(No Model.)

W. O. CORNING.

CORSET CLASP.

No. 405,876. Patented June 25, 1889.

Fig. 1

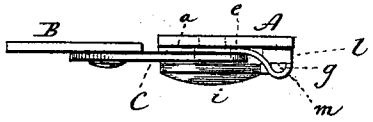


Fig. 2

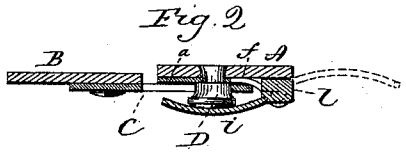


Fig. 3

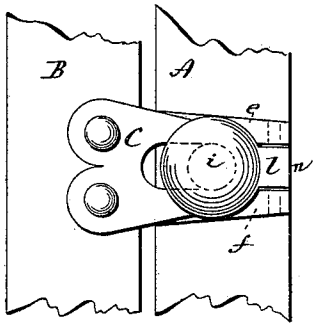


Fig. 4

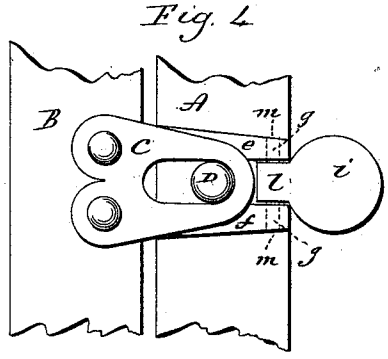


Fig. 5

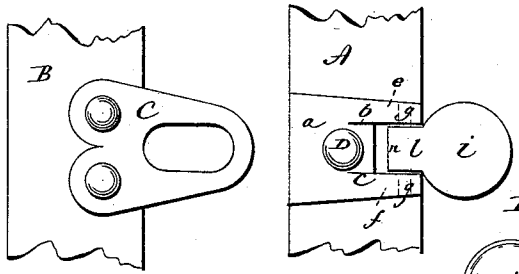


Fig. 6

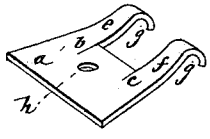


Fig. 7

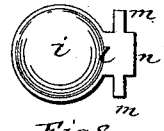


Fig. 8



Fig. 9

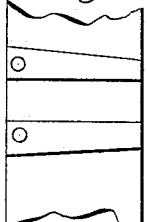
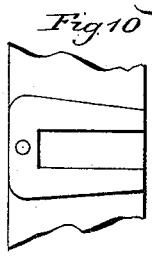


Fig. 10



Witnesses:
J. H. Shumway.
Fred C. Earle.

William O. Corning.
Inventor
By atty.
Wm. O. Ends.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM O. CORNING, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR OF ONE-HALF TO SOLON BRYANT, OF WORCESTER, MASSACHUSETTS.

CORSET-CLASP.

SPECIFICATION forming part of Letters Patent No. 405,876, dated June 25, 1889.

Application filed April 8, 1889. Serial No. 306,329. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM O. CORNING, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new Improvement in Corset-Clasps; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, an end view of the steel, representing a side view of the clasp in the closed position; Fig. 2, a transverse central section through the two busks and through the fastening device; Fig. 3, a face view of the clasp in the closed position; Fig. 4, the same as Fig. 3, showing the cap turned away from the stud; Fig. 5, the two parts in the open position; Fig. 6, a perspective view of the plate *a* detached; Fig. 7, a top view of the cap detached; Fig. 8, an edge view of the cap detached; Figs. 9 and 10, modifications.

This invention relates to an improvement in clasps for corsets, the object being to retain, substantially, the usual eye and stud as a means for securing the two parts together, but to combine therewith a device which shall securely hold the parts when engaged or permit their easy separation. To this end the invention consists in a spring-cap hinged to the stud-busk, which is adapted to fold down over the end of the stud after the eye shall have been applied, and there held by the force of its spring, but yieldingly held, so as to be readily turned away from the stud, to permit the disengagement of the eye from the stud, as more fully hereinafter described.

A represents one of the busks or steels of a corset, and B the other.

C represents the eye, which is secured to the one busk B, and may be the usual eye; but the opening through the eye may be of equal width throughout, if desirable.

D represents the stud, which is secured to the other busk A. The securing device for the eye and stud consists of a plate *a*, made from elastic metal, with two slits *b c*, one each side the center, so as to leave a tongue *d* in the center. These two slits *b c* form spring-arms *e f*, which at their outer ends are bent to form pivot-bearings *g*, as seen in Fig. 6. The length of the plate corresponds substantially to the width of the busk to which it is to be applied. The tongue *d* is pierced, as at *h*, corresponding to the shank of the stud D, and so that the shank may pass through the plate and busk, as seen in Fig. 2, and then, riveted down in the usual manner, will firmly secure the plate to the busk.

i represents the cap, which is in the form of a concavo-convex disk with a shank *l* projecting radially therefrom. This shank is constructed with trunnions *m* on each side, corresponding to the bearings *g* of the arms *e f*, and, as seen in Fig. 7, the shank *l* projecting beyond the trunnions so as to form a cam *n*. The shank is preferably of a length to be doubled back upon itself to give a greater thickness, as seen in Fig. 8.

The cap is applied and the trunnions *m m* set into the bearings *g* of the arms *e f*, as indicated in Figs. 2 and 3. The projection *n*, which forms the cam, is adapted to bear upon the steel below, and is forcibly held there by the elasticity of the spring-arms *e f*; but these arms yield for the turning of the cap under the action of the cam *n*. The under or flat side of the cam, resting upon the corresponding surface below when in the closed position, is firmly held in place. In such closed position it covers the end of the stud, as seen in Fig. 2, and so that, the eye having been engaged, the cap in its closed position will prevent its detachment; but when it is desired to release the clasp the cap is turned away, as indicated in broken lines, Fig. 2, and is held in its open position by the action of the spring, bringing the reverse side of the cam projection to a bearing on the busk.

The convex surface of the cap presents a smooth exterior, so as to protect the garments of the wearer, which naturally comes from contact with the projecting studs, thus performing the double office of securing the clasps in the closed position and protecting those clasps to prevent injury upon the garments in contact therewith.

While I prefer to construct the spring-arms in a plate with the central tongue *d* as a

means for securing the springs to the steel, the spring-arms may be separate and riveted individually to the steel, as represented in Fig. 9, or they may be united without the employment of the tongue, as represented in Fig. 10.

I claim—

1. A corset-clasp consisting of the eye C, fixed to one busk, and the corresponding stud D, secured to the other busk, the combination therewith of a pair of spring-arms *e f*, secured by one end to the busk, their free ends extending toward the rear edge of the busk and terminating in bearings *g*, a disk-cap *i*, having a shank *l* projecting therefrom, the said projection constructed with trunnions *m m*, corresponding to the said bearings *g* in the said spring-arms, and so as to work therein, the projection extending beyond the pivots to form a cam *n* to work upon a corresponding surface, substantially as described.

2. The combination of the plate *a*, slit to form spring-arms *e f*, and an intermediate tongue *d*, with an opening through it corresponding to the shank of the clasp-stud, the said arms *e f* terminating at their outer ends in bearings *g*, combined with a disk *i*, constructed with a shank *l* projecting radially therefrom, the said shank constructed with trunnions *m m*, corresponding to the said bearings *g*, and so as to rest therein, the said shank extending beyond the pivots to form a cam *n* adapted to work upon the surface under the busk, substantially as and for the purpose described.

3. The combination of the plate *a*, slit from one end to form spring-arms *e f*, and an intermediate tongue *d*, the said intermediate tongue *d* adapted to receive the stud by which the said plate may be secured to the busk, a concavo-convex disk *i*, constructed with a shank *l*, the said shank constructed with trunnions *m m*, resting in the said bearings *g g*, and so as to work therein, the said projection extending beyond the pivots to form a cam *n*, the said concave surface of the disk toward the plate when in the closed position, substantially as and for the purpose described.

WILLIAM O. CORNING.

Witnesses:
FRED C. EARLE,
J. H. SHUMWAY.