

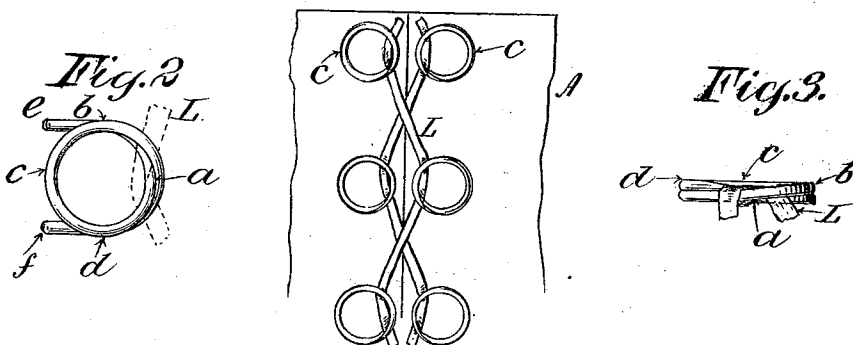
(No Model.)

J. WALDEN.
LACE FASTENER.

No. 505,909.

Patented Oct. 3, 1893.

Fig. 1.



Witnesses.

D. W. Gardner.

H. Gerald Chapin.

Inventor.

Joseph Walden

UNITED STATES PATENT OFFICE.

JOSEPH WALDEN, OF ORANGE, NEW JERSEY.

LACE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 505,909, dated October 3, 1893.

Application filed November 17, 1892. Serial No. 452,238. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH WALDEN, residing at Orange, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Lace-Fasteners, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in fasteners for the laces of shoes, gloves, corsets, &c. Its operation will clearly appear from the drawings, in which—

Figure 1 is a front elevation of the top of a shoe which has six of my improved fasteners attached thereto. Fig. 2 is a top view of the fastener, and Fig. 3 is a cross-section.

In each figure the lace is shown inserted in the fastener.

My improved device consists of a single piece of spring wire, and it is constructed in the following way: The central portion of the requisite length of wire is first bent so as to form of said central portion, the circular head *a b c d* which is completed at the intersecting neck *a*. The arm portions of the wire are each then bent upward, from the said neck *a*, to form two base pieces *a e* and *a f*. These are substantially parallel to each other, and they also are in the same plane. Their said plane is also parallel to the plane of the circular head *a b c d*. The said base pieces *a e* and *a f* are clearly shown in Figs. 2 and 3. They must be of sufficient length to extend, and be adapted for extension through and to be bent under the material of the article to which the said fastener is to be attached. This completes my improved fastener. Between the said circular head and the base-pieces *a e* and *a f*, the lace *L* is then to be inserted, in the usual manner. When drawn

closely to the intersecting neck *a*, it will be held tightly in place, by reason of the said intersection and crossing of the spring wire, and the mutual springing and pressure between the said circular head and the adjacent base-pieces which are attached to the material, as above described.

As will be seen from Figs. 2 and 3, the lace *L* passes, first, under the portion *a d*, then over the portion *a e*, and afterward under the portion *a b*. The greater the downward tension on the lace, the more firmly is it held in position. This applies to a lace of any suitable shape or material.

The size and quality of the spring wire used for the fastener will depend upon the article to which the fastener is to be attached.

My improved device may be attached at any desired point, to hold the end of the lace, or several of them may be used (as shown in Fig. 1) instead of the ordinary studs or hooks, on the material *A*.

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

As an improved article of manufacture, a lace-fastener consisting of a single piece of spring-wire, and comprising the circular head *a b c d*, the intersecting neck *a*, and two base-pieces *a e* and *a f*, which base-pieces lie in the same plane and are also parallel to each other, the said plane of said base-pieces being parallel to the plane of said circular head, and the ends of said base pieces being adapted to be inserted through the desired material, and bent thereunder, substantially as shown and described.

JOSEPH WALDEN.

Witnesses:

H. GERALD CHAPIN,
CHARLES L. DENKS.