(No Model.)

C. H. PRATT.

FASTENER FOR SHOES.

No. 559,463. Patented May 5, 1896.

Fig. 1.

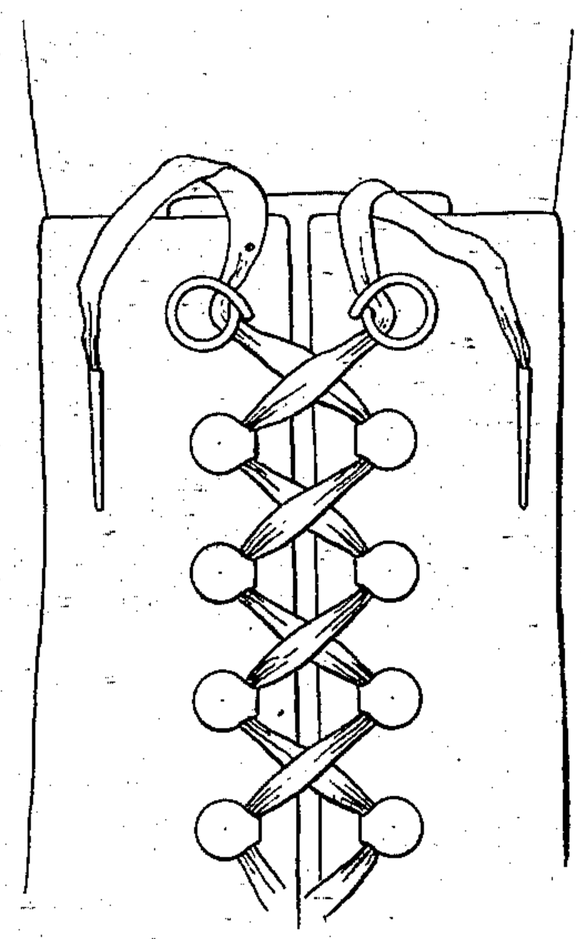


Fig. 2.

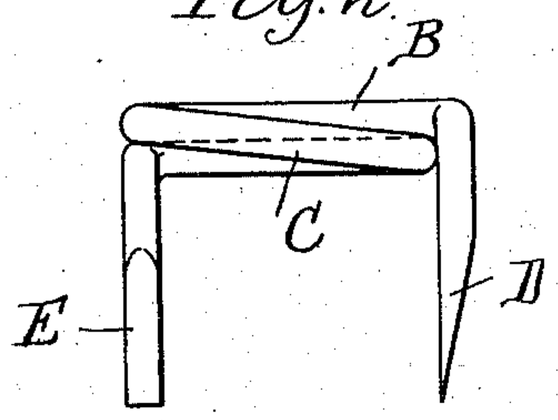


Fig. 3.

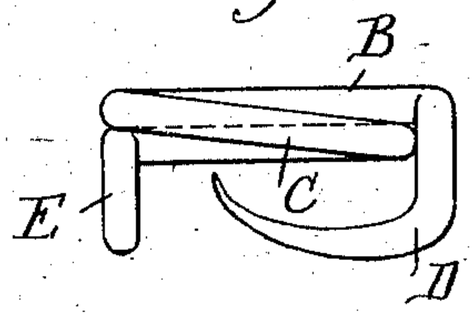
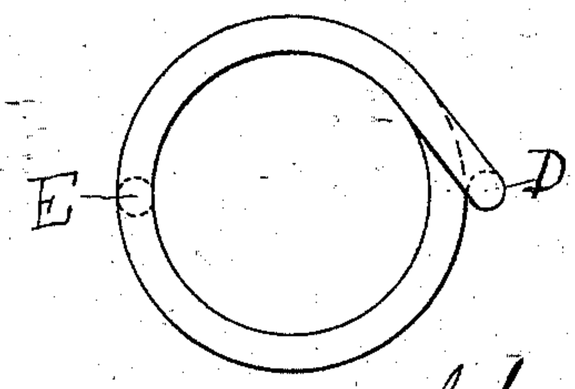


Fig. 4.



Witnesses.
Wm. N. Rheem.
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Inventor.
Charles H. Pratt.
by Brown & Darby Atty's.

UNITED STATES PATENT OFFICE.

CHARLES H. PRATT, OF BUTTE, MONTANA, ASSIGNOR TO THE PRATT FASTENER COMPANY, OF NEW HAMPSHIRE.

FASTENER FOR SHOES.

SPECIFICATION forming part of Letters Patent No. 559,463, dated May 5, 1896.

Application filed February 10, 1896. Serial No. 578,694. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. PRATT, a citizen of the United States, residing at Butte, in the county of Silver Bow and State of Montana, have invented a new and useful Improvement in Fasteners for Shoes, of which the following is a specification.

My invention relates to that class of fasteners made of wire wherein each fastener forms a means for engaging and holding a lace. This class of fasteners may be used in connection with shoes, gloves, corsets, and various other articles.

The object of my invention is to produce a fastener capable of economical manufacture by machinery and which will be most efficient in use.

The invention consists in substantially the construction set forth in the subjoined specification, and more particularly pointed out in the claims appended.

Like letters of reference designate the same parts in the several figures of the drawings, in which—

Figure 1 is a front view of an article with a series of the fasteners applied thereto and a lace engaged and held by such fasteners. Fig. 2 is a side elevation of the fastener before it is clenched. Fig. 3 is a side elevation of the fastener after it is clenched. Fig. 4 is a plan view of the fastener.

The fastener is composed of a single piece of wire of suitable gage and length, which is bent into a coil of one whole convolution, and a partial and preferably half-convolution, one of these convolutions having its free end projecting outside of beyond and at an angle to the plane of the convolution. The other end projects beyond the convolutions and from the point of beginning of one of them. The two ends of the wire are intended to pass through the material and to be clenched or otherwise fastened on the inside of such material, and it is desirable that that end which passes outside of the convolutions shall after passing beyond the same be bent inwardly below and transversely of the convolution, so that the one convolution will have its side inclosed within a sort of U-shaped yoke, as illustrated at the right-hand side of Fig. 3 of the drawings. The object of having the end of one convolution pass outside of the plane of the convolutions is to make it serve as a post or stop to resist the strain of the engaging lace and to impede lateral movement of the convolution resting against the same, and when this end is bent inwardly in clenching the action just described is intensified. In the drawings, and as a preferable construction, the convolutions are composed of an upper and a lower convolution and the free end or post passes beyond the convolutions at substantially a right angle, although this arrangement of coils and this angle for the post are not absolutely necessary, the essential point being that the end of one convolution passes outside of the other convolution and acts to thereby confine it after the manner of a stop or post.

The partial convolution is designated by the letter B, and the complete convolution by the letter C, while the ends projecting at angles from such convolutions are respectively lettered E and D. These ends may be beveled, as shown in Fig. 2 of the drawings, for the purpose of facilitating their passage through the material and the bending of the same in clenching. Many variations may be made in the details above described without departing from the principle of the invention.

With this fastener the lace is prevented from slipping or rendering and is ravelable at will, because each loop constitutes a separable point of the fastening, which may be adjusted independently of the other loops and without distributing the strain.

What I claim, and desire to secure by Letters Patent, is—

1. A lace-fastener comprising a single strand of wire, bent to form convolutions, the free end of one projecting down outside of and at an angle to the plane of the other convolution, whereby the lateral movement is impeded; as and for the purpose set forth.

2. A lace-fastener, comprising a single strand of wire, formed into a coil composed of a lower complete convolution and an upper partial convolution, the end of the upper being turned to substantially a right angle with the plane of the coil and outside the lower convolution; substantially as described.

3. The combination with a body of sup-

porting material and a lace, of a fastener for such lace, comprising a single piece of wire formed into a coil composed of convolutions superposed one above the other and the free end of the upper projected outside the lower and at right angles to the plane of the coil, and the free end of the lower projected therefrom at a similar angle, and both adapted to be secured to the inside of such material; substantially as described.

4. A shoe-lace fastener, consisting of a single wire formed of convolutions, the free end of one projecting outside of and beyond the other convolutions, and bent inwardly below the convolutions; substantially as and for the purpose set forth.

In witness whereof I have hereto set my hand this 28th day of January, 1896.

CHARLES H. PRATT.

Witnesses:

MARTIN V. BARNEY,

A. P. DODGE.