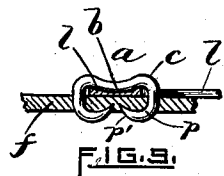
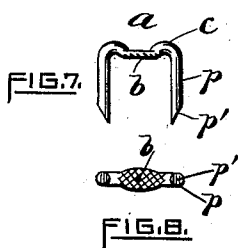
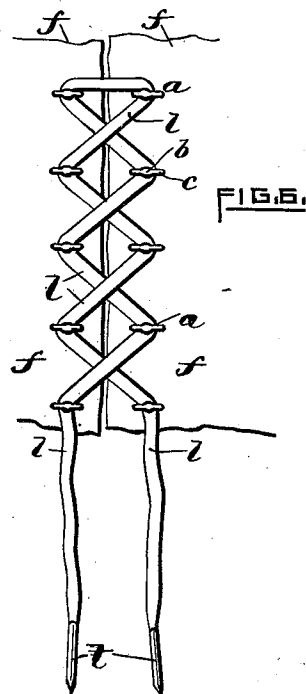
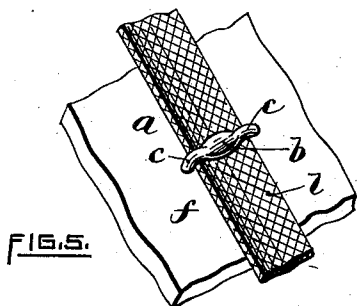
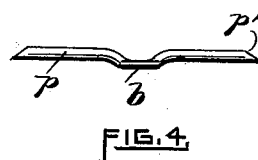
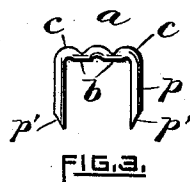
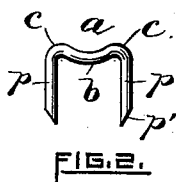
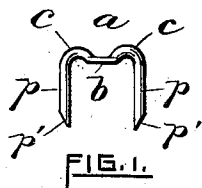


(No Model.)

G. W. PRENTICE.
SHOE FASTENING.

No. 506,861.

Patented Oct. 17, 1893.



WITNESSES.

Charles H. Higinson
H. E. Carpenter

INVENTOR.

George W. Prentice
by Remington D. Henthorn
Attys.

UNITED STATES PATENT OFFICE.

GEORGE W. PRENTICE, OF PROVIDENCE, RHODE ISLAND.

SHOE-FASTENING.

SPECIFICATION forming part of Letters Patent No. 506,861, dated October 17, 1893.

Application filed March 3, 1891. Serial No. 383,559. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PRENTICE, 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 Two-Prong Metallic Staples; 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 has relation to two-prong staples, and it consists essentially of a staple, of the class referred to, having a bent head portion uniting the prongs, thereby forming a central depression and a yielding or spring-tie or bridge.

My improved staple is well adapted to be used on wearing apparel, such as gloves, shoes, &c. When thus employed the staple is secured thereto by bending and clinching the prongs thereunder, the bent top or head-portion at the same time being in contact with the upper or outer surface of the material. By thus attaching the staples along the adjacent fastening edges, say of a glove or shoe, and properly introducing the ends of a lacing between the material and the staple-heads the latter will not only prevent the lacing from being drawn out sidewise or laterally but at the same time act to frictionally hold it in position.

In the appended drawings illustrating my improved two-prong staple, Figure 1 is a side elevation, enlarged. Figs. 2 and 3 are similar views, showing modified forms of the staple-head. Fig. 4 shows a piece of prepared wire before having its end portions bent to form the prongs. Fig. 5 is a perspective view showing the staple, as in use. Fig. 6 shows, in reduced scale, a manner of arranging the staples when combined with a lacing. Fig. 7 shows the staple having the tie or head provided with a roughened face. Fig. 8 is an inverted plan view thereof, and Fig. 9 is a partial sectional view showing the staple (Fig. 2) in use.

In the drawings *a* indicates my improved

two-prong staple complete. I preferably make it of wire, round cross-sectionally, although other forms of wire may be employed.

The staple consists of two legs or attaching prongs *p* united at the top by a bent yielding tie or bridge *b*. This latter forms a central depression and constitutes the essential feature of my invention; the said tie-portion may be flattened laterally, as indicated in Figs. 1, 4, 5, &c., or it may be bent as shown in Figs. 2 and 3, or in any other desirable form. In any case the two prongs extend upwardly beyond the intermediate or center portion of the tie, thus producing a depressed bridge *b* as stated, its points of union *c* with the prongs being well rounded.

My improved staple when properly attached to the fabric, leather or other material, as *f*, Figs. 5 and 9, forms a yielding spring-tie adapted to receive a lacing *l* between it and the adjacent face of the material, see Fig. 9; the interposed lacing being retained or held by frictional engagement with the said faces, the two penetrating prongs at the same time preventing the lacing from being drawn out sidewise. The lower face of the tie *b* may be roughened or serrated, see Figs. 7 and 8, thereby increasing its retaining capacity.

The staple-blank may be cut from a piece of wire, at the same time forming in it a central depression *b*, substantially as shown by Fig. 4; the blank is next reduced to a staple-form by bending the two end portions downwardly, thereby producing the attaching prongs or legs *p*, Fig. 1, &c. To facilitate the insertion of the prongs into the material or fabric *f* the entering ends may be beveled or otherwise sharpened, as indicated by *p'*. The staple *a* is well adapted to be attached to the material *f* and clinched thereunder, see Fig. 9, in any well-known manner.

In Fig. 6 are represented two adjacent parts of a portion of an article of wearing apparel, as for example, a glove, shoe or corset, provided with a series of my improved staples, combined with a lacing *l*; the latter may be readily inserted by first introducing the metallic tips *t* between the contiguous surfaces of the spring ties or heads *b* and the material *f*.

I claim as my invention—

1. As an improved article of manufacture, the two-prong wire staple hereinbefore described, consisting of two puncturing prongs, a depressed tie or head portion uniting the
5 prongs, and having the angles formed at the intersection of the head with each prong substantially semi-circular.

2. The one-piece wire staple *a*, consisting of a yielding depressed head or tie portion *b*,
10 two puncturing prongs *p p* having the upper portions well rounded and terminating in and

uniting with said head, and having the under side of the head roughened or otherwise adapted to frictionally engage the surface of a flexible lacing, substantially as described. 15

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

GEORGE W. PRENTICE.

Witnesses:

CHARLES HANNIGAN,
F. A. SMITH, Jr.