I.I.Ford.

Shoe Fastening.

Nº 111,625. Fatented Feb.7, 1871. Fig. W.

United States Patent Office.

FRANKLIN D. FORD, OF NEW BEDFORD, MASSACHUSETTS.

IMPROVEMENT IN BOOT AND SHOE FASTENINGS.

Specification forming part of Letters Patent No 111,625, dated February 7, 1871,

To all whom it may concern:

Be it known that I, FRANKLIN D. FORD, of New Bedford, in the county of Bristol and State of Massachusetts, have invented new and useful Improvements in Fastenings for Boots and Shoes; and I do hereby declare the following to be a clear and exact description thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand and use the same, reference being had to the accompanying drawings, making part of this specification, in which-

Figures 1 and 2 are perspective views of shoes having my invention applied thereto. Fig. 3 is a top view of a fastening previous to bending and application to the ring through which lacing is passed. Fig. 4 is a side view of the complete fastening as applied to the ring. Fig. 5 is a top view thereof. Fig. 6 is a side view of the device as applied to a boot. shoe, or other article of wear; and Figs. 7 and 8 are views of the fastening for the ends of the lacing.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in lacing gaiters or shoes by passing the said laces through alternate holes, as will hereinafter more fully be set forth.

It also consists in a fastener for connecting

the rings in position.

In the drawings, A may represent a boot, shoe, legging, or other article of wear, which I shall designate in this specification as a "shoe." B B is the lacing applied thereto. It consists of two laces, which are passed through the lowermost rings, hooks, links, or eyelets at the sides of the opening which allows the foot to be introduced into the shoe. The middle of the laces rest in the ring, hook, link, or eyelet, while their four ends are free and in position ready for the operation of reeving. I shall hereinafter designate the ring, hook, link, or eyelet as the "ring" or "rings," as either may be employed without deviating from my inven-I take one of the laces on one side and cross it to the first ring on the opposite side, and run it through it. The same operation is performed with the corresponding lacing on

regularly reeved up to the top of the shoe by crossing them and passing them through the rings, skipping every alternate ring on each side, so that when the top is reached there will be found a series of rings alternately occupied by the lacing and alternately unoccupied. There is yet a single lacing unemployed, and this remains at the bottom of the opening. Its side parts or ends are now run up similarly to the first operation, and they fill up the unoccupied rings. It is readily seen that the precise mode of handling the lacing, as to which lacing shall first be run up, may be varied. It is essential, however, that as each lacing is run up it will pass one ring on both sides, and thus leave room for the following lacing. When the double lacing is fully reeved, the two ends on each side are preferably knotted or tied together for united operation. The advantages of the employment of the double lacing and the method of reeving are that whenever the wearer of the shoe draws the lacings on one side there are always two points of purchase or leverage alternating from side to side, from top to bottom, whereby the wearer has great purchase or leverage for lacing the shoe. Should one of the lacings or both sides break, the remainder will hold the shoe sufficiently close until a new lacing is supplied. Should both of the lacings on one side break, those on the other side will likewise prevent the opening of the shoe, and should there be a breakage of two on one side and one on the other the remaining one will yet provide means of keeping the shoe closed.

C represents a mode of securing rings or equivalent devices to the fabric. In the present case I employ the ring D, which consists of two parts or rings continuous of each other. one portion of which, d, being horizontal, and

the other, d', is vertical.

E is the fastener. It consists of a plate having two prongs, a a, at one side, and one or two prongs, b b, at the opposite side. The two prongs a a are adapted to embrace or straddle the central portion of the ring D, and the other prong, b, to enter the horizontal eve or ring d. After the prongs are thus located they are pressed into the fabric and turned under it, so as to firmly clinch or hold the the opposite side. These two lacings are then I fastener in place, and thereby retain the ring

securely in the fabric. It will be seen that the ring is prevented from moving in any direc-

tion unless worn out or broken.
Having thus described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. The mode of lacing a shoe by means of the laces B B, recved in alternate holes, substantially as herein shown and described.

2. The fastener E, for securing rings to the shoe, constructed and operating substantially as déscribed.

The above signed by me this 1st day of March,

1870.

FRANKLIN D. FORD.

Witnesses:

JOHN A. WIEDERSHEIM, W. H. FINCKEL.