

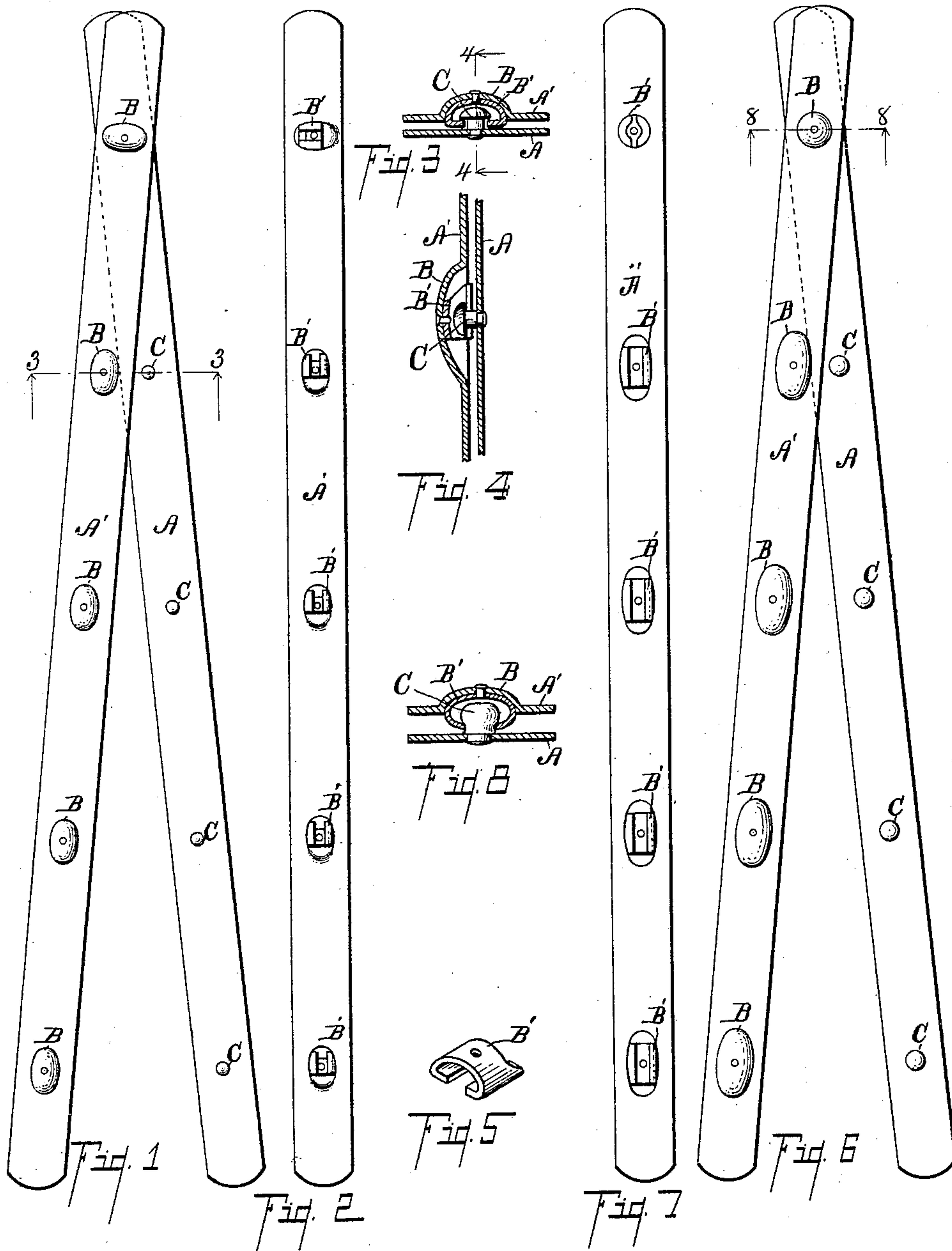
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Patented Sept. 5, 1899.

J. H. HATFIELD & E. M. BRIGHAM.  
CORSET STEEL AND CLASP.

(Application filed Mar. 13, 1897.)

(No Model.)



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## CORSET STEEL AND CLASP.

SPECIFICATION forming part of Letters Patent No. 632,489, dated September 5, 1899.

Application filed March 13, 1897. Serial No. 627,440. (No model.)

*To all whom it may concern:*

Be it known that we, JAMES H. HATFIELD, residing at the city of Kalamazoo, county of Kalamazoo, and EDWARD M. BRIGHAM, residing at the city of Battle Creek, in the county of Calhoun, State of Michigan, citizens of the United States, have invented certain new and useful Improvements in Corset Steels and Clasps, of which the following is a specification.

Our invention relates to improvements in corset clasps and steels.

The corset-steels now in common use are very objectionable for the reason that the heads of the studs of the clasps project and being comparatively small soon wear through the garments outside. These steels are also objectionable, as they are liable in use to become unfastened and very frequently do so and necessitate the wearing of the corset uncomfortably and injuriously tight in order to avoid unclasping thereof. They are further awkward to fasten and unfasten. They require to be of quite heavy material to prevent breaking.

The objects of this invention are to overcome these objections and provide an improved clasp for corsets or waists which shall permit the steels to be placed one upon the other instead of side by side, thus securing a smoother finish for the corset and avoiding the necessity of using any underlying busks or steels.

Further objects will appear definitely in the detailed description.

We accomplish these objects of our invention by the devices and means described in the following specification, pointed out in the claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a front view of a pair of corset-steels embodying the features of our invention, the top clasp alone being fastened. Fig. 2 is a rear view of the under clasp A', showing the clasps thereon in detail. Fig. 3 is an enlarged detail transverse sectional elevation on a line corresponding to line 3 3 of Fig. 1, showing the clasp joined. Fig. 4 is an enlarged detail longitudinal sectional elevation on line 4 4 of Fig. 3. Fig. 5 is an enlarged detail perspective view of the clasp B' removed

from the steel. Fig. 6 is a front view of a pair of corset-clasps, showing a slightly-modified construction similar to the view in Fig. 1. Fig. 7 is a rear view of the corset steel or clasp A' of the modified construction, showing the clasps in detail. Fig. 8 is an enlarged detail transverse sectional elevation on line 8 8 of Fig. 6.

In the drawings all of the sectional views are taken looking in the direction of the little arrows at the ends of the section-lines.

Similar letters of reference refer to similar parts throughout the several views.

Referring to the lettered parts of the drawings, A is the inside steel or clasp, which bears the usual studs C C, much shortened. The outside steel A' is provided with depressions, preferably stamped into the steel, corresponding in position to the studs C C. The depressions B are oval or elliptical in form, and the one at the top of the steel is transverse to the same. Within the depressions B are secured suitable spring-clasps B', which are made into suitable form by folding a single piece of spring metal so that its opposite edges form engaging edges for the studs C. These spring-clasps B' are conformed to the depressions B and are shorter than the same, so that there is an opening into one end of the clasp within the depression, which is here arranged to be the lower end of the depression, with the exception of the depression at the top, where the opening comes on that side which is away from the corset when in use.

To fasten our improved corset-clasp, the wearer inserts the stud C at the top within its clasp, which, being transverse to the corset-steel, locates all of the remaining studs C in proper position for engagement, when all that is required is to exert a little pressure, when the studs snap through the clasps and are securely engaged. When it is desired to unfasten this clasp, it is not necessary to break the engaging members apart, but merely to slide the outer steel transversely at the top, which will be permitted by the elasticity of the spring, when it will become disengaged and can be raised up, freeing all of the studs below with one movement very quickly and with great ease.

The steel bearing the clasps is described as



the upper steel; but it is obvious that the relation of the two steels may be reversed.

We are aware that this structure can be greatly varied in its details without departing from our invention.

In Figs. 6, 7, and 8 we show a construction in which a much larger stud is employed, with a round stud and clasp at the top similar to the ordinary spring-clasp in common use upon gloves. In this structure the clasps B' of the lower fasteners project considerably beyond the surface of the steel; but owing to the fact that the engaging edges are longer they will remain engaged, though the bending of the steel will cause them to slide upon each other to a considerable extent. This same sliding motion also occurs in our preferred construction; but owing to the fact that the steels are close together a much shorter fastening serves the purpose. It will be observed that the top fastening in each pair of steels is fixed, and no longitudinal movement is permitted between the steels at that point, while longitudinal movement is possible between the members of all other fasteners.

We desire to state that the fixed fastener—that is, the one preventing longitudinal movement—might be any other fastener upon the steel and serve its purpose of preventing disengagement, and yet permit all the motion required between the steels. It is much preferred to locate this fixed fastening at the top, owing to the fact that at that point it is easiest to fasten the corset first, and when that is done all of the remaining fasteners are located. With this improved fastening it would no doubt be possible to join the steels without the depressions B in the outer steel, though it is much preferred to have them, as it lessens the motions of the steels upon each other and makes a smoother and flatter front to the corset. The depressions also assist in retaining the clasps in place, so that a single rivet is sufficient to hold each one. From these statements it must be clear that great variations in the details of construction are possible.

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

1. In corset clasps and steels the combination of the steel A, with suitable fastening-studs C, thereon; an outer steel A' with depressions B, B, therein the top of which is transverse to the steel and the rest longitudinal therewith positioned to correspond with

the studs C, and engaging clasps B', formed with parallel engaging edges situated within the depressions B, to engage the studs C, and permit a slight longitudinal movement to the lower fastenings and a fixed fastening at the top all coacting together substantially as described for the purpose specified.

2. In corset steels and clasps the combination of the inner steel A, with suitable studs thereon; an outer steel A', with depressions formed therein corresponding to the position of the studs on the opposite steel and engaging members within the depressions to receive the studs and retain the same for the purpose specified.

3. The combination in corset clasps and steels A, A' one of which is superimposed on the other, suitable fasteners on the opposing faces of said steels at intervals to join the same together, the top one of which secures the steels in a fixed longitudinal relation to each other and the remainder of which are spring-fasteners with longitudinal slots to permit a slight longitudinal motion between their members for the purpose specified.

4. The combination in corset clasps and steels A, A' one of which is superimposed on the other, suitable fasteners on the opposing faces thereof at intervals to join the same together one of which secures the steels in a fixed longitudinal relation to each other and the remainder of which are spring-clasps the members of which are open toward the opposing faces of said steels and having longitudinal slots to permit a slight longitudinal motion between the members for the purpose specified.

5. The combination in corset clasps and steels of a pair of corset-steels one of which is superimposed on the other; a close-fitting fastener the members of which are fixed to the steels; spring-clasps on the opposing faces between the two steels possessing loose joints to allow longitudinal motion between the steels to accommodate the motion of the steels on each other in use, for the purpose specified.

In witness whereof we have hereunto set our hands and seals in the presence of two witnesses.

JAMES H. HATFIELD. [L. S.]

EDWARD M. BRIGHAM. [L. S.]

Witnesses:

WALTER S. WOOD.

EDWARD A. SHIELDS.