E. F. FRIEDRICH & J. J. WEBER.

CORSET CLASP.

APPLICATION FILED JUNE 21, 1916.

1,196,769. Patented Sept. 5, 1916.

Fig. 1.

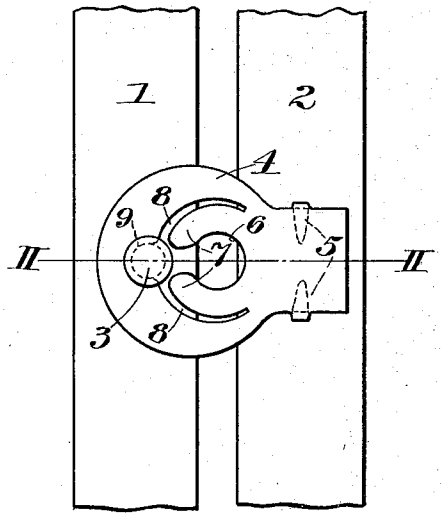


Fig. 2.

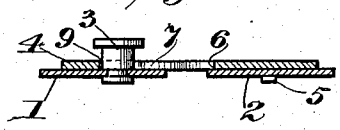


Fig. 3.

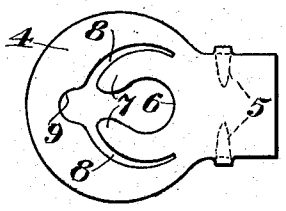


Fig. 4.

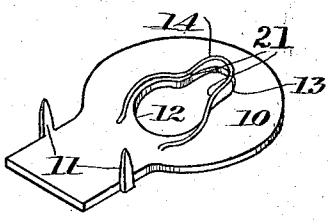
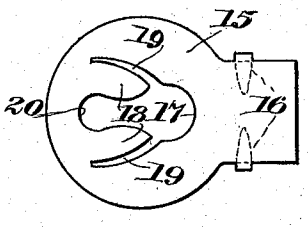


Fig. 5.



Inventor

Edward F. Friedrich
and John J. Weber

By Chas. E. Riordon
Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDWARD F. FRIEDRICH AND JOHN J. WEBER, OF PLATTEVILLE, WISCONSIN.

CORSET-CLASP.

1,196,769. Specification of Letters Patent. Patented Sept. 5, 1916.

Application filed June 21, 1916. Serial No. 105,044.

To all whom it may concern:

Be it known that we, EDWARD F. FRIEDRICH and JOHN J. WEBER, citizens of the United States, residing at Platteville, in the county of Grant and State of Wisconsin, have invented certain new and useful Improvements in Corset-Clasps, of which the following is a full, clear, and exact specification.

This invention relates to clasps for fastening together the two front stays or steels of corsets, and especially to the eye parts of such clasps.

The object of the invention is to provide an improved and simplified form of corset clasp eye which will effectively prevent clasps which have been fastened from being unfastened while the remaining clasps are being secured. In fact, it is the aim of this invention to provide an eye having improved means for retaining it in fastened position on its supplemental pin without danger of accidental displacement.

The invention will be first hereinafter described in connection with the accompanying drawings which constitute part of this specification and then more specifically defined in the claims at the end of the description.

In the accompanying drawings, wherein similar reference characters are used to designate corresponding parts throughout the several views: Figure 1 is a front view of a short section of the front stays fastened together by the usual pin on one stay and one of our improved eyes on the other stay. Fig. 2 is a section taken on the line II—II of Fig. 1. Fig. 3 is a detailed plan view of our preferred form of eye, and Figs. 4 and 5 are detailed views of modified forms of eyes.

Referring first to Figs. 1, 2 and 3 of the drawings, 1 and 2 designate the front stays of a corset, 3 the usual headed pin mounted on one stay, and 4 our preferred form of eye designed to interlock with said pin. The eye 4 is made of a flat piece of metal having sufficient inherent resiliency to insure the locking arms, which are formed therein, returning to normal position after the passage of the pin between their ends. The eye 4 may be fastened to the stay 2 in any desired or known manner, as by the tongues 5 which are passed through the stay and flattened upon the inner face thereof.

The eye may be formed in a single operation by a suitable die, and during this operation an opening 6 of greater diameter than the head of the pin 3, an opening 9 of less diameter than the head of said pin, and a pair of oppositely arranged slots 8 are formed. The slots 8 merge into the opening 9 and with the opening 6 form a pair of oppositely curved locking arms 7 the ends of which are normally spaced apart a distance slightly less than the diameter of the shank of the pin 3, the precise distance between the ends of the arms being determined according to the resistance power of the metal of which the clasp or eye is made. The opening 6 is arranged adjacent the stay to which the eye 4 is attached, while the opening 9 is located in the outer end portion of said eye, the restricted passage between the ends of the arms 7 being arranged intermediate of said openings 6 and 9.

When the pin 3 is to be engaged with the eye 4, the head of said pin is inserted through the opening 6 and the shank of the pin then forced through the passage between the ends of the arms 7 until it reaches the opening 9, as shown in Figs. 1 and 2. During the passage of the shank of the pin between the ends of the arms 7, said arms are forced back into the spaces formed by the slots 8, and as the shank of the pin passes from between the arms they automatically spring back to normal position owing to the resiliency inherent in the metal of which the eye is made. To unfasten the clasp, pressure must be exerted to force the shank of the pin through the restricted space between the ends of the arms 7 just as it was necessary to force the eye into the opening 9, so that there is no danger of the clasp becoming accidentally unfastened. The space 9 being of less diameter than the head of the pin 3, it will be impossible to disengage said pin from the eye otherwise than by forcing the shank of the pin back through the restricted space between the ends of the arms 7 until said pin reaches the opening 6 which is large enough to allow the head of the pin to pass through it.

The ends of the arms 7 are rounded, as shown in Figs. 1 and 3, in order to guide or lead the shank of the pin gradually into the restricted passage between the nearest points on said arms. This curvature of the ends of the arms coöperates with the curva-

ture of the shank of the pin to reduce the force necessary to move said shank through the restricted passage between the ends of the arms as compared with the force which would be required if the shank of the pin encountered abrupt edges in entering this restricted passage.

The arms 7 are arranged in the plane of the surrounding portions of the clasp or eye, and the slots 8 are wide enough to permit said arms to play back and forth therein to the extent necessary to permit the shank of the pin to pass between the ends of said arms. Should the arms lose their resiliency after long usage, the clasp will still be useful to the same extent as the ordinary corset clasp without the safety feature, for the opening 9 will not permit the passage of the head of the pin through it.

The corset clasp eye 15 shown in Fig. 5 is also made entirely of a flat piece of metal and may have tongues 16 for fastening it to a stay. An opening 17 of greater diameter than the head of the pin with which this eye is designed to be used, another opening 20 of less diameter than the head of the pin, and oppositely arranged slots 19 are formed in the eye 15 in substantially the same manner as already described in connection with the eye 4 except that the slots 19 merge into the opening 17 instead of the opening 20, and the arms 18 are formed between said slots and the opening 20 so that they extend toward the stay to which the eye 15 is attached instead of away from said stay as in the eye 4. The ends of the arms 18, Fig. 5, form a restricted passage through which the shank of the pin must be forced in fastening and unfastening the clasps, and said ends of the arms are rounded to guide said shank gradually into said restricted passage.

In Fig. 4 the eye 10 is made of sheet metal with an enlarged opening 12 leading directly to a smaller opening 13. The opening 12 is larger than the head of the pin with which this eye is designed to be used, while the opening 13 is of a size to fit the shank of said pin. In this case, the shank of the pin is locked in the opening 13 by inwardly bent rounded shoulders 21 of a resilient wire loop 14 secured to one face of the metal plate. Said wire loop is bent to follow the outlines of the openings 12 and 13 except for the inwardly projecting shoulders 21 which are arranged between said openings 12 and 13 and which are rounded, as illustrated, to guide the shank of the pin between them. The eye 10 may also be provided with tongues 11 for attaching it to a stay.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent of the United States is:

1. In a corset clasp, the combination with a headed pin, of an eye having an opening larger than the head of the pin, another opening smaller than the head of the pin and a restricted passage of less width than the diameter of the shank of the pin joining said openings, there being a pair of slots in the eye merging into the smaller opening at opposite sides, and resilient arms formed between the larger opening and the slots, said arms lying entirely within the plane of the surrounding portions of the eye, and the extremities of said arms bounding the restricted passage between the openings.

2. In a corset clasp, the combination with a headed pin, of an eye having an opening larger than the head of the pin, another opening smaller than the head of the pin and a restricted passage of less width than the diameter of the shank of the pin joining said openings, there being a pair of slots in the eye merging into the smaller opening at opposite sides, and resilient arms formed between the larger opening and the slots, said arms lying entirely within the plane of the surrounding portions of the eye, and the extremities of said arms bounding the restricted passage between the openings and being rounded for the purpose specified.

3. In a corset clasp, the combination with a headed pin, of an eye having an opening larger than the head of the pin, another opening smaller than the head of the pin and a restricted passage of less width than the diameter of the shank of the pin joining said openings, there being a pair of slots in the eye merging into the smaller opening at opposite sides, and resilient arms formed between the larger opening and the slots, said arms lying entirely within the plane of the surrounding portions of the eye, and the extremities of said arms bounding the restricted passage between the openings, said grooves being of sufficient width to allow the arms to be spread apart when the shank of the pin is forced between them.

4. In a corset clasp, the combination with a headed pin, of an eye having an opening larger than the head of the pin, another opening smaller than the head of the pin and a restricted passage of less width than the diameter of the shank of the pin joining said openings, there being a pair of slots in the eye merging into the larger opening at opposite sides, and resilient arms formed between the smaller opening and the slots, the extremities of said arms bounding the restricted passage between the openings.

5. In a corset clasp, the combination with a headed pin, of an eye comprising a plate having an opening larger than the head of the pin, and another opening smaller than the head of the pin communicating with

the larger opening, and a resilient wire loop mounted on one face of the plate and generally following the outline of the two openings therein, said wire having a pair of shoulders spaced apart a less distance than the diameter of the shank of the pin and arranged opposite the space joining the two openings in the plate for locking said shank in the smaller opening.

6. In a corset clasp, the combination with a headed pin, of an eye having an opening larger than the head of the pin, another opening smaller than the head of the pin, and a restricted passage of less width than the diameter of the shank of the pin joining said openings, there being a pair of slots in the eye merging into one of the openings at opposite sides thereof, and resilient arms formed between the other opening and the slots, the extremities of said arms bounding the restricted passage between the openings.

EDWARD F. FRIEDRICH.
JOHN J. WEBER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."