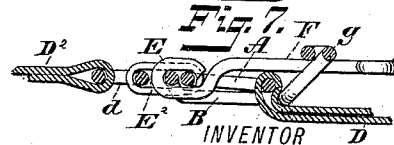
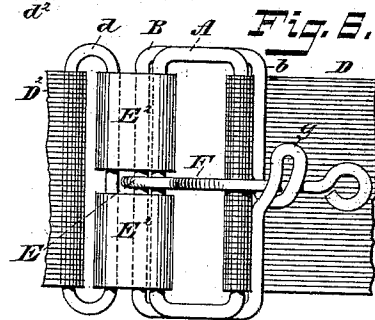
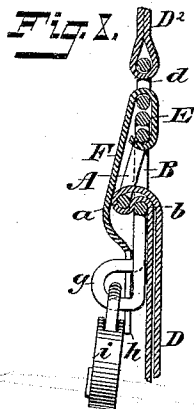
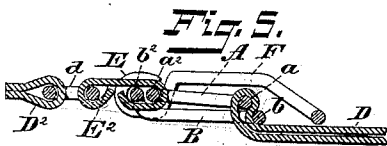
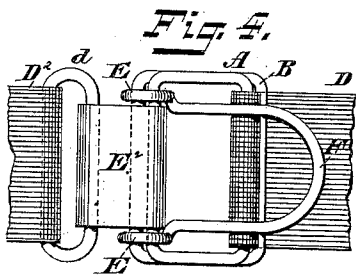
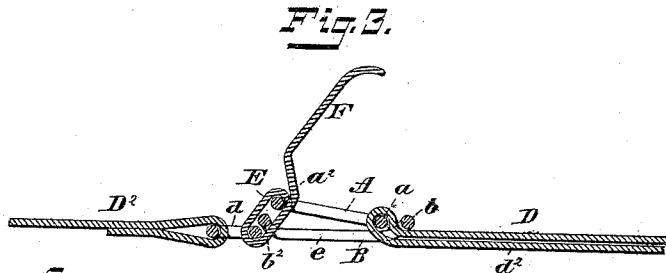
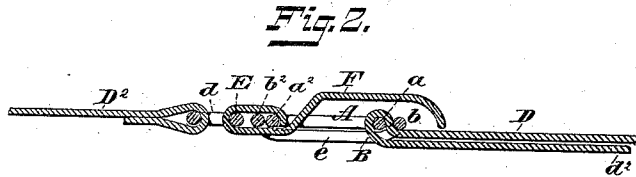
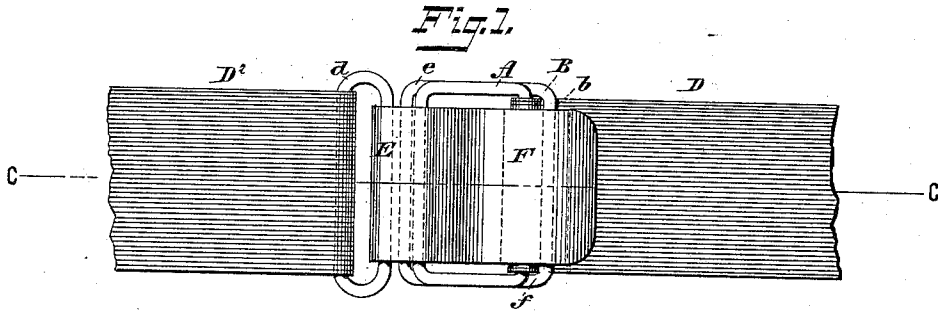


(No Model.)

S. B. FERRIS.
CLASP.

No. 409,779.

Patented Aug. 27, 1889.



WITNESSES:
Gustav Dittmick.
Theo. F. Bourne.

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UNITED STATES PATENT OFFICE.

SHERWOOD B. FERRIS, OF LAKEWOOD, NEW JERSEY.

CLASP.

SPECIFICATION forming part of Letters Patent No. 409,779, dated August 27, 1889.

Application filed April 25, 1889. Serial No. 308,591. (No model.)

To all whom it may concern:

Be it known that I, SHERWOOD B. FERRIS, a resident of Lakewood, Ocean county, New Jersey, have invented an Improved Clasp or Buckle, of which the following is a specification.

This invention relates to the class of clasps or buckles shown in Letters Patent No. 295,965, issued to me January 8, 1889, wherein two loops are employed to grasp a tape or strap; and the invention has for its object to permit the tape or strap to be quickly and easily loosened from the clasp.

The invention consists in the combination of two loops to grasp a tape or strap, with a swinging hinge for holding said loops on one edge, whereby when the hinge is turned the edge of one loop will be drawn away from the other loop and the tape thus loosened from the clasp.

The invention further consists in the details of improvement and the combinations of parts, that will be more fully hereinafter set forth.

Reference is to be had to the accompanying drawings, forming part of this specification, wherein—

Figure 1 is a face view of my improved clasp or buckle. Fig. 2 is a longitudinal section on the line *c c*, Fig. 1. Fig. 3 is a similar view showing the hinge swung outwardly and the tape loosened. Fig. 4 is a face view showing a modified form of hinge. Fig. 5 is a central longitudinal section of the same, and Figs. 6, 7, and 8 are detail views of other modified forms.

The letters A B represent two open loops placed one upon the other, so that their corresponding sides or clamping-edges *a b* can come close together and clasp between them a tape or strap D, as indicated in Figs. 2 and 3. The opposite sides *a² b²* of the loops A B are held in an open hinge E, so that said sides will be in the same plane when the parts are in the normal or closed position, as indicated in Fig. 2. The hinge E is hung on a loop or bar *d*, so that it may be swung outwardly, as shown in Fig. 3. The loop *d* is connected with a tape or the like D², which may be a continuation of the tape D or a separate piece. I prefer to provide the hinge E with a lever or handle F, so that said hinge may be easily swung on its pivot *d* from the position shown

in Fig. 2 to that in Fig. 3; but it is evident that the swinging hinge E may be turned without the aid of a lever or handle F, as it is capable of being turned by grasping its sides with the fingers. The length of the handle F may be varied from that shown.

When the parts are in the position shown in Fig. 2, the tape or strap D will be firmly held between the clamping-edges *a b* of the loops A B, and the more draft that is applied to the end *d²* of the strap D the tighter it will be held. When it is desired to loosen the tape or strap D from the clasp, the hinge E is swung on its pivot *d* into the position shown in Fig. 3, whereby the sides *a² b²* are moved into different planes and the sides or clamping-edges *a b* moved away from each other, whereby the tape or strap D is loosened from the grasp of the clasp and can readily be withdrawn from the same. By moving the hinge back again into the position shown in Fig. 2 the sides or clamping-edges *a b* will be again brought together into the clamping position.

By the above construction the utility of this class of clasps or buckles is greatly increased over the ordinary clasps, where the clamping-edges have to be separated by the fingers of the user, it only being necessary to raise the handle or lever F or swing the hinge E for the same purpose with my improved clasp.

In order to make the clasp as thin or flat as possible, I place the corresponding sides *a b* and *a² b²* of the loops A B on about the same plane, as in Fig. 2. This I accomplish by depressing the sides *e f* of the loop B below the level of the sides *b b²*, so that the loop A may come in line with the sides *b b²*. This construction of loops may be used without the particular swinging hinge E and lever or handle F shown.

In the modification shown in Figs. 4 and 5 the hinges E for the loops A B are shown connected together by a looped handle or lever F. The loops A B in this case are connected to the loop *d* by a separate link E² instead of by the hinge E, as in Figs. 1 and 2.

In the construction shown in Figs. 6 and 7 a single hinge E for the loops A B is shown between two links E² that connect the loops A B with the loop or bar *d*. The side *b* of the loop B is in this case provided with an outwardly-extending eye or cross-piece *g*, under

which the handle or lever F can be passed to prevent spontaneous movement.

In the modification shown in Fig. 8 the handle or lever F is perforated or slit at *h* near its free end, through which the eye *g* can pass. The eye *g* may then be provided with a padlock *i* or other device to prevent the opening of the clasp.

In all the above modifications the swinging hinge E acts to move and to lock the loops A B as described with reference to Figs. 1, 2, and 3.

It is evident that the hinge E can be swung to move the loops A B otherwise than by the handle or lever F.

Having now described my invention, what I claim is—

1. The combination of the loops A B, adapted to grasp a tape or strap, with the swinging hinge E, having one opening to receive corresponding sides of the loops, so that one loop can be moved on the other to tighten and loosen a tape, and with means, substantially as described, for swinging said hinge, substantially as described.

2. The combination of the loops A B, adapted to grasp a tape, with the swinging hinge E, for holding and sliding said loops, and the handle

or lever F, connected to the hinge for swinging the hinge to move the loops one upon the other, substantially as described.

3. The combination of the loops A B, adapted to grasp a tape, with the swinging hinge E, for said loops, handle or lever F, and means, substantially as described, for holding the handle or lever from movement, substantially as herein shown and described.

4. The loops A B, both connected to the tape D, combined with the link *d* and its tape D², and with the swinging hinge-piece E and means, substantially as described, for swinging said hinge E, and means, substantially as described, for connecting both loops A B with the link *d*, substantially as described.

5. The loop B, having the depressed sides *e* *f*, combined with the loop A, that rests upon said sides *e* *f*, whereby two sides of the loop A are brought about in line with two corresponding sides of the loop B, and with a hinge for holding the loops A B, substantially as described.

SHERWOOD B. FERRIS.

Witnesses:

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