(No Model.)

F. B. CONVERSE.

CORSET CLASP.

No. 436,473. Patented Sept. 16, 1890.

Fig. 1.

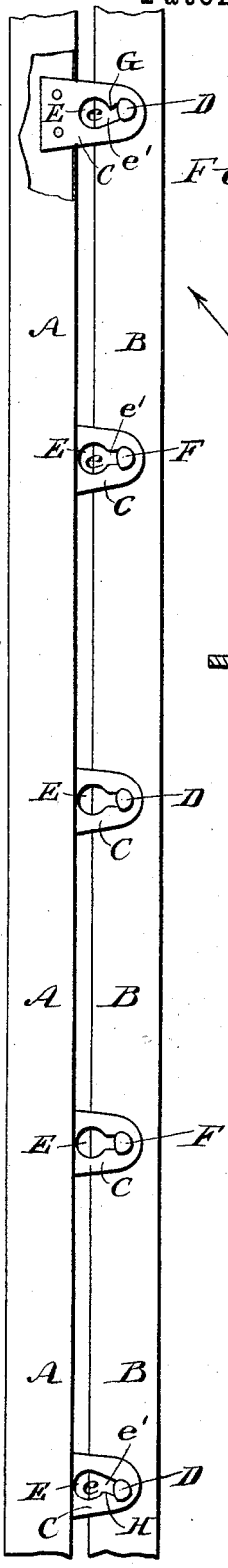


Fig. 2.

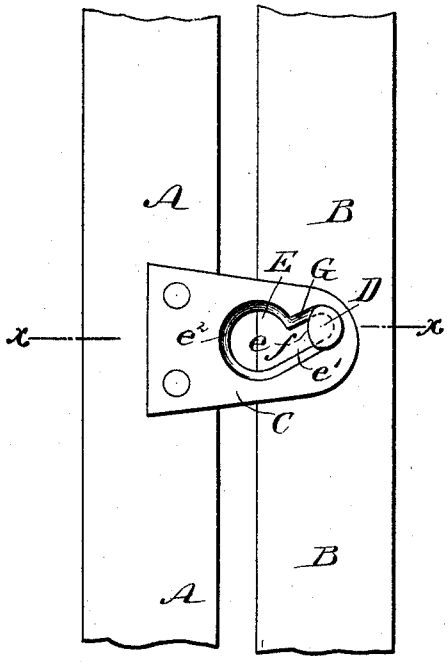
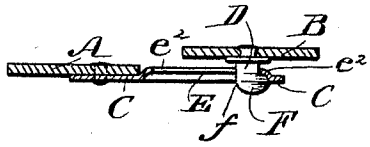


Fig. 3.



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CORSET-CLASP.

SPECIFICATION forming part of Letters Patent No. 436,473, dated September 16, 1890.

Application filed August 2, 1889. Serial No. 319,503. (No model.)

To all whom it may concern:

Be it known that I, FRANK B. CONVERSE, of the city, county, and State of New York, have invented new and Improved Corset-Clasps, of which the following is a full, clear, and exact description.

My invention relates to corset-clasp fastenings, and has for its object to provide simple, inexpensive, and efficient clasps or fastenings of this character which may be readily fastened, and will safely withstand diagonal or vertical strains tending to loosen or disconnect them, while allowing the corset to be easily unfastened and removed at will.

The invention consists in certain novel features of construction and combinations of parts of the corset-clasp fastenings, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front view of a pair of corset-steels or busks provided with my improved clasps and partly broken away. Fig. 2 is a front view of the upper portion of the uncovered steels and the upper clasp, drawn to a larger scale; and Fig. 3 is a transverse section through the steels and clasp, taken on the line $x\ x$ in Fig. 2.

I will particularly describe the invention as applied to use as a corset-fastening; but it is manifest that it may be used as a dress-waist fastening or for other analogous purposes.

The pair of corset steels or busks A B may be made of any approved material, and may have any form or size as the conditions of their use may require.

The present invention is an improvement upon a prior one, for which I made application for Letters Patent, which were allowed June 15, 1889, and serially numbered 302,968. The aforesaid application described particularly the catch-plate C and the stud D, held, respectively, to the steels A B. The peculiarities of said catch-plate and stud are that the catch-plate has a slot E, having a larger part e, and made narrower at e' at one end, and the stud D has an outer or front head portion F, which is preferably rounded underneath and is also cut away to the shank and rounded over at one side at f, where the stud faces the catch-plate. The catch-plate also is preferably provided with an inbent or pressed flange e^2, all around the margin of its slot E. The object sought in or by this construction was chiefly to allow the heads F of the studs D to rock easily on the catch-plate and to slip easily from the catch-plate slots E after the studs had been pushed from the narrower into the wider parts of the slots, this being accomplished by the heads being rounded underneath and rounded over at f, the part f preventing the stud-heads offering a shoulder which could catch on the outer face of the catch-plate and prevent easy disengagement of the clasp.

The aforesaid preferred construction is preserved in this improvement, which, in combination with the above features of the clasp, resides more particularly in the relative arrangement of the larger and smaller parts e e' of the two end clasps of the corset-steels.

Fig. 1 of the drawings shows that the three center clasps have slots E, which range directly at right angles to the length of the steels, or, in other words, the parts e e' of these slots E are parallel with a line ranging at right angles with the steels, but the narrower parts e' e' of the upper and lower or top and bottom clasps range tangentially from opposite sides of the larger parts e e of the slots, thereby providing at one side of the slots at the points of junction of their portions e e' a quite prominent lip or projection. The lip G of the upper clasp is at the upper wall or margin of the slot E thereof, while the lip H of the lower clasp is at the lower wall or margin of its slot E. In other words, the narrow portion e' of the slot E of the upper clasp extends tangentially upward from the lower edge of the wider portion e of the slot to provide the lip G, while the narrow portion e' of the slot E of the lower clasp ranges tangentially downward from the upper edge of the larger part e of its slot E to provide the lip H. The upper clasp, with its slot and lip or projection G, is shown enlarged and to the best advantage in Fig. 2 of the drawings.

The operation of my invention is very sim-

ple and effective, as follows: When the corset-clasps are engaged to hold the corset around the body of the wearer, the series of central clasps will, by engagement of their studs F in the narrow parts *e'* of the catch-plate slots E, resist any direct upward or downward strains, while the lip or projection G at the upper catch-plate slot will resist tendency to unloosen the clasps by any diagonal strains which would be liable to shift the steel B in direction of the arrow *a*, and the lip or projection H at the lower catch-plate slot will resist any diagonal strains in the opposite direction, or those which would be liable to shift the steel A in direction of the arrow *b*. Hence the liability of the corset to become unfastened is reduced to a minimum. The corset may, however, be easily removed, when required, by the wearer taking hold of the tops of the steels A B, one by each hand, and by facially springing the steels in a manner not liable to occur by usual wear of the corset. The stud D of the upper clasp can be readily slipped past the lip or projection G until its head F enters the larger part *e* of the clasp-slot E, and as the rounded-over part *f* of the head does not allow it to catch on the plate C at the outer edge or wall of the slot, the stud D may easily be slipped out of the slot and the successively lower clasps may then be readily disengaged and the lower clasp-stud D may then be slipped along outward past the lip or projection H of its catch-plate, and as the stud slips from the slot E the steels are disengaged and the corset is free.

To fasten the corset, the lower clasp will first be engaged, the stud D easily entering the tangential slot *e'* past the lip H, and the successively-higher clasps may also be engaged, and the top clasp is also readily engaged and its stud F may be slipped past the lip G to lock behind it in the tangential slot *e'* by facially bending the steels, and the corset is fastened securely against unloosening by strains in any direction, as will be understood from the aforesaid description.

The corset may be fastened or unfastened by first engaging and disengaging the lower or bottom clasp having the lip H, instead of first operating the upper clasp having the lip G. I also wish it to be understood that in so far as some features of my invention are concerned the catch-studs may have any desired form, provided the catch-plates have slots provided with tangential narrower portions producing inwardly-projecting opposing lips G H, as hereinbefore set forth.

I am aware that a corset-clasp fastening has before been made in which slots of substantially ⊣ form have been provided at opposite ends of one busk or steel, which at the center has a horizontal slot, all three slots being adapted to engage headed studs on the other busk or steel in a manner giving free vertical play of the two end studs in their slots to allow easy bending movements of the wearer of the corset, while the center slot and stud prevent independent bodily endwise movement of the busks. In this construction the two end slots of one busk have substantially three parts—viz., a broad rounded end portion allowing introduction of the head of the stud on the other busk, a narrower vertical opposite end portion allowing vertical play of the stem of the clasped stud, and a central horizontal portion giving passage of the stud-stem from the larger end of the slot into the central part of the vertical portion of the slot. The two end studs normally stand opposite the central part of the slot, through which they are passed and through which they are liable to slip back again. Hence these busks will easily and accidentally unclasp at the ends.

My improvement is readily distinguishable from this last-named corset-clasp in that the two end slots of one busk have but two parts or members—viz., a larger part *e*, through which the head on the stud of the other busk passes, and a smaller or narrower part *e'*, which projects tangentially from the larger part and receives the stem or shank of the stud. Whether these narrower portions *e'* of the slots are straight or curved, their tangential positions relatively with the parts *e* of the slots provide at the points of junction of the two parts of the slots the lips or projections G H, which may either be pointed or rounded at their extremities. Furthermore, said tangential parts *e'* of the two end slots, whether they are curved or straight, extend in reverse directions, or one upward and outward and the other downward and outward, and the end studs on the other busk are so located relatively to the slots that the stems of the studs, when the corset is clasped, normally lock behind the lips or projections G H so long as both clasped busks are bent together, and the busks will not easily and accidentally unclasp by strains from any direction caused by ordinary wear of the corset. It is immaterial whether the slots E be formed directly in the body of the busk or in a catch-plate fixed thereto. In either case the slots are practically formed in the busk, as will readily be understood.

I am also aware that a corset-clasp fastening has before been made with opposite vertically-ranging slots in end plates held to one busk, these slots having larger outer end portions admitting the heads of studs on the other busk; but the narrower parts of the slots project one directly downward and the other directly upward, and not one tangentially upward and outward and the other tangentially downward and outward, as in my invention. The two fastenings are structurally and operatively different, as sudden bends of a person wearing the corset having the vertically-disposed clasp-slots might bend one busk farther than the other and disengage the clasp, as there is nothing to prevent slip of the stud toward the larger parts of the slots, while in my construction the outwardly-in-

clined tangential smaller parts of the two end slots while approaching a horizontal position also provide the locking lips or projections G H, which effectually prevent accidental disengagement of the clasps by bending strains on them.

I have also seen a corset-clasp fastening in which all the stud-receiving slots in one busk are formed substantially like the lower slot E in my clasp or with tangential narrow portions ranging outward and downward; but I do not adopt this construction, as the opposite end slots of my clasp have reversely-inclined tangential narrower portions which engage the end studs to automatically and securely lock the busks together against strains from any direction, this being a function impossible with the clasps having tangential slots ranging all in one direction, either upward or downward.

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

In a clasp-fastening, the combination, with one busk provided with headed studs, of another busk provided with opposite end slots made larger at one end and formed with narrower portions projecting tangentially in reverse directions from their larger portions and providing lips or projections, the opposite end studs being relatively arranged to normally lock behind said lips or projections when the busks are clasped together, one busk also having intermediate slots adapted to engage corresponding intermediate studs on the other busk, substantially as described, for the purposes set forth.

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Witnesses:
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