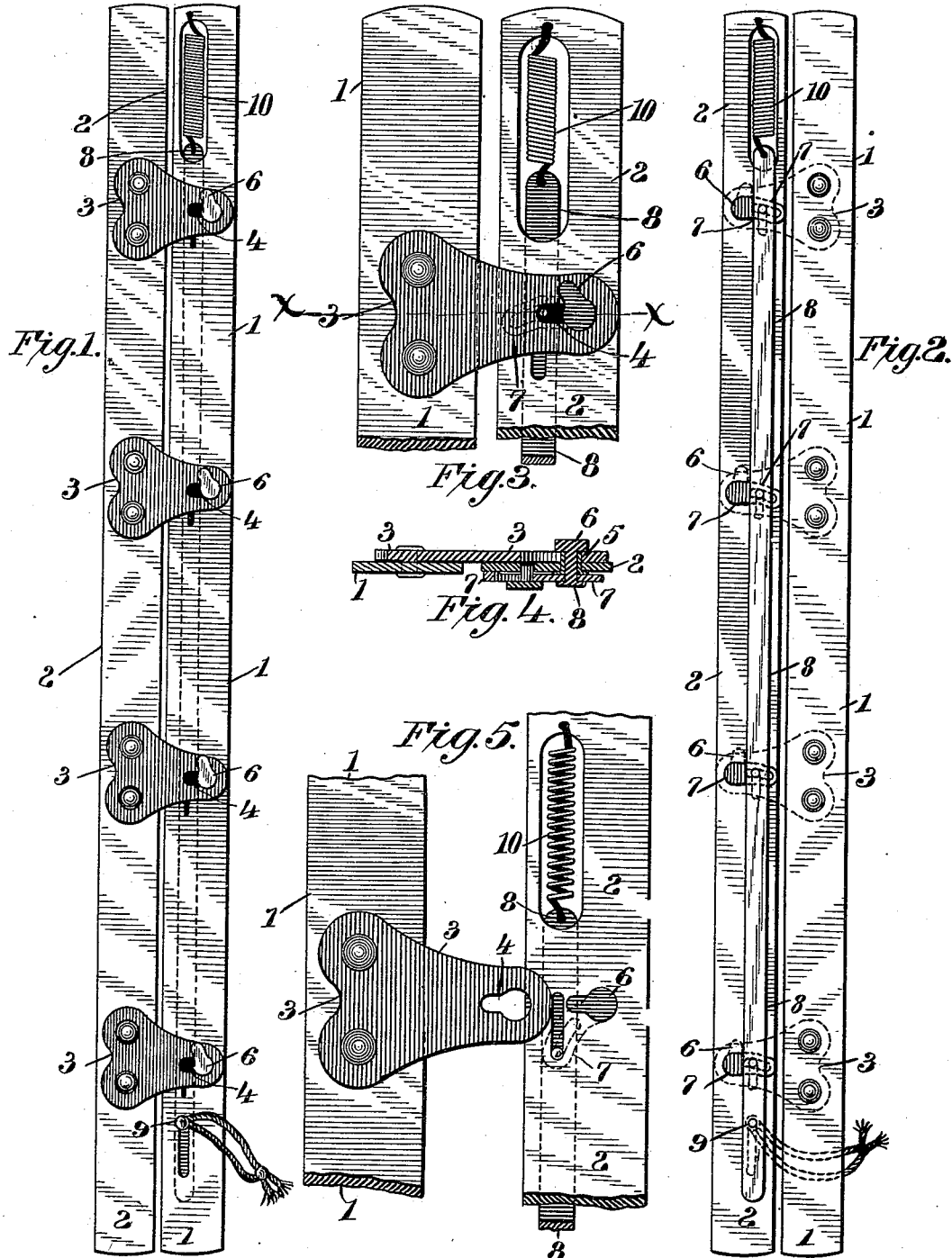


(No Model.)

M. W. HENIUS.
CORSET STEEL CLASP.

No. 419,439.

Patented Jan. 14, 1890.



Witnesses
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UNITED STATES PATENT OFFICE.

MAX W. HENIUS, OF BRIDGEPORT, CONNECTICUT.

CORSET-STEEL CLASP.

SPECIFICATION forming part of Letters Patent No. 419,439, dated January 14, 1890.

Application filed December 7, 1888. Serial No. 292,950. (No model.)

To all whom it may concern:

Be it known that I, MAX W. HENIUS, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Corset-Steel Clasps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in clasps for securing together the steels in the front meeting edges of a corset, and has for its object to provide a device whereby the said steels may be readily joined and automatically locked together as against any accidental release, but by means of which the said meeting edges may be unfastened as to all the locking-points simultaneously when desired. Heretofore certain devices intended to effect this result have been produced; but, so far as I am aware, all of them have depended for their operation upon the formation of the pierced or female member of the clasp in two or more parts, so arranged as to be opened and closed about the stud or male member.

In the clasp herein described I preserve the integrity of the pierced members, which differ in no material respect from the ordinary key-hole-slotted sheet-metal female clasps in common use. I depend for the locking upon the studs, which are of somewhat different construction and shape and operate in a different manner from the fixed studs usually found, combined with the plain key-holed clasp.

In order that those skilled in the art to which my invention appertains may more fully understand its construction and mode of operation, I will describe the same in detail, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a plan view of a pair of steels provided with clasps in accordance with my improvement, said clasps being shown as locked; Fig. 2, a similar view from the rear side of the steels; Fig. 3, an enlarged detail plan view of one pair of clasps; Fig. 4, a

transverse section on line *xx* of Fig. 3; and Fig. 5, a plan view of one pair of clasps, open and separated.

Like numerals denote the same parts in all the figures.

1 and 2 represent the two steels, which are adapted, as will be readily understood, for insertion at the respective front meeting edges of a corset. Secured upon the steel 1 by rivets or other suitable means are the pierced female members 3, having each an opening 4, which may be simply oblong or oval, but which I prefer to make of key-hole form, with the large end of the hole outward, as seen in the drawings.

In a series of holes in the steel 2 are set bushings 5, which may be either immovable or capable of rotation in the holes. Projecting through and having their bearings in said bushings are a series of studs 6, with eccentric heads, which when brought into proper position relative thereto will pass readily through the holes in the female clasps, but which heads, as will shortly appear, are normally held at an angle of, say, forty-five degrees or less to the greatest length of the openings 4. The edges of the studs I prefer to make slightly rounded, so that they may the more easily pass through the clasp-openings. These studs are capable of partial rotation within the said bushings, and each at its end below the steel is provided with a short projecting crank 7, which is connected to a sliding strip 8 at the back of the steel by a pin and slot, or in any other suitable manner, so that it may be turned by the longitudinal movement of the strip.

At one end the strip 8 has a button or handle 9 projecting through the steel, whereby said strip may be moved longitudinally, and at the other end it is connected to the end of the steel by a small spring 10. The spring is herein shown as at the upper and the button at the lower end of the steel; but these positions may be reversed, if required, for convenience of operation or any other reasons; or a different spring may be used in place of the spiral, as shown.

The stud-heads and cranks are arranged at such an angle to each other that when the cranks are in the position in which they are

normally held by the pull of the spring upon the strip the stud-heads will stand at an angle to the line of greatest length of the opening. When, however, the strip is pulled downward against the action of the spring, said strip, through the cranks, turns the studs until their heads coincide with and may be readily passed through the openings, when, the strip being released, they are turned back to their normal position by the pulling action of the spring on the strip. To release the clasps it is only necessary to turn the studs into coincidence with the holes by pulling down upon the slide-strip, when the said studs will readily slip backward out of engagement and the corset be unfastened.

The object of the sleeves or bushings is twofold: to afford a sufficient bearing in which the studs may turn easily, and also to form a holding-point against which the inner edge of the female clasp may pull. Thereby wear upon the stud-shank is obviated, and the latter is left free to turn readily inside the bushing, which takes up the strain of the clasps.

In this my invention I do not wish to be confined to the precise details of construction which I have herein shown and described, since many minor changes entirely within the province of mechanical skill may be made therein without departing from the spirit of my invention, which contemplates the eccentric-headed rotatable studs and the slide-strip for the automatic and simultaneous turning thereof, when combined with female clasps adapted to be engaged by said stud-heads.

I claim—

1. In a corset-steel clasp, the combination, with one of the steels having secured thereon a series of stationary female clasps, of the complementary steel, a series of eccentric studs arranged therein and rotatable about their axis, a sliding strip arranged at the rear of the last-named steel, and suitable connec-

tions between said strip and the studs, whereby the latter may be partially turned upon their axes, substantially as specified.

2. The combination, in a corset-steel clasp, with one steel of the pair, of a series of eccentric-headed studs extending through and having their bearings in said steel, cranks secured to the rear ends of said studs, a slide-strip connected to and adapted to actuate said cranks, and the complementary steel provided with female clasps corresponding in position to the studs, substantially as specified.

3. In a corset-clasp, the combination, with one of the steels, the same having a series of eccentrically-pierced clasps, of the other steel, a series of eccentrically-headed studs corresponding to the clasps and journaled in said steel, cranks secured to and adapted to turn said studs, and a spring-actuated slide-strip at the rear of the steel connected to and adapted to turn said cranks, whereby the heads of the studs may be turned into coincidence with the openings in the clasps, substantially as set forth.

4. The combination, with one of the steels, the same having thereon clasps provided with eccentric openings, of the other steel having therein a series of vertically-arranged bushings, eccentric-headed studs passed through and having their bearings in said bushings, cranks attached to the ends of the stud-shanks beneath the steel, and a spring-actuated slide-strip engaging and adapted to operate said cranks, all arranged as described, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

MAX W. HENIUS.

Witnesses:

S. H. HUBBARD,
M. C. HINCHCLIFFE.