

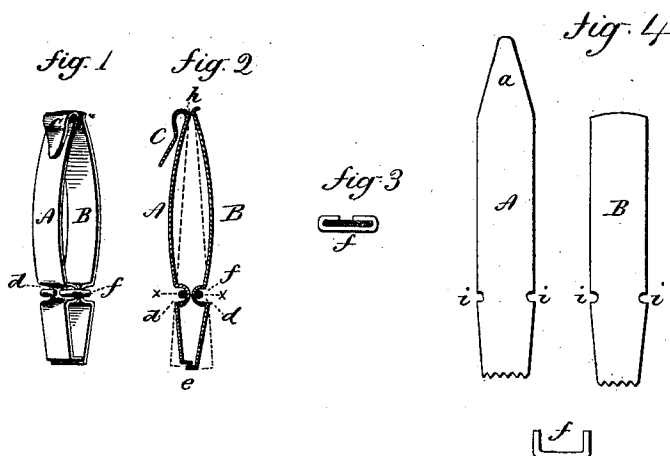
(No Model.)

B. F. NEAL.

CLASP.

No. 253,414.

Patented Feb. 7, 1882.



Witnesses:
J. H. Shumway
J. A. Earle

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UNITED STATES PATENT OFFICE.

BENJAMIN F. NEAL, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE
STEELE & JOHNSON MANUFACTURING COMPANY, OF SAME PLACE.

CLASP.

SPECIFICATION forming part of Letters Patent No. 253,414, dated February 7, 1882.

Application filed January 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. NEAL, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Clasps; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of the clasp; Fig. 2, a vertical central section; Fig. 3, a transverse section on line *xx* of Fig. 2; Fig. 4, the parts detached.

This invention relates to an improvement in that class of clasps which consist of a pair of jaws arranged to grasp the thing to be attached, and provided with a spring the tendency of which is to close the jaws, but particularly to that class of such clasps as are designed to be used for papers, but applicable to many purposes, the object of the invention being to avoid the wear at the hinged point, as well as to make an article strong, durable, and cheap; and it consists in the construction as herein-after described, and particularly recited in the claims.

The two parts A B (see Fig. 4) are cut from elastic sheet metal, and of substantially the same outline, save that the part A is preferably extended at one end, as at *a*, the other end preferably cut to form teeth for the jaws. Transversely across each part a groove, *d*, is formed by striking the metal inward, and so as to make a corresponding projection upon the in or reverse side, as seen in Fig. 2. The jaw ends are preferably turned inward at right angles, as at *e*, Fig. 2. The transverse ribs form a bearing upon which the two parts hinge. The two parts are placed together, a wire loop, *f*, (see Fig. 4,) is laid into one groove, the legs of the loop passing each side of the parts, and then bent down upon the opposite side, as seen in Fig. 3. This secures the two parts together and forms a hinge-like joint, upon which the jaws may turn, and also serves to secure the two parts together. From the hinge the two parts are curved outward, then inward toward

their ends, as seen in Fig. 2, and so as to come together at or near their extreme ends, as at *h*, so that the two ends bear one upon the other, and in that condition hold the jaws closed. To open the jaws, place the thumb and finger upon the opposite sides, back of the joint, the elasticity of the metal permitting this inward springing of the two parts, and such inward springing opening the jaws, as indicated in broken lines, Fig. 2. At the grooves, each side of the two parts, a notch, *i*, should be made, into which the legs of the hinging-wire will set and prevent longitudinal movement of either part upon the other.

The extension *a* on the part A is bent downward to form a hook, C, as seen in Fig. 2. It serves as a convenient device for hanging the hook when attached—as, for instance, when used for securing several papers together the hook may be employed to hang the papers so secured. It is also useful for other purposes—as, for instance, stocking-supporters, the hook serving to engage a button-hole in the strap or garment, while the jaws engage the stocking; but without the hook the clasp is useful for holding papers together, or several leaves in a book, and for various purposes to which such clasps are adapted.

The simplicity of this construction and the strength of hinge which it gives enable the production of this clasp more cheaply than clasps have heretofore been produced, and superior in that they are more durable.

While I prefer to turn the ends or noses of the jaws inward toward each other, this is not essential, as the two ends may come flatly together.

I claim—

1. The herein-described clasp, consisting of the two parts A B, the said two parts constructed with the transverse grooves *d* and corresponding internal ribs, with the wire loop placed in the groove of one part and closed into the groove of the other part to form the hinge between the two parts, the two parts forming jaws at one end, their other ends curved and brought together at the extremes to form springs to force the jaws together, substantially as described.

2. The two parts A B, each constructed with a transverse groove, *d*, and corresponding internal ribs, with a notch, *i*, in each side at the said grooves, the two parts forming jaws at one end, their other ends curved and brought together at the extremes to form springs to force the jaws together, and a wire loop set through the said notches *i* and closed into the grooves to form the hinge, substantially as described.

3. The herein-described clasp, consisting of the two parts A B, the said two parts constructed with the transverse grooves *d* and

corresponding internal ribs, with the wire loop placed in the groove of one part and closed into the groove of the other part to form the hinge between the two parts, the two parts forming jaws at one end, their other ends curved and brought together at the extremes to form springs to force the jaws together, one of said parts constructed with an extension bent to form the hook C, substantially as described.

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Witnesses:

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