No. 717,333. Patented Dec. 30, 1902.

E. M. BRIGHAM.

CORSET CLASP.

(Application filed Apr. 17, 1902.)

(No Model.)

Fig. 1.

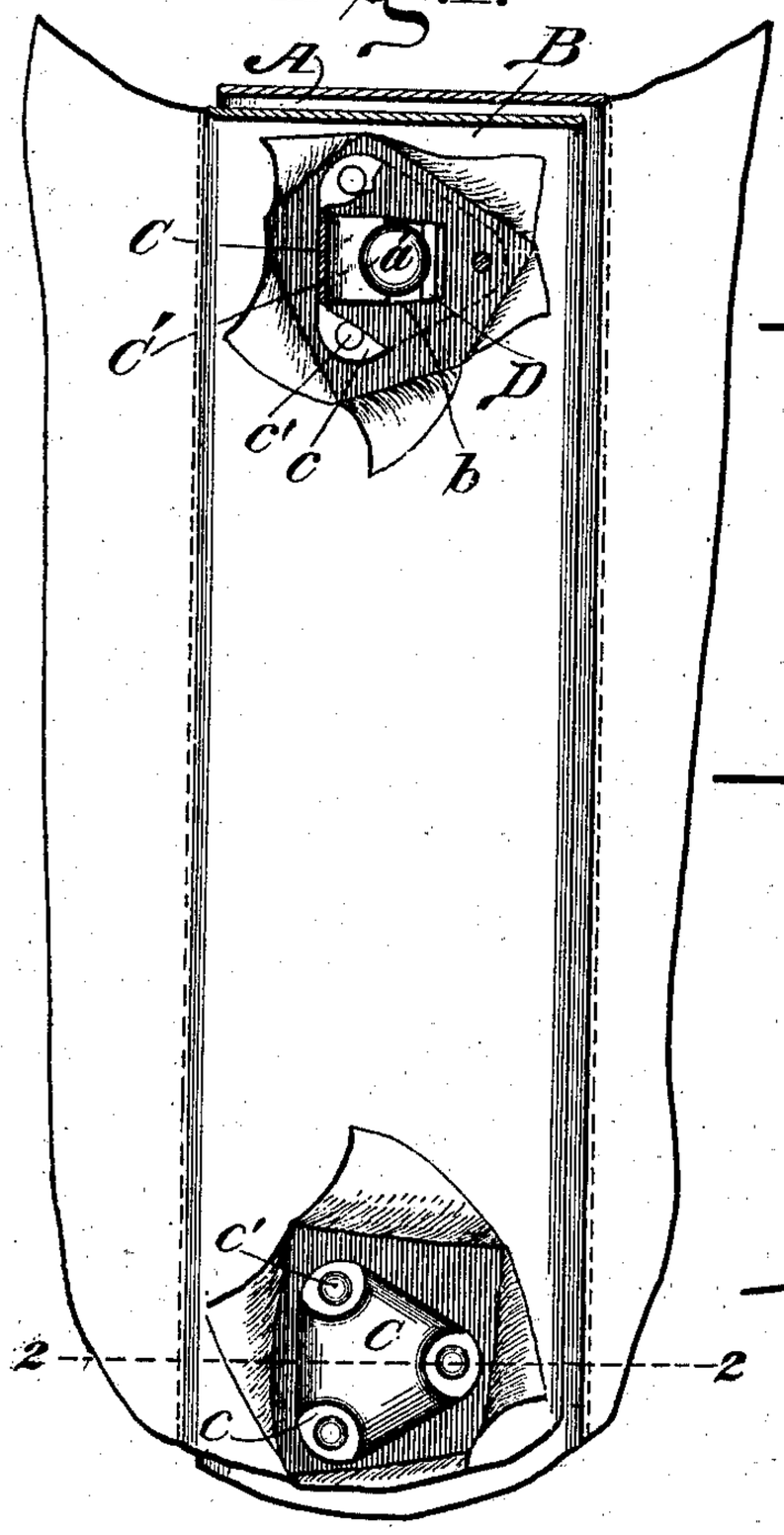


Fig. 2.

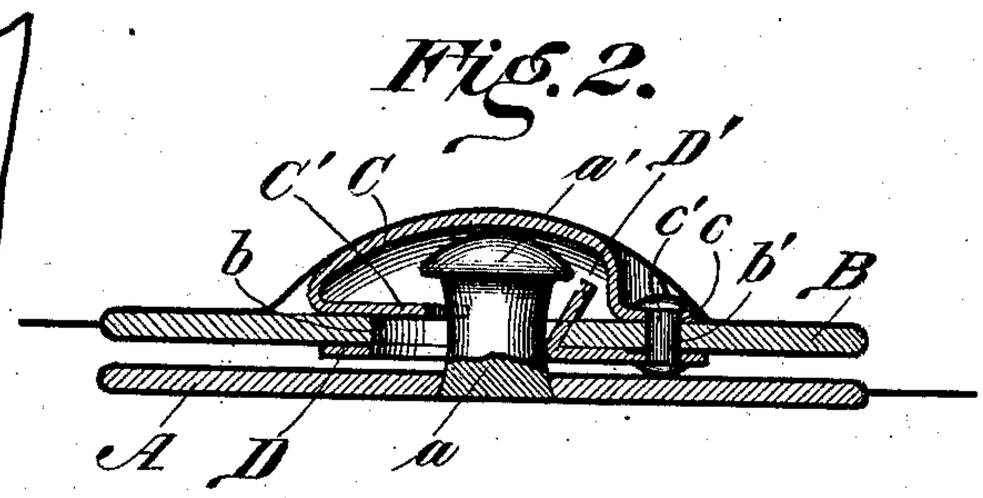


Fig. 3.

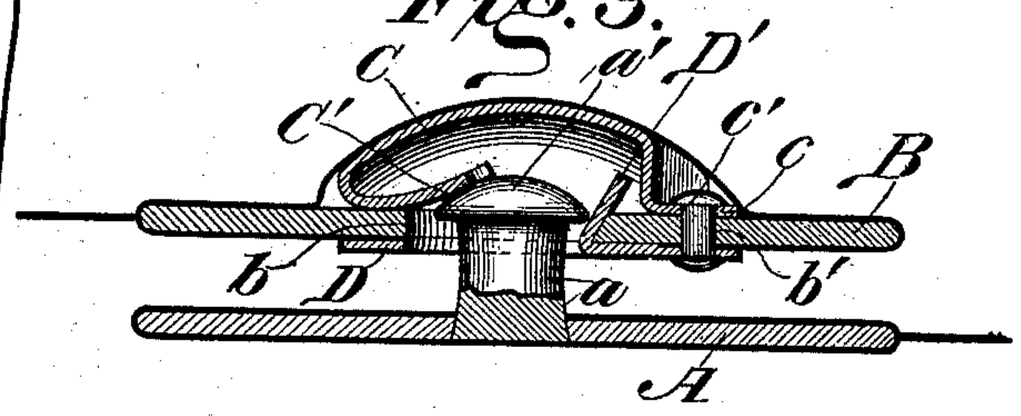


Fig. 4.

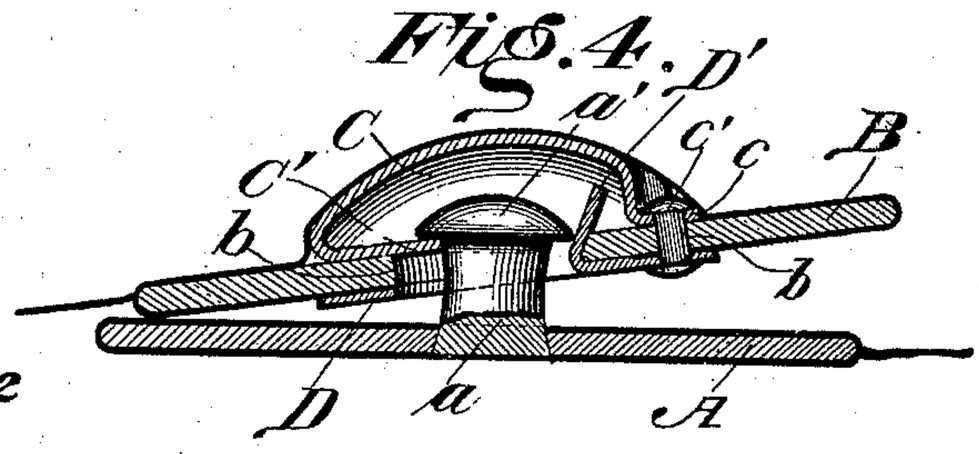


Fig. 6.

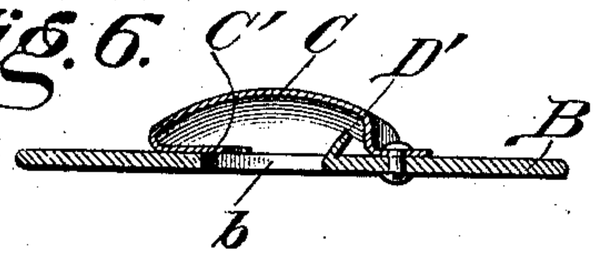


Fig. 5.

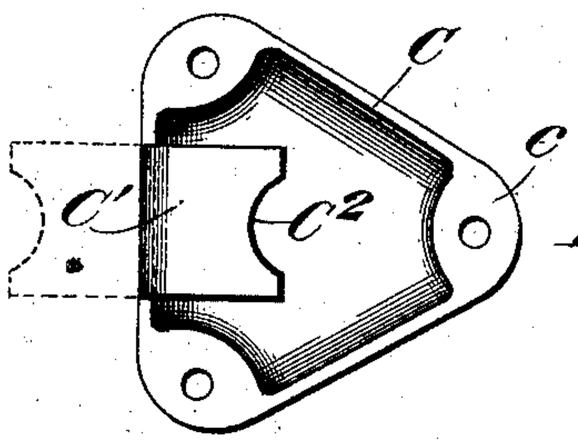


Fig. 7.

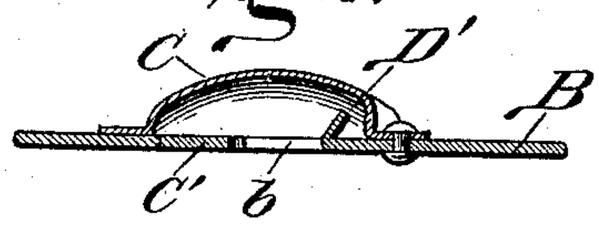
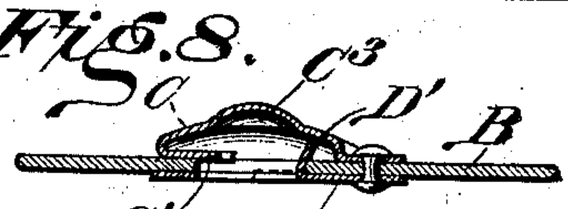


Fig. 8.



WITNESSES

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UNITED STATES PATENT OFFICE.

EDWARD M. BRIGHAM, OF BATTLECREEK, MICHIGAN, ASSIGNOR OF TWO-THIRDS, BY DIRECT AND MESNE ASSIGNMENTS, TO IRVING L. STONE, OF BATTLECREEK, MICHIGAN, AND JAMES H. HATFIELD, OF KALAMAZOO, MICHIGAN.

CORSET-CLASP.

SPECIFICATION forming part of Letters Patent No. 717,333, dated December 30, 1902.

Application filed April 17, 1902. Serial No. 103,396. (No model.)

To all whom it may concern:

Be it known that I, EDWARD M. BRIGHAM, of Battlecreek, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Corset-Clasps; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is an improved separable clasp especially designed and adapted for corset-fastenings in which the steels overlap when fastened; and the objects of the invention are, first, to provide a fastening-clasp that will be most simple in operation and be more easily fastened or unfastened than those heretofore known; second, to provide a corset-fastening which will positively secure the corset when fastened under all conditions of service without requiring the wearer to lace the corset tightly and which will allow sufficient relative movements of the steels to render the corset most comfortable to the wearer; third, to so construct the fastening that the working parts thereof will be entirely concealed when in use and the clothing of the wearer protected from injury by contact with protruding metallic parts, and also to reduce to the minimum the prominences of the fastenings, so that the corset provided therewith will not render tight-fitting garments unslightly.

The invention consists in the novel construction of a retaining device adapted to engage the head of a pin similar to those ordinarily employed in old style pin-and-slot corset-fastenings and in the combination of the improved retaining devices with such pins, as will be hereinafter more fully set forth and explained with reference to the accompanying drawings, which illustrate the best form of the fastening now known to me; but as the particular construction of parts shown therein may be varied within the scope of my invention I refer to the claims following the description of the fastening for summaries of the features and combinations of parts constituting the invention and for which protection is asked.

In the drawings, Figure 1 is a front view, enlarged, of portions of a pair of corset-steels equipped with my fastenings, the shell of one fastening being broken away to show underlying parts. Figs. 2, 3, and 4 are enlarged sectional views on line 2 2, Fig. 1, showing the fastening devices in the positions assumed thereby when fastened, in the act of closing, and in the act of unfastening. Fig. 5 is an enlarged bottom view of the shell. Figs. 6, 7, and 8 are detail views illustrating various slight modifications.

The inner steel A is provided with headed pins or studs *a*, which may be of the usual type commonly employed in corset-fastenings, arranged at proper distances apart. The outer and overlapping steel B is provided with a series of openings *b*, corresponding in number with the pins *a* and adapted to be entered by the latter when steel B is placed over and against steel A. Adjacent to holes *b* are small perforations *b'* for engagement of the rivets securing the shields and guard-plates of the fastening to the steel.

On the outer face of the steel B, over each opening *b*, is secured a concavo-convex cap or shield C, which is large enough to cover the opening *b* and is provided with perforated flanges *c*, through which pass the securing-rivets *c'*, which rivets engage perforations *b'*. The shields C protect the heads *a'* of the pins *a* when the latter are inserted through openings *b* and prevent the pins catching the garments of the wearer. The shields C, moreover, may be provided with pin-retaining spring-catches C', which may be stamped out of sheet metal as integral parts of the shields, as indicated in dotted lines in Fig. 5, and then bent back under the body of the shield, so as to project partly over the inner sides of the opening *b*, as indicated in Figs. 2, 3, 4, when the shield is secured in place. The springs C', however, might be integral with the steel B, as indicated in Fig. 7, being formed and left within openings *b* by suitably forming the stamps and dies used in manufacturing the steel B. At present I deem it preferable to make the spring-catches integral with the shields. The catches C' are notched at their

inner ends, as at C^2, primarily to receive stem of pin *a* as head *a'* of pin is drawn away from its engagement with tongue C' and also to facilitate the entrance of the pin-heads *a'* into the openings *b* and to cause the catches to hold the pins more securely when entered. The main function of these spring-catches, however, is to prevent disengagement of the pin-heads and openings *b* by a direct outward parallel separating movement of the two steels. This the catches will prevent, as indicated in Figs. 2 and 4, and in order to disengage the pins from the openings it is necessary to tilt steel B laterally on steel A, so that the pin-heads will tilt out of the holes, as indicated in Fig. 4. To facilitate this disengagement of the pins and holes, an inclined tongue D' is arranged in the front or locking side of each opening *b* opposite the tongue C'. This tongue D' inclines away from the tongue C' and also inclines away from the pin-head when the latter is inserted in the opening, said tongue serving as a guide to direct the pin-head out of the opening when the steel B is tilted laterally on steel A. A guard-plate D preferably surrounds the under side of opening *b* and is secured to the steel by the same rivets *c'* which attach shield C thereto, and the tongue D' may be formed integral with the guard-plate during the process of stamping, as indicated in dotted lines, Fig. 8, and then bent up into proper position, as shown in full lines. The tongue D' might be formed integral with the steel B, as indicated in Fig. 6, if desired; but I prefer to form it with the guard-plate, as in Figs. 2, 5, because the latter is useful both to strengthen and stiffen the edges of opening *b* and to secure the raw edges of the fabric covering of the steels around the inner edges of the opening. The shield C might be formed with a pocket C^3 to accommodate the head of the pin *a*, as indicated in Fig. 8, which pocket will assist in holding the pin in a central position, so that it may always be freely tilted out of the opening as described. I do not consider this pocket indispensable, however.

The steels are fastened together by merely hooking over from right to left in the old-fashioned manner—that is to say, the steel B at the right-hand side of the wearer is hooked over the steel A at the left-hand side, and the pin-heads *a* enter the openings *b*, pressing past the catches C', and as the latter yield the pin-heads slide toward the opposite side of the openings and are guided inwardly by the tongues D'. The engagement of the steels is facilitated by the lateral draft or pull on the steels, which tends to separate them when the corset is clasped on a person. When the pin-heads move past the springs, the latter recover their original position and prevent the pin-heads becoming disengaged while the steels remain with their flat surfaces parallel, as they naturally do and must while the corset is worn. To unfasten the steels, it is only necessary to lift the outer edge of steel B and tilt the same away from steel A, which movement brings the pin-heads against the tongues D' and at such an angle to springs C' that they can slip thereby, as indicated in Fig. 4, the disengaging of the steels being effected simply and instantaneously by simply tipping the outer steel without any tugging of the steels or annoying delays or hindrances and without the wearer having to expel her breath to contract the body, as the corset does not have to be drawn more tightly in unfastening.

When applied to corset-steels, the fastenings are alike throughout the series, and the wearer may begin to fasten the corset either at top or bottom of steels. No longitudinal movement of one steel upon the other is necessary to fasten or unfasten them. There being no slots to be traversed by the pins, the fastening is made and unfastening is effected with the slightest effort, as the natural separating pull between the steels facilitates the engagement of the fastening devices, and the same separating pull facilitates the unfastening of the steels after the outer steel is tilted, as above described. The pin-heads may be inserted in the openings by directly pressing them thereinto past the catches C' or by slightly tilting them under either the tongues or catches.

The fastening while particularly designed for corsets may be usefully employed on other close-fitting garments, and I do not restrict myself to the specific application or construction of parts shown and described, for the invention may be embodied in various forms preserving its distinguishing peculiar characteristics, and

Therefore what I desire to protect as my invention by Letters Patent is—

1. A separable fastening, comprising in combination, a headed pin, an engaging member therefor having an opening for the reception of the pin-head, and a narrow inwardly-projecting tongue attached to the steel located at one side of and projecting upwardly from its point of attachment into said opening, said tongue being inclined upwardly away from the pin-head when the latter is inserted in the opening and adapted to direct the pin out of the opening when tilted thereagainst, substantially as described.

2. In a separable fastening, the combination of a headed pin, and a pin-engaging member comprising an opening for the reception of the pin-head, a narrow spring-catch at one side of and projecting partly over said opening, and a narrow inwardly-projecting tongue entering said opening, and arranged opposite and inclined away from the spring-catch and pin, and adapted to direct the pin out of the opening when tilted thereagainst, substantially as described.

3. In a separable fastening, the combination of a member and a headed pin thereon, an opposed member having an opening for the reception of the pin-head, a shield covering

said opening, a spring-catch formed integral with the shield and projecting over one side of the opening, and a narrow tongue opposite the spring-catch extending through the opening and into the shield and inclined away from the catch and pin-head and adapted to direct the pin out of the opening when tilted thereagainst, substantially as described.

4. In a separable fastening, the combination of a member provided with headed pins; an opposed member having a series of openings for the reception of the pin-heads; shields covering said openings, a spring-catch projecting over the edge of each opening, and a tongue inclined away from the pin-head and catch and projecting through each opening into the hollow of the shield and located opposite the spring-catch therein, whereby the pins may be disengaged from the openings by tilting one member laterally upon the other, substantially as described.

5. In a fastening for corsets, &c., the combination of a steel provided with headed pins; an opposed steel having a series of openings for the reception of the pin-heads; shields covering said openings, guard-plates around the under edges of the openings, a spring-catch projecting over the edge of each opening, and a tongue projecting through each opening into the shield and lying opposite the spring-tongue and inclined away from the pin-heads, whereby the pins may be disengaged by tilting one steel laterally upon the other, substantially as described.

6. In a corset-fastening, the combination of a steel provided with a series of headed pins, an opposed steel having a corresponding series of openings for the passage of the pin-heads, concavo-convex shields attached to said steel over the openings said shields having pockets for the accommodation of the pin-heads, inwardly-projecting spring-catches arranged at the inner sides of the openings, guard-plates around the lower edges of the openings, and tongues opposite the spring-catches and inclined away from the pin-heads, the pins being disengaged by tilting one steel laterally on the other, substantially as described.

7. The herein-described corset-fastening comprising a steel provided with a series of headed pins, an opposed steel having a corresponding series of openings for the passage of the pin-heads, concavo-convex shields attached to said steel over the openings, said shields having inwardly-projecting spring-catches arranged at the inner sides of the openings, guard-plates around the lower edges of the openings provided with tongues extending into the openings opposite the spring-catches and inclined away from the pin-heads, the pins being disengaged from the openings only by tilting one steel laterally on the other, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

EDWARD M. BRIGHAM.

In presence of—
CHAS. A. GRAMES,
RICHARD L. STONE.