compressed, with the spring in place, as presently explained, is where the narrow piece of metal 15 of plate 9 impinges against the surface of the part 11 of plate 8.

Besides the plates 8 and 9 the clasp embodies a coiled spring 16. (Shown detached in Fig. 7.) This spring is of the required strength, and its ends are extended to form arms 17, having their extremities 18 bent substantially at right angles to the main portion of the arms. This spring serves the purpose of securing the plates 8 and 9 together in operative condition, thus enabling me to entirely dispense with solder or rivets in the construction of the clasp, as well as providing the spring-clamping action of the device. After the plates 8 and 9 have been interlocked in the manner already explained the spring 16 is pushed with the fingers laterally between the plates just below the point where the plates hinge in opening and closing, the conformation of the

plates 8 and 9 at this point being such as to furnish a circular receptacle or seat adapted to receive and retain the spring. The length of spring 16 should be substantially equal to the distance between the outside edges of the series of bars 12, so that when the spring is placed in its seat the arms 17 will occupy positions within those slots 13 that are adjacent to the wider bars 14, as indicated in Fig. 1, and the bent ends of said arms will bear against the inner surfaces of said wider bars 14, also as shown in Fig. 1, and thus insure the requisite spring-action to the clasp when its plates are compressed. The respective depressions in the plates 8 and 9 at the point 19, intermediate of the coil of the spring and its bent ends 18, serve to prevent the spring from being accidentally displaced, since, when the spring is in place, its arms 17 are slightly elevated above or extend beyond these depressed surfaces, and are thus furnished with an abutment which effectually prevents lateral movement of the spring either way.

It will be noticed that the organization of the clasp is such that while the plates hold the spring in position the spring serves to hold the plates in operative position, and this without any rivets or solder.

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

1. In a fabric-clasp, the combination, with

a pair of coacting longitudinally-slotted plates hinging upon each other, as explained, and having depressions at 19, whereby a cylindrical seat is provided between said depressions and hinging-point, of a coiled spring located within said seat and co-operating with the plates, substantially as set forth. 35

2. In a fabric-clasp, the combination, with a pair of coacting longitudinally-slotted plates provided with depressions at 19, of a coiled spring seated between the plates above said depressions and provided with arms, as 17, co-operating with the bars of the slotted plates and projecting above or beyond said depressions 19, whereby lateral displacement of the spring is prevented, substantially as set forth. 40 45

3. The combination, with the longitudinally-slotted interlocking plates 8 and 9, the upper narrow surface 15 of the latter hinging on plate 8 above its slots, of a coiled spring seated between the slotted plates below said hinging-points and provided with arms having angular extremities, as 18, which co-operate with the bars of the plates, substantially as and for the purpose set forth. 50 55

Signed at New York, in the county of New York and State of New York, this 9th day of August, A. D. 1889.

FRANCIS W. MALLETT.

Witnesses:

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