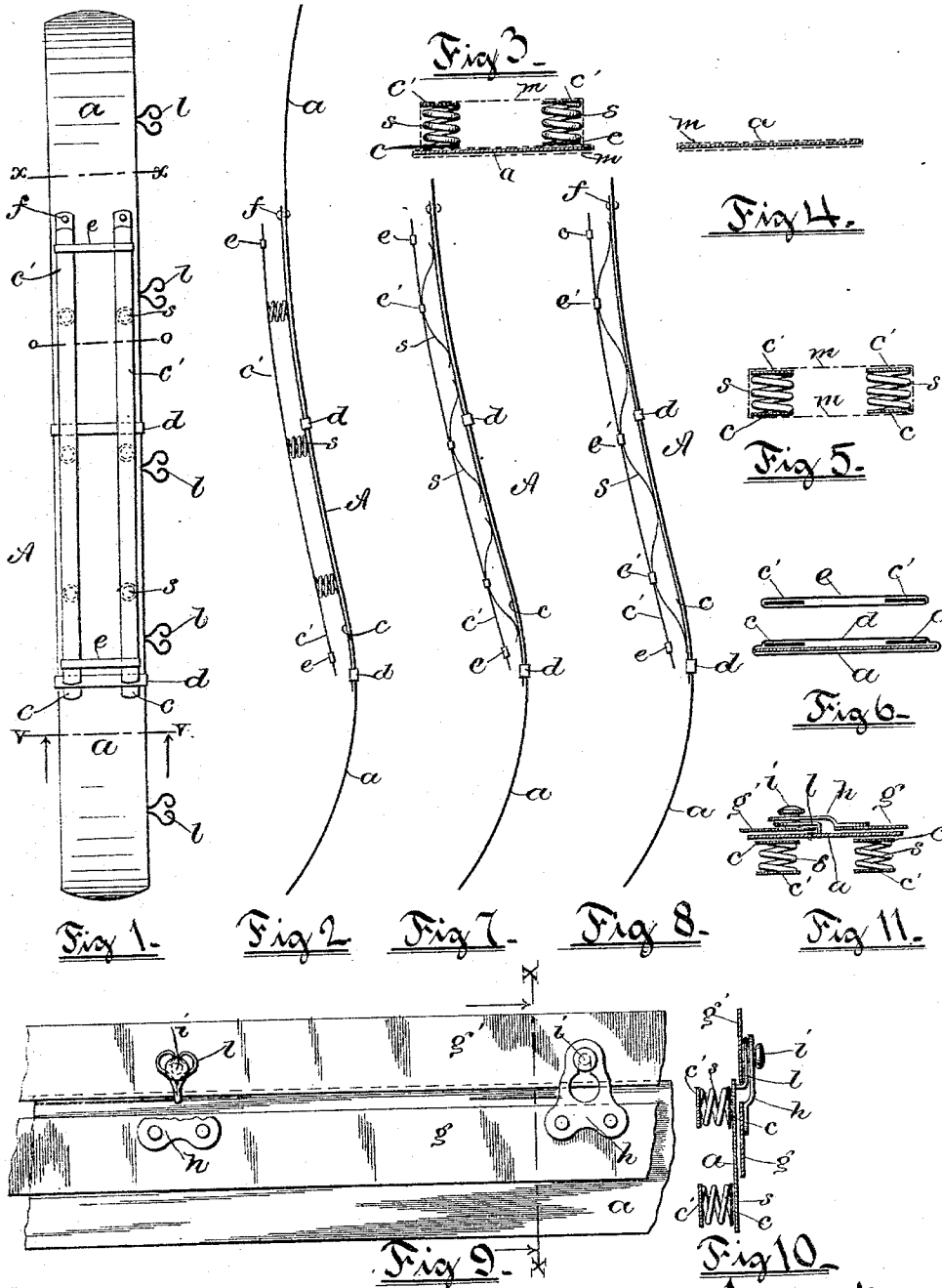


(No Model.)

A. A. WHIPPLE.
CORSET STEEL PROTECTOR.

No. 556,792.

Patented Mar. 24, 1896.



Witnesses.

Frank A. Foster

Ida M. Warren

Fig 10

Inventor.

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UNITED STATES PATENT OFFICE.

ALICE A. WHIPPLE, OF PROVIDENCE, RHODE ISLAND.

CORSET-STEEL PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 556,792, dated March 24, 1896.

Application filed July 20, 1893. Serial No. 481,024. (No model.)

To all whom it may concern:

Be it known that I, ALICE A. WHIPPLE, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Corset-Steel Protectors; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to means for strengthening corset "steels" or springs, or, in other words, the front or clasp portion of corsets; and it consists essentially of a corset-steel protector composed of a bent flexible stay member, a series of yielding auxiliary smaller stays secured to the back thereof, and means whereby the protector may be detachably secured to the corset-steel, all as will be more fully hereinafter set forth and claimed.

While I am aware that in some instances garments of the class above referred to have had the steels provided with flat superimposed ribs or strips of metal riveted thereto, yet such former devices have been found impracticable, owing to the fact that while they undoubtedly strengthened the steel the devices at the same time operated to decrease its resiliency, thus to a great extent neutralizing the principal function of the steel or stay.

The object I have in view is to provide the steel with means whereby the liability to breakage while in use is reduced to a minimum, the efficiency of the steel at the same time remaining unimpaired.

By means of my improvement the garment can be worn with greater comfort and safety, the auxiliary stay being so constructed that it forms a yielding support, thereby to a great extent rendering the garment more durable and efficient.

In the appended sheet of drawings, Figure 1 is a front elevation representing an auxiliary steel or stay provided with yielding strips of metal and embodying my improvement detached from a corset. Fig. 2 is a side view of the same. Fig. 3 is a transverse sectional view, enlarged, taken on line *o o* of Fig. 1.

Fig. 4 is a similar sectional view taken on line *x x* of Fig. 1. Fig. 5 is a cross-sectional view similar to Fig. 3, the backing-stay being omitted. Fig. 6 is a cross-sectional view taken on line *v v* of Fig. 1. Figs. 7 and 8 are side views of my improvement, showing modified forms of the springs. Fig. 9 is a front view showing a part of the clasp portion of a corset combined with my improvement. Fig. 10 is a cross-sectional view taken on line *x x* of Fig. 9, and Fig. 11 is a similar cross-sectional view showing the stay located centrally of the corset-steels.

In carrying out my invention I employ a piece of metal, as steel, rolled flat and then tempered to form a stay *a* and adapted in use to be located at the back of the front steel or clasp portion *g g'* of a corset, as usually constructed. The said stay *a* is provided at its back with one or more series of narrower metallic reinforcing-strips *c*, each having a similar strip *c'* attached thereto, and, further, having light yielding springs *s* interposed between and separating the parts *c* and *c'*. I prefer to make the latter somewhat shorter, as well as more flexible, than the stay *a*, as clearly shown in Figs. 1 and 2, the whole when thus combined forming an auxiliary stay *A* for the corset, by means of which the garment can be worn with greater comfort and at the same time the liability to breakage of the steel *g g'* is practically overcome.

The upper end of the reinforcing-strip *c* may be secured to the stay *a* by means of a rivet *f*, or in any other suitable manner whereby the proper relation and position of the strip to the stay are maintained. The strips may be further held in position laterally by means of guide-loops *d*. The outer strips *c'* are, as drawn, separated laterally by end spreaders *e* and are fastened to the springs *s*, the latter, as indicated in Figs. 7 and 8, being secured to the strips *c'* by fastenings *e'*. I would state that practically the several parts *a c c'* are covered with cloth *m*, (see dotted lines, Figs. 3, 4 and 5,) the cloth being omitted from the other figures in order to render the drawings clearer.

My improved reinforcing-stay *A* when covered with cloth, as before stated, may be secured to the corset by stitching. In some cases, however, I prefer to provide the stay

with a series of catches or fastenings *l*, arranged to engage with the usual clasp-pins *i* of the corset-steel *g'*. When thus constructed, the stay can be readily attached to or detached from the corset. Figs. 9 and 10 represent my improved stay thus combined with the usual steels *g g'* and clasping device.

The stay *a* may be first bent or curved to conform to the shape of the wearer, after which it is inserted into the front of the garment and at the back of the steels *g g'*, the device in use being so arranged that the short flexible strips *c'* lie contiguous to the body of the wearer.

It will be seen, referring to Fig. 11, that by locating the catches or fastenings *l* at or near the center of the stay *a* the latter will then bear uniformly against both portions of the steels *g g'*. I prefer to make the stay of one comparatively-wide piece of stock, although it may be composed of two narrow pieces without departing from the spirit of the invention.

By means of my invention it will be apparent that the front steels of the garment cannot become accidentally broken when in use, since the reinforcing-stay *a* and its flexible resilient strips *c c'* serve to prevent the steels from being bent abruptly. The device, moreover, permits the steels to return to the normal position.

In addition to the foregoing advantages the device renders the garment more durable and efficient, and it can be worn with greater ease and safety, as before stated.

I claim as my invention and desire to secure by United States Letters Patent—

1. In a corset-steel protector, the combination with the bent bust or stay member *a*, of a series of laterally-separated auxiliary stays, as *c, c'*, smaller and shorter than said stay *a*, springs interposed between the adjacent sides or faces of the auxiliary stays, and means for securing the latter to the stay *a*, substantially as described.

2. The combination, in a corset-steel protector, of the flexible bent principal stay member *a*, a series of auxiliary flexible stays, shorter and narrower than said member *a*, secured to the back of the latter, springs interposed between the adjacent faces of the said principal and auxiliary stays, and fastenings, as *l*, secured to the stay *a*, by means of which fastenings the protector is capable of being attached to the corset.

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

ALICE A. WHIPPLE.

Witnesses:

GEO. H. REMINGTON,
IDA M. WARREN.