

(No Model.)

F. I. BOWLES.  
CORSET CLASP.

No. 448,631.

Patented Mar. 24, 1891.

Fig. 1.

Fig. 3.

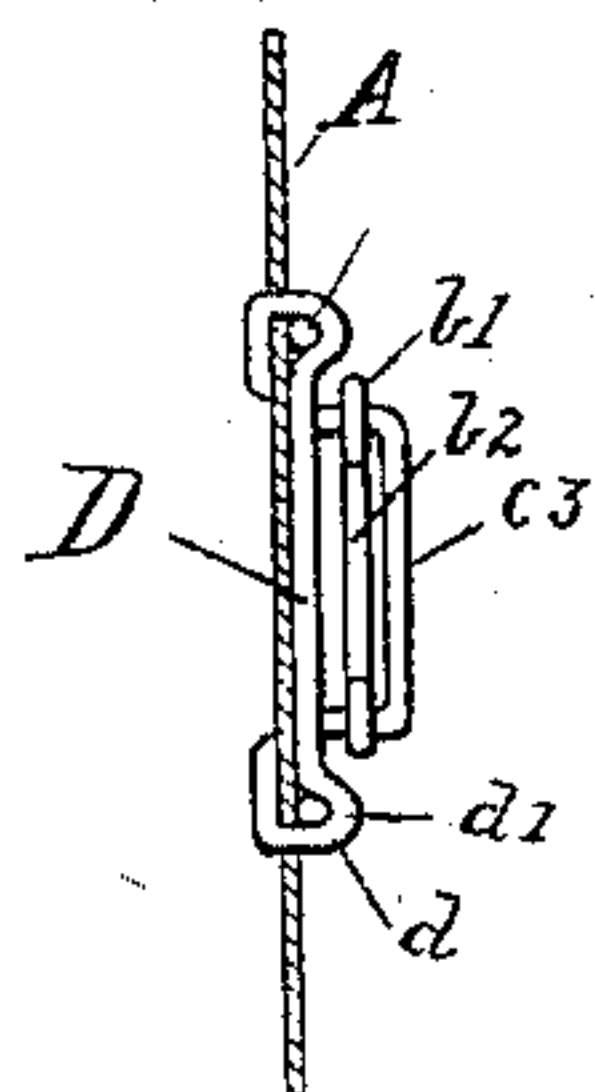


Fig. 5.

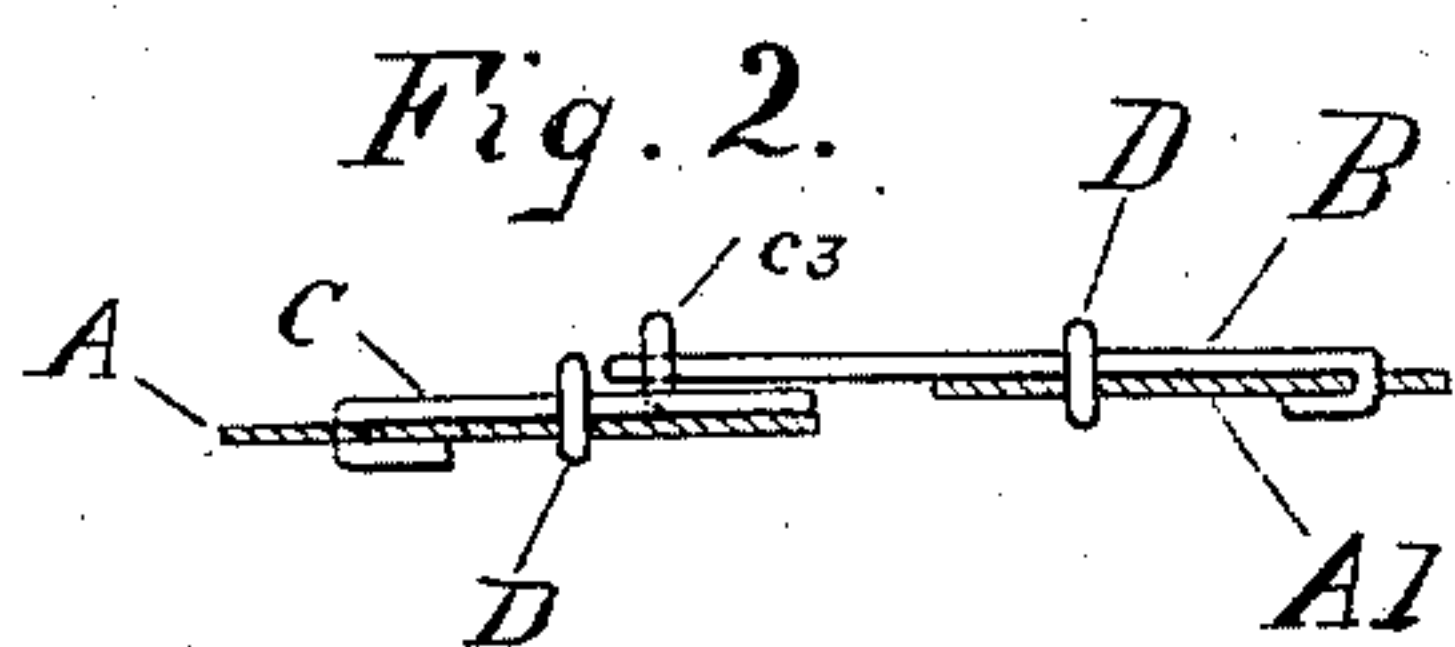
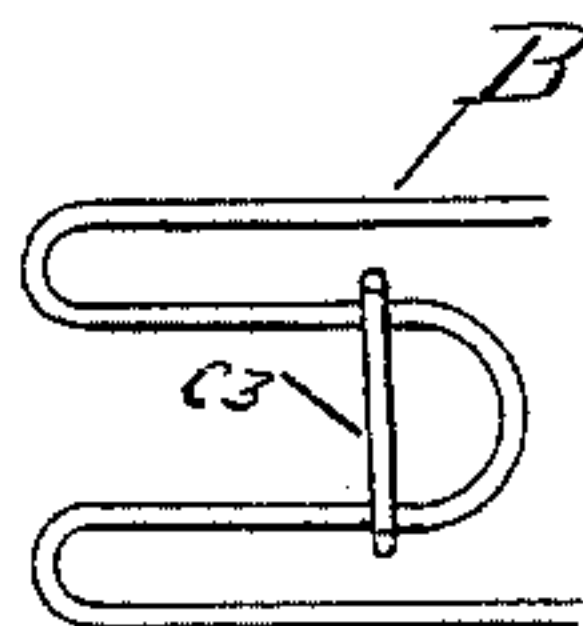


Fig. 4.

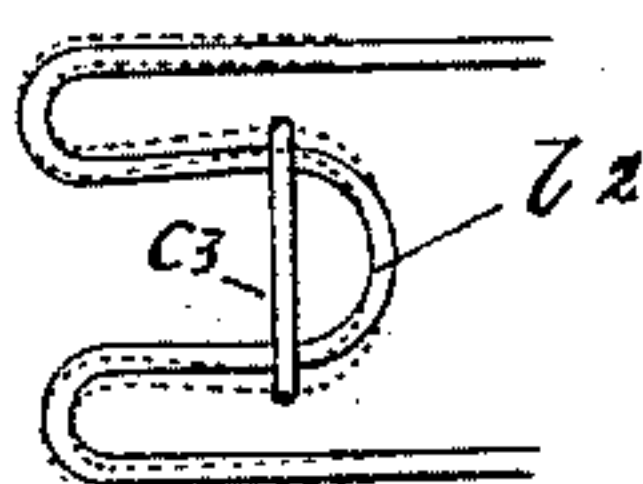
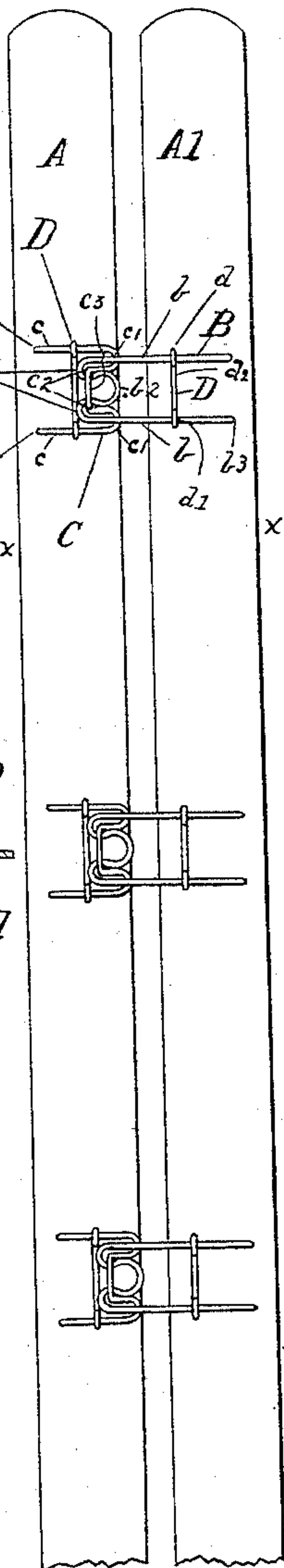
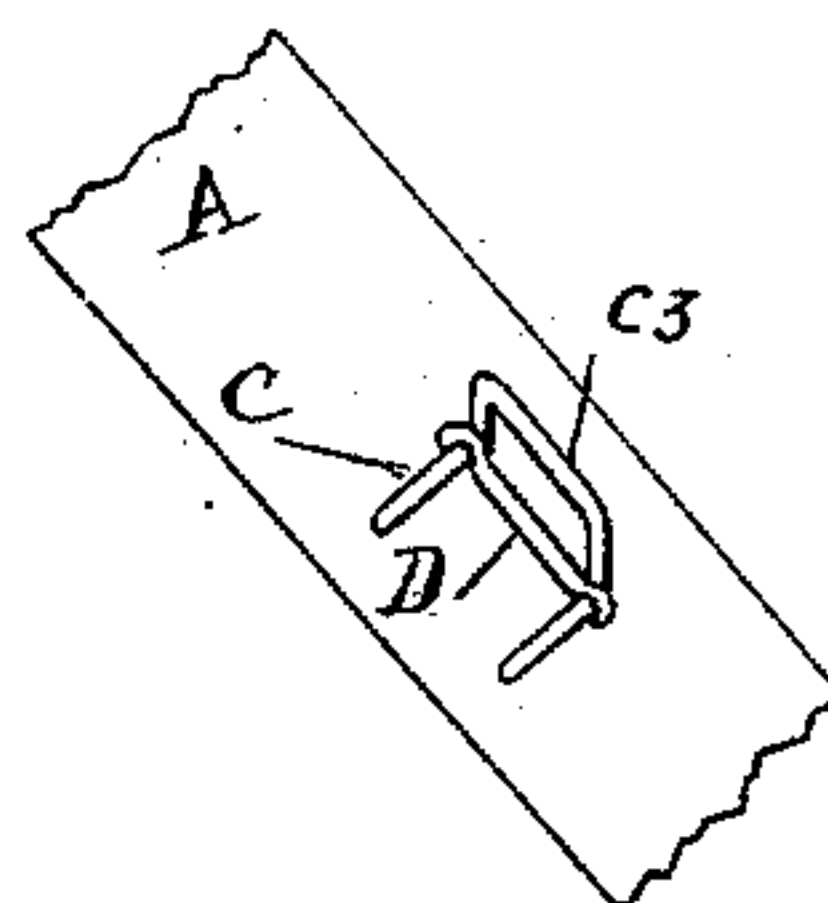


Fig. 6.



WITNESSES

W. G. Hodge.  
C. J. Shipley

INVENTOR

Frank I. Bowles  
By Wm. W. Lippert & Co.  
Attorneys.



# UNITED STATES PATENT OFFICE.

FRANK I. BOWLES, OF DETROIT, MICHIGAN.

## CORSET-CLASP.

SPECIFICATION forming part of Letters Patent No. 448,631, dated March 24, 1891.

Application filed October 21, 1890. Serial No. 368,835. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK I. BOWLES, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Corset-Clasps; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

In the drawings, Figure 1 is a view in elevation of uncovered corset-steels, illustrating my improved clasp. Fig. 2 is a sectional view on the line  $xx$ , showing the corset-clasp in side elevation. Fig. 3 is a section through one of the staples employed with each part of the clasp for holding it in place upon the steel. Fig. 4 is an enlarged view illustrating the tongue of such size that the adjacent parts have to be sprung together to enter the loop. Fig. 5 is a similar view with the tongue of such size as to enter the loop freely without springing. Fig. 6 is a variation in the form of the loop.

It is the purpose of my invention to produce a corset-clasp which shall be made entirely of wire, thus materially cheapening the construction and producing a clasp in which there shall be no material projection above the general surface of the corset; so, also, to produce a clasp in which there may be a certain degree of motion of the steels toward and from each other without liability of unclasping; also, in the provision of means whereby a certain amount of play may be had, and yet be a strong frictional spring lock or engagement to prevent accidental disengagement; also other features of construction.

In carrying out my invention, A and A' represent two adjacent corset-steels.

B represents the tongue portion of the clasp, and C the loop portion of the clasp. The tongue portion of the clasp consists of a single wire having arms  $b$  and bent at  $b'$ , so as to form an intermediate tongue  $b^2$ , located in the same plane with the arms  $b$ . The extreme ends of the wire at  $b^3$  are passed through orifices in the steel and are clinched back of the same, and a clip or staple D assists to hold the said arms  $b$  firmly to the steel. The staple D

has its ends  $d$  passed through orifices in the steel and clinched beneath the same. Then in front of the steel are raised portions  $d'$ , which constitute eyes which embrace the arms  $b$ , while the intermediate portion  $d^2$  rests flush with the face of the steel and prevents either arm  $b$  from being pressed or bent toward the other. The loop portion C is likewise made of a single piece of wire, having parallel arms  $c$ , and is bent at  $c'$  back upon itself in the same plane, then bent upward at  $c^2$ , and across at  $c^3$ , constituting a raised loop. The extreme ends of the arms  $c$  are passed through orifices in the steel and are clinched back of the same at  $c^4$ . There is also employed one of the staples D, as before described, to hold the arms  $c$  firmly in place against the steel. The tongue is engaged with the loop by first carrying the tongue beyond the loop, then springing it down back of the loop, and pulling the tongue through it. This tongue may enter the loop freely, as indicated in Fig. 5, and in that event the two steels will have play toward and from each other the full length of the tongue without there being any possibility of their being disengaged the one from the other. So, also, when fastened to the steels in the relation shown in the drawings, which is their proper relation, the edges of the corset-steels would come together before they would be in position where they could be disengaged, and they could in fact only be disengaged when one steel is made to lap past the other. I prefer, however, a construction in which the tongue  $b^2$  is swelled sufficiently, as shown in Fig. 4, that it will not enter the loop without springing somewhat together, as indicated by the dotted lines, so that when the tongues have passed into the loop it shall by expanding to its normal shape form a firm frictional and spring resistance against an effort to unclasp it from the loop. This insures against any accidental disengagement of the two elements of the clasp. I prefer, also, the form of loop shown, in which the metal is bent back upon itself in the same plane as shown at  $c'$ , since this construction permits the loop itself to spring slightly toward either arm  $c$ , and so accommodate itself to the entering tongue in case the two elements should not be exactly opposite each other, and it also permits the loop itself to open out slightly by springing



the said portions apart as the tongue is crowded through it. This form, however, is not absolutely essential, for the loop may, if desired, be constructed, as shown in Fig. 6, 5 without these reverse bends at  $c'$ .

It will be observed that the loop illustrated in the various drawings projects but very slightly beyond the general surface of the corset-steel, and is therefore not liable to catch 10 upon the clothing of the wearer.

I would have it understood that, while this device is described in connection with a corset, it is clearly applicable in the various places where similar clasps are required.

15 What I claim is—

The combination, with the corset-steels A A', the tongue portion B, having the tongue  $b^2$  and arms  $b$ , and the loop portion C, having the loop  $c^3$  and arms  $c$ , of the clips or staples D, respectively embracing the arms of the 20 tongue and loop portions and having their extremities passed through perforations in the corset-steels and clinched to the under side thereof, substantially as described.

In testimony whereof I sign this specifica- 25 tion in the presence of two witnesses.

FRANK I. BOWLES.

Witnesses:

MARION A. REEVE,  
ARTHUR CUNINGHAM.