

No. 677,130.

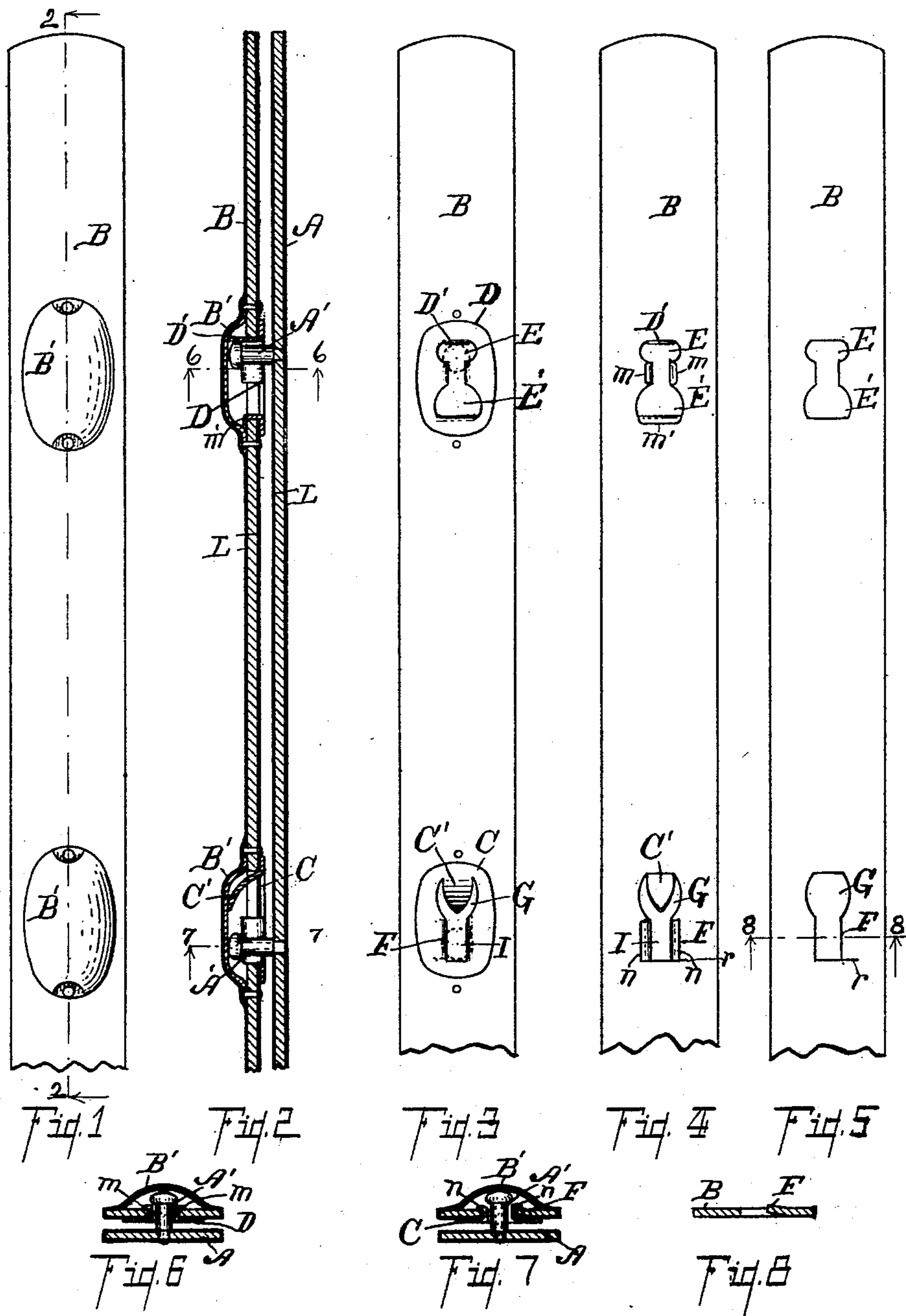
Patented June 25, 1901.

J. H. HATFIELD & E. M. BRIGHAM.

CORSET CLASP.

(Application filed Aug. 23, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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CORSET-CLASP.

SPECIFICATION forming part of Letters Patent No. 677,130, dated June 25, 1901.

Application filed August 23, 1899. Serial No. 728,251. (No model.)

To all whom it may concern:

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

10 This invention relates to improvements in corset-clasps, and is an improvement in certain details of the invention described and illustrated in our Letters Patent No. 632,489, dated September 5, 1899, and in other particulars.

15 The objects of this invention in detail are, first, to provide for the purpose of strength and durability a fastening to unite the steels which shall be so attached to the steels as to impose the principal strain upon the steels and not upon the fastening; second, to provide a simple and efficient fastening that can be rapidly and efficiently united to the steels; third, to provide a fastening which shall utilize the spring or elasticity of the steel itself in forming a snap or spring fastening; fourth, to provide a new and improved fastener for use in this relation that shall serve to lock or hold the spring or snap fasteners in their correct engaging position; fifth, to provide a new and improved locking-fastener for use in clasps of this character which is very secure in use and at the same time very convenient to fasten and unfasten, and, sixth, to provide generally an improved fastening means for use in corset-clasps having their steels superimposed one upon the other.

Further objects will appear in the detailed description.

40 The invention is clearly pointed out and defined in the claims.

A structure fully embodying our invention is illustrated in the accompanying drawings, forming a part of this specification, in which—

45 Figure 1 is an enlarged exterior detail view of a corset-clasp embodying our invention. Fig. 2 is an enlarged detail sectional elevation taken through both clasps on a line corresponding to line 2 2 of Fig. 1. Fig. 3 is a detail plan view of the inside of outer steel B. Fig. 4 is a detail view of the exterior of

the same with the outer shields B' removed. Fig. 5 is a detail of the outer steel or clasp B before the fasteners are put in place. Fig. 6 is a transverse detail sectional view taken on line 6 6 of Fig. 2, showing the upper fastener. Fig. 7 is a detail sectional view taken on line 7 7 of Fig. 2, showing one of the lower fasteners. Fig. 8 is a detail sectional view of the steel B with the fasteners entirely removed, taken on a line corresponding to line 8 8 of Fig. 5.

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

Referring to the lettered parts of the drawings, A is the inner clasp or steel, provided with posts or studs A' for attaching to the outer steel. These studs are similar in form to those already in common use. In the drawings we have illustrated them of considerable length and very much increased in size in order that the details may clearly appear. The outer steel is provided with specially-constructed fasteners for engaging these studs. The steel is perforated in the first instance, as indicated in Fig. 5, the upper perforation E E' being for the locking-fastener and the lower perforation being for the lower fasteners, the number of which may be varied to suit the requirements or convenience of the manufacturer or user, there usually being three or more.

Regarding the upper or locking fastener, we apply a plate D to the upper opening, a part D' of which is turned straight in and other portions m m m' are folded through the perforation to retain the plate in position and strengthen the steel. Outside of this we place a shield B', which is secured to the steel B by suitable rivets or other means to strengthen and support the steel at the point perforated for the fastener. In operating this fastener the stud A' is inserted through the enlarged portion E' of the aperture and pasted up between the portions m m, and it normally rests against or close to the inwardly-projecting portion D'. In unfastening, the stud A' is tipped by pulling the upper ends of the steels or clasps apart,

when it will be found to pass readily out of the portion E of the perforation. When the steels are parallel, as they normally are, the head will be positively retained.

- 5 Each of the lower fasteners, only one of which is illustrated, consists of a plate C, which is secured to the perforation by flaps or ears folded outwardly at *nn* and which conform to and positively engage the steel.
- 10 The steel is cut or slit at *rr* to one side from the portion F of the perforation, so that it will readily yield, and this portion F is bent slightly outward. On one side, as shown in sectional view given in Fig. 7, the flap engages
- 15 the straight border of the perforation in the steel and on the other side it engages the bent border of the perforation, which serves as a spring, as already described. In use the stud A' is drawn against the straight side
- 20 of the fastening away from the flap that engages the steel on the side of the perforation which is bent and acts as a spring, and hence the fastening has the benefit of the full strength of the steel, neither the body of the
- 25 plate nor its dependent flap being subjected to any material strain. This construction avoids the necessity of using thick material in the plates forming the inner fastening, and thus permits the opposing steels to come close
- 30 to each other, which is a very great advantage in diminishing the bulk of the clasps, in increasing their strength, and in lessening their amount of movement one upon the other.

The tongue C' is struck outwardly to form

35 a guide for the stud A' of the inner steel at this point to facilitate unfastening, and the bottom of the opening is left straight to serve as a stop to retain the stud. A cap or shield B' is provided for the outside of the fasten-

40 ing, the same as on the upper fastening. The shield is shown as very much enlarged and also projecting to a greater length than in practice. On the clasps in use when covered with cloth in the usual way the shields are

45 very inconspicuous and being nicely rounded and smooth are not in the least objectionable.

To operate our improved clasps, the top fastener is first joined by inserting the stud A' in the enlargement E' at the bottom of the

50 slot and sliding it up. This will retain the steel in position. The lower fasteners are then united by forcing the heads against the plates C and forcing the steels together. When thus joined together, the heads are free

55 to play longitudinally in the fasteners, owing to their slot-like formation. They are prevented from moving up out of engagement by the fastening at the top, and they are prevented from moving out at the bottom of the

60 slots or openings by the formation at that point.

When it is desired to unfasten our improved clasps, the top ends are pulled apart. This tips the head of the stud at that point and al-

65 lows it to escape. Then the steel with the studs slips easily up, and all the lower fas-

teners are disengaged at once by the single motion.

We desire to state in this connection that the details of construction of our improved 70 corset-clasps can be greatly varied without departing from our invention. A different style of locking-clasp might be used in connection with the spring-clasps containing the longitudinal slots, and the particular form of 75 spring-clasps might also be varied and still make use of the particular style of locking-fastener which we have described. We believe, however, that each is well adapted for use with the other and that the best results 80 are secured in this way.

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

1. In corset-clasps the combination of steels 85 adapted to be superimposed one upon another; fastener-studs on one of said steels; spring snap-fasteners on the opposite steel formed with a longitudinal slot to open at the upper end to engage said studs; a locking-fastener 90 to engage the top stud having a slot enlarged at the bottom to admit the stud freely, and the opening slightly broadened at the top to allow the stud to be withdrawn when inclined for the purpose, as specified. 95

2. In corset-clasps, the combination of two steels adapted to be superimposed one upon the other; fastener-studs on one of said steels; a spring-fastener on the opposite steel the sides of which fastener form a longitudinal 100 slot open at the end to release the stud; and a locking-fastener to join the steels together and limit their motion to keep the members of the spring-fastener in engagement, for the purpose specified. 105

3. In a corset-clasp, the combination of a steel with a stud thereon; a steel with a spring-fastener to engage the stud formed by a longitudinal opening in the steel one side of which is rendered elastic by a cut in the 110 steel so as to permit the entrance of the head of the stud, for the purpose specified.

4. In a corset-clasp, the combination of a steel with a stud thereon; a steel with a spring-fastener to engage the stud formed by 115 a longitudinal opening in the steel, one side of which is rendered elastic by a cut in the steel so as to permit the entrance of the head of the stud; and a cap or shield over the opening to cover the stud, for the purpose speci- 120 fied.

5. In a corset-clasp, the combination of a steel with a stud thereon; a steel with a clasp to engage said stud, formed by a plate folded into an aperture in the said steel and having 125 a tongue depressed at an angle to serve to guide the stud from the clasp, for the purpose specified.

6. In a corset-clasp, a steel with a stud thereon; the opposite steel containing a slot 130 enlarged at one end to receive the stud freely, and slightly enlarged at the opposite end to

permit the removal of the stud when it is inclined, for the purpose specified.

7. In a corset-clasp, the combination of
5 steels adapted to be superimposed the one
upon the other; spring or snap fastenings,
the members of which are on the opposing
faces of said steels and permit a longitudinal
motion between the steels, the female mem-
bers of which fasteners open toward the op-
10 posite steel to permit the steels to be joined
together by pressing the one upon the other;

and means of limiting the longitudinal mo-
tion of the steels the one upon the other, for
the purpose specified.

In witness whereof we have hereunto set 15
our hands and seals in the presence of two wit-
nesses.

JAMES H. HATFIELD. [L. S.]

EDWARD M. BRIGHAM. [L. S.]

Witnesses:

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