F. NOACK,
Shoe-Fasteners.

No. 215,286. Patented May 13, 1879.

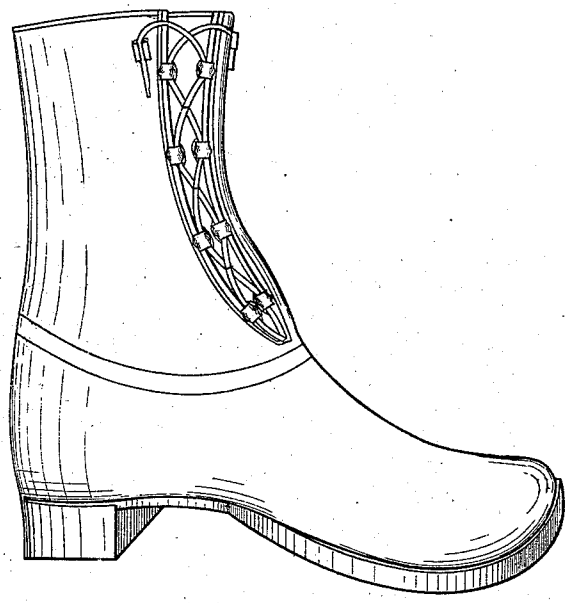


Fig. 1.

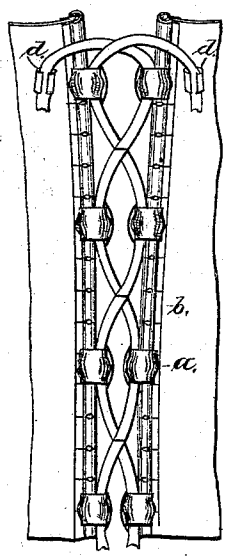


Fig. 2.

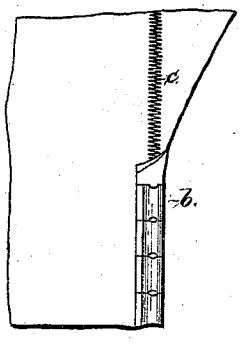


Fig. 3.

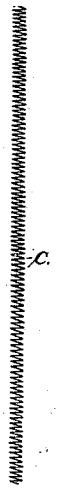


Fig. 4.

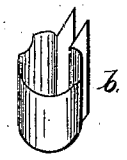


Fig. 5.

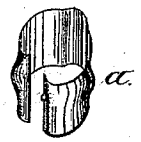


Fig. 6.

WITNESSES:

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FRIEDRICH NOACK, OF ALLEGHENY, PENNSYLVANIA.

IMPROVEMENT IN SHOE-FASTENERS.

Specification forming part of Letters Patent No. **215,286**, dated May 13, 1879; application filed February 15, 1879.

To all whom it may concern:

Be it known that I, FRIEDRICH NOACK, of the city of Allegheny, county of Allegheny, State of Pennsylvania, have invented a new and useful Improvement in Tying or Fastening Shoes and Boots Easily and Quickly, of which the following is a specification.

The object of my invention is to provide a shoe-fastener to do away with threading the string through eyelets or hooks, and which is easily fastened or loosened by merely drawing the string from the top, or opening the shoe.

My invention consists in providing the flexible ways with a spiral spring, as the core of said way, in order to insure elasticity and flexibility.

In the accompanying drawings, Figure 1 is a view of my device attached to the shoe. Fig. 2 is an enlarged view of the device, showing the parts. Fig. 3 is a view of the devices used in forming the way, with part of the exterior broken away. Fig. 4 is a view of the spiral spring which forms the core of the way. Fig. 5 is a view of one of the clamps which form the exterior of the way. Fig. 6 is a view of one of the runners.

Similar letters indicate like parts in the different figures.

a are the runners through which the string passes, and which slide up and down the ways. *b* are the clamps or pieces which form the exterior of the ways. *c* are the spiral springs which form the core of the ways. *d* are clasps placed at the top of the shoe to receive and hold the string when the shoe is drawn up.

The spiral spring, which is very elastic, is the core of the way. Around this is placed the leather, as shown in Fig. 3, and over all are placed the clamps *b* and pinched in place. In pinching the clamps a channel is formed on each side, which furnishes a better bearing and attachment for the runners.

It will be noticed that the clamps are cut away on the side, so as not to offer any obstruction to the flexibility, and that with the spiral springs and leather covering they form a way which is completely flexible, yielding readily to the action of the foot.

The operation of my device is obvious. When it is desired to close the shoe, the string is pulled and the runners rise on the ways, the sides of the shoe are drawn together, and the fastening is completed by inserting the ends of the string into the clasps *d*. When it is desired to open the shoe, the ends of the strings are released from the clasps *d* and the sides of the shoe are drawn apart, the bending of the ways driving the runners down.

It will be seen that the ways are entirely independent of the shoe, and may be attached to any shoe, whether new or old, or may be formed in the manufacture.

I am aware that shoe-fastenings similar to mine have been constructed, and I do not claim, broadly, the devices used in this sort of fastening; but

What I do claim is—

The shoe-fastening consisting of the flexible ways composed of the spiral springs *c*, the leather covering and the metal clamps *b*, the runners *a*, the string, and suitable clasps, as shown and described.

FRIEDRICH NOACK.

Attest:

JAMES H. PORTE,
JOS. M. FURDMAN.