No. 707,694. Patented Aug. 26, 1902.

J. F. HAWKES.

SHOE FASTENER.

(Application filed Nov. 20, 1901.)

(No Model.)

Fig. 1.

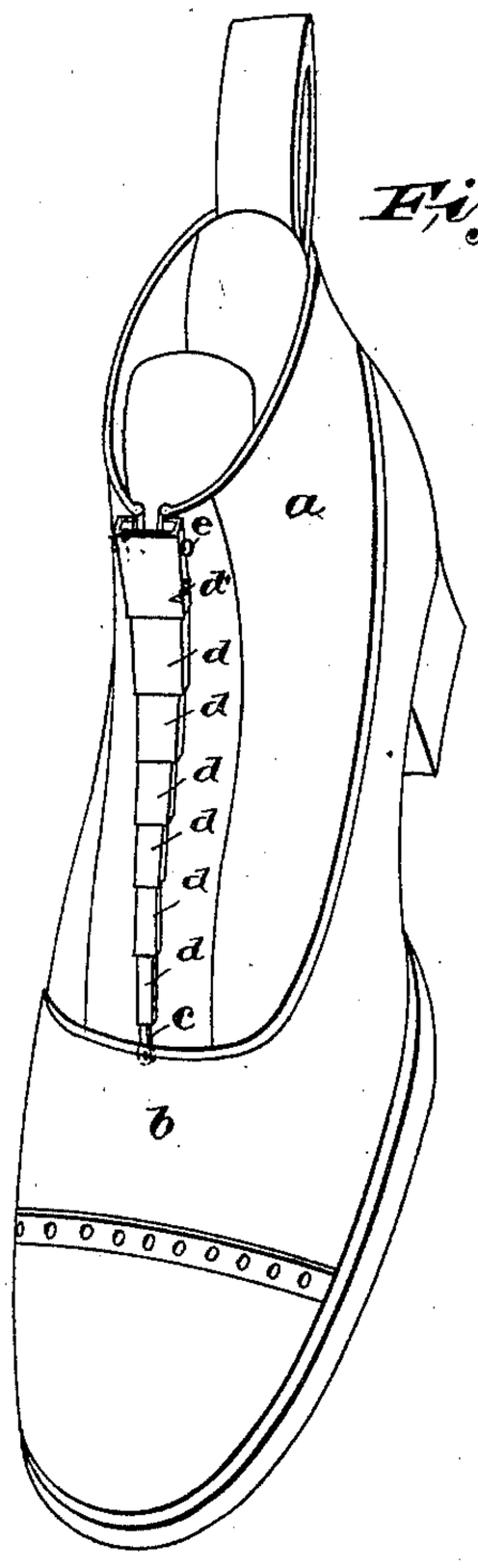


Fig. 2.

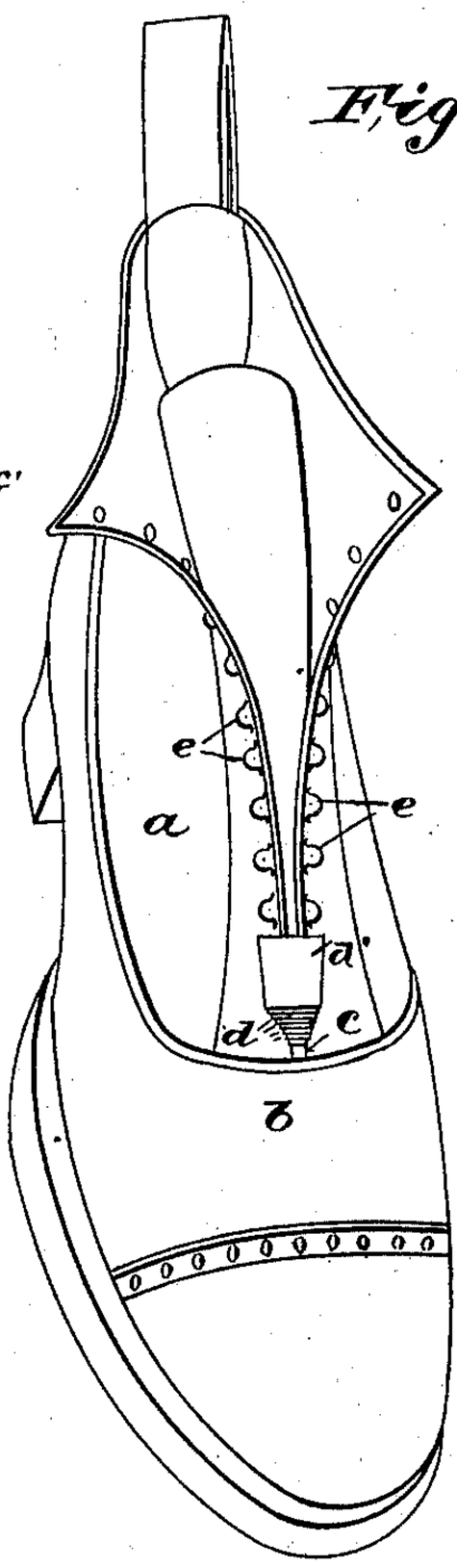


Fig. 4.

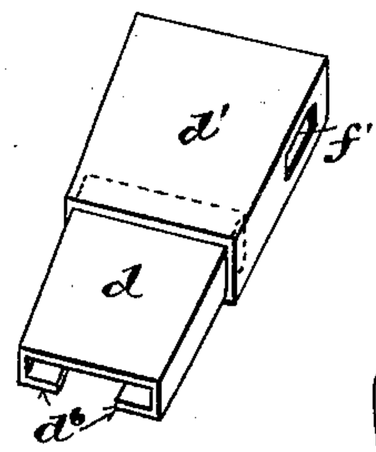


Fig. 3.

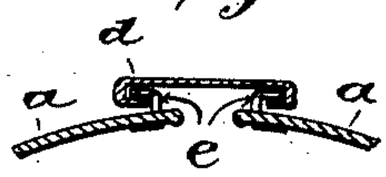


Fig. 5.

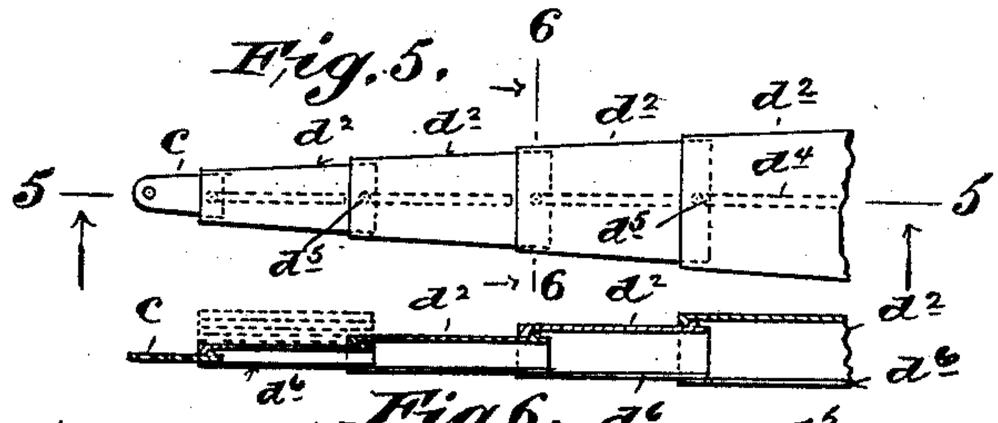


Fig. 6.

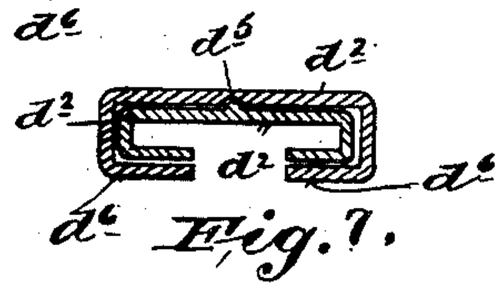
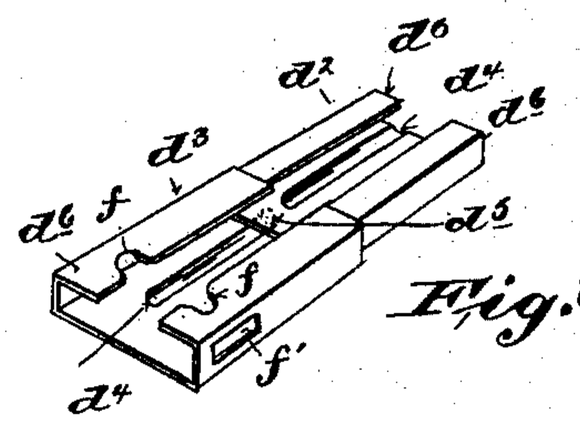


Fig. 7.

Fig. 8.



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UNITED STATES PATENT OFFICE.

JOHN F. HAWKES, OF JERSEY CITY, NEW JERSEY, ASSIGNOR OF ONE-HALF TO SAMUEL BLATT, OF JERSEY CITY, NEW JERSEY.

SHOE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 707,694, dated August 26, 1902.

Application filed November 20, 1901. Serial No. 82,988. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. HAWKES, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented a certain new and useful Improvement in Shoe-Fasteners, of which the following is a specification.

I will first describe the improvement in detail and then point out the novel features thereof in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a shoe with the fastener attached and laced. Fig. 2 is a view of the same with the fastener telescoped. Fig. 3 is a sectional view in section through one of the sections of the fastener in position on a section of a shoe. Fig. 4 is a perspective view of two of the series of sections of the fastener. Fig. 5 is a plan view of a modification. Fig. 6 is a sectional view of the same on lines 5 5, Fig. 5. Fig. 7 is a sectional view through Fig. 5 on lines 6 6, and Fig. 8 is an under side view of the two upper sections of fastener illustrated in Figs. 5, 6, and 7.

Similar letters of reference designate corresponding parts in all the figures.

a designates the upper of a shoe, and *b* the portion of the shoe to which the upper is secured.

c designates a rod secured to the shoe in any desired manner.

d designates sections of the fastener. Each of the sections *d* is bent around, as shown in Fig. 4, so as to form lugs d^6. Each of the sections *d* is preferably made widest at its upper end and gradually tapers toward its lower end. The uppermost section *d'* is of the same general shape as the other sections *d*, except that said section *d'* is provided with means for securing it in place when the fastener is drawn into the position shown in Fig. 1. The means I prefer to employ to so secure said section *d'* in place is to place the uppermost prongs *e* farther away from the edges of the upper than the other prongs *e*. Notches, as *f*, will enable said uppermost prongs *e* to be drawn back, so that the outer edges of said prongs will extend out through the slots *f'*, as shown in Fig. 1. Each of the sections *d* will be of such size relatively to the section *d* immediately below it that the section *d* immediately below may slide down in the section immediately above until the two sections reach such a position relatively to each other that the lower section cannot move farther outward. In this way the several sections of the fastener are held together as the fastener is drawn upward. Into the lowest section *d* the rod *c* is inserted. As the rod *c* is intended to be made tapering outwardly from its lower end, said rod *c* will be held to the lowest section *d* in the same manner as the various sections *d* are held together.

In Figs. 5, 6, 7, and 8 I have shown a modified form of a fastener embodying my improvement. As shown in these figures, each section d^2 is provided with a groove d^4, which extends down from the top of the section near to the bottom thereof. The section d^2 immediately below is provided with a projection d^5, which rides in the groove d^4 immediately above it, and when the projection d^5 strikes the end of the groove d^4, in which it rides, the two sections are prevented from further movement away from each other.

The fastener will be so shaped as to conform to the shape of the foot.

Instead of making the sections of the fastener flat, as shown, they may be rounded or given any other desired shape.

I will now describe the operation of my improvement. The fastener being collapsed, as shown in Fig. 2, the section *d'* will be grasped by the fingers and drawn up into the prongs *e*. Fig. 3 shows how these prongs will be held in place. When the section *d'* has about reached the limit of its upward movement, the uppermost prongs will slide into the notches *f* and naturally fall back until the outer edges of said uppermost prongs extend out through the slots *f'*. The fastener then has the appearance shown in Fig. 1 and the shoe is securely fastened. To unloose the shoe, it is only necessary to push the uppermost prongs back and shove down the section *d'* until the fastener resumes the position shown in Fig. 2.

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

1. A shoe provided along the edges of its opening with engaging means, combined with a fastening, the latter comprising a series of

telescoping sections graduated in size and adapted at their opposite sides for engaging the said engaging means of the shoe.

2. A shoe provided along the edges of its opening with engaging means, combined with a fastener comprising a series of sections coupled together and graduated in size, whereby they are adapted to telescope, each of said sections being adapted to removably engage said engaging means of the shoe.

3. A fastener, comprising a series of sections graduated in size, whereby they are adapted to telescope one within the other, and means for preventing their separation, said sections being adapted at their opposite edges to engage removably with projections on a shoe and close the opening in the latter.

4. A shoe, the opening of which is provided with engaging means, combined with a fastener comprising a series of non-separable sections loosely coupled together, graduated in size and therefore adapted to telescope one within the other, and means for locking the said sections against telescoping.

5. A shoe, the opening of which is provided with engaging means, combined with a fastener, comprising a series of non-separable loosely-coupled sections graduated in size, and therefore adapted to telescope one within the other, and means for securing the lowermost section to the lower end of the shoe-opening and for locking the fastener against telescoping.

6. A shoe, the opposite edges of the opening in which is provided with engaging means, combined with a fastener comprising a series of non-separable tapered graduated sections adapted to telescope one within the other, said sections being adapted to removably engage said engaging means of the shoe, and means for securing said fastener against telescoping.

7. A shoe provided along the opposite edges of its opening with the prong *e*, combined with the fastener, consisting of the series of tapered and graduated sections *d* loosely connected and adapted to telescope the one within the other, the rod *c* connected to the shoe upper at the lower end of the opening and at its upper end to the lower section *d* of the series, and the upper section of the series being provided with the notches *f* and opposite side slots *f'*.

8. A shoe-fastener, consisting of a series of sections held in engagement with each other, each of which sections is provided with lugs to form recesses in which prongs on the shoe may be held, and each of said sections being so formed that the sections immediately below it may be inserted into it, substantially as specified.

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