(No Model.)

M. W. HENIUS.

CORSET CLASP.

No. 278,430. Patented May 29, 1883.

Fig. 1.

Fig. 2.

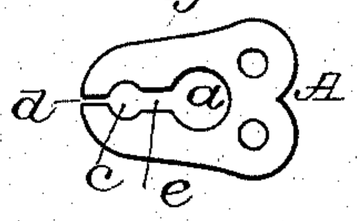


Fig. 4.

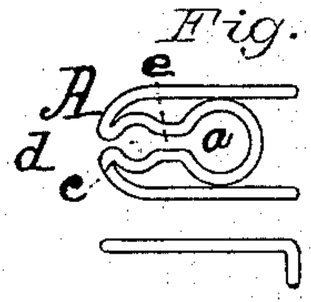


Fig. 3.

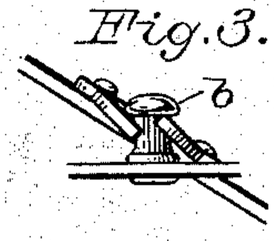
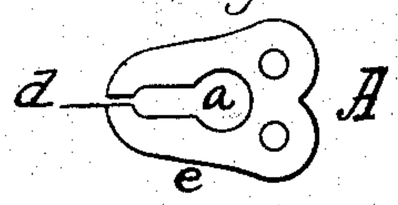


Fig. 5.



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UNITED STATES PATENT OFFICE.

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CORSET-CLASP.

SPECIFICATION forming part of Letters Patent No. 278,430, dated May 29, 1883.

Application filed December 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, MAX W. HENIUS, of Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Corset-Clasps; and I do hereby declare that the following specification, taken in connection with the drawings furnished and forming a part of the same, is a clear, true, and complete description of my invention.

The objects of my present improvements are to provide against liability of accidental disconnection, and at the same time enable a ready disconnection when desired; and to those ends I have so constructed the eye-plate with which the usual studs engage that said plate slightly expands laterally during the passage of the stud from the main eye to the smaller or retaining eye, thus causing the stud, which has a shank slightly greater in diameter beneath the head than the normal width of the opening which connects said eyes, to be securely retained within the retaining-eye, but readily released therefrom when desired, said plate being divided or slotted from the retaining-eye, or from the opening which receives the shank of a stud, to its outer end, which enables the stud to be removed from said eye through said slot when the plate is slightly twisted by the stud; or the stud may, if desired, be retired by way of the main eye, as heretofore.

I am aware that corset-clasp plates have heretofore been constructed in two parts, serving as a pair of jaws for embracing a stud beneath its head, and that one jaw of each pair has been pivoted to a sliding plate overlying the corset steel or busk, so that by moving said plate longitudinally all of said jaw-clasps would be opened or closed; also, that corset-clasp plates have heretofore been provided with an entering or main eye, as usual, and also with a retaining-hook provided with a lateral opening, by which a stud could be entered or released at the outer end of the clasp as well as at the main eye. My novel clasp-plate differs from said prior clasp-plates, in that with it the stud can only be released from the outer end by twisting the plate by means of the stud, and that the stud can be entered only by way of the main eye, and also in that my plate is integral, coupled with the fact that by reason of the slot at its outer end each side of said clasp-plate has a spring capacity for releasing a stud when the plate is slightly twisted, and for closely embracing the shank of the stud while occupying the retaining-eye or the outer portion of the clasp-plate.

To more particularly describe my invention, I will refer to the accompanying drawings, in which Figure 1 illustrates a pair of corset steels or busks with upper and lower clasp-plates constructed in accordance with my invention. Fig. 2 is an enlarged view of one of the clasp-plates detached. Fig. 3 is an end view of the same with a stud in position, as if being withdrawn through the slot. Fig. 4 illustrates the clasp-plate composed of spring-wire. Fig. 5 illustrates a clasp-plate having a stud-eye and a long opening for the shank of a stud, but divided at its outer end in accordance with my invention.

It is well known that it is only the end clasps of corset steels or busks that are liable to accidental disconnection, and therefore the plates of the intermediate clasps shown in Fig. 1 are of the usual form.

The integral clasp-plates A embody my invention, and they have the usual main stud-eye, *a*, larger in diameter than the head of the stud *b*, used therewith, and, as shown in Figs. 1 to 4, inclusive, they also have the usual retaining-eye, *c*, which is smaller in diameter than the head of the stud. These eyes may merge one with the other at their peripheries, as is common in such clasps, or be connected by the straight-sided opening, as shown, without departure from certain features of my invention, for, however these openings in the plate may be formed, one portion of my invention consists in making each side of the plate into a spring by dividing it at its outer end—as, for instance, by slitting from the auxiliary eye to the end of the plate, as at *d*. In its best form my clasp, thus slitted or otherwise divided, has a straight-sided passage, *e*, between the main eye and the retaining-eye, and in its normal condition this is somewhat narrower than the diameter of the shank of the stud *b*, so that in forcing the stud from one eye to the other the two sides of the plate are slightly expanded or separated, and therefore when

the stud occupies the retaining-eye it can only be released therefrom by a corresponding expansion, or by slightly twisting the plate on the stud, as indicated in Fig. 3, thus permitting the stud to pass outwardly for its release. I prefer that the clasp-plate be composed of sheet metal; but it may be composed of wire sufficiently heavy and hard to afford the requisite strength and spring capacity indicated. As illustrated in Fig. 4, the wire is bent to form the two eyes, the connecting opening, and the slit or its equivalent at the outer end of the plate, thus providing for the lateral spring movement of the two sides of the plate, as when sheet metal is used. These wire plates have two shanks, which are bent rectangularly to serve as rivets for uniting them to the corset-steels.

It is to be understood that, so far as my knowledge extends, the dividing of the outer end of the integral clasp-plate, so as to cause its outer ends to constitute substantially two co-operating springs for embracing the stem of a stud, is broadly new, and that I do not preclude myself from employing that feature in a clasp-plate having no specially-formed retaining-eye, but provided with a straight or an angular opening leading from the large eye toward the outer end of the plate, as illustrated in Fig. 5. In this case the spring capacity of the plate also causes the shank of the stud to be firmly embraced, and the stud can be released from the plate by way of its front end, instead of by way of the large eye.

It will be seen that because of the lateral springing capacity of the two sides of the plate the opening which receives the shank may be normally much narrower than the diameter of the shank, and therefore a firmer connection of the stud and plate is obtained than could be the case if said opening were normally large enough to receive the shank, as in the undivided or solid plates heretofore constructed; and it is obvious that with a plate having the retaining-eye the shank of the stud has the desired freedom of movement in said eye, while the liability of the stud to be accidentally disconnected by its re-entering the main eye is reduced to a minimum.

Having thus described my invention, I claim as new—

1. The integral corset-clasp plate having a main stud-eye for the reception of a corset-stud, and divided at its outer end into two springs, substantially as described, whereby a stud is embraced at its shank between said springs, and is capable of being released at the outer end by slightly twisting said plate, as set forth.

2. The integral clasp-plate provided with the main eye and the retaining-eye, and divided into two springs at its outer end for grasping or closing upon a stud when in position for use at or near the outer end of the plate, substantially as described, thereby preventing said stud from freely re-entering the main eye and becoming disengaged, as set forth.

3. The integral clasp-plate divided or slitted at its outer end to form two springs, and provided with the main eye, the retaining-eye, and the straight-sided slot connecting said eyes, for adapting a stud to be released from the outer end by slightly twisting said plate, substantially as described.

4. The combination, with a pair of corset steels or busks, of a headed stud and an integral clasp-plate divided into two springs at its outer end, for grasping or closing upon the stud when in position for use, and provided with a main eye and a retaining-eye.

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