

No. 777,453.

PATENTED DEC. 13, 1904.

J. P. WAKEFIELD.
FASTENER FOR SHOE SOLES.
APPLICATION FILED AUG. 25, 1902.

NO MODEL.

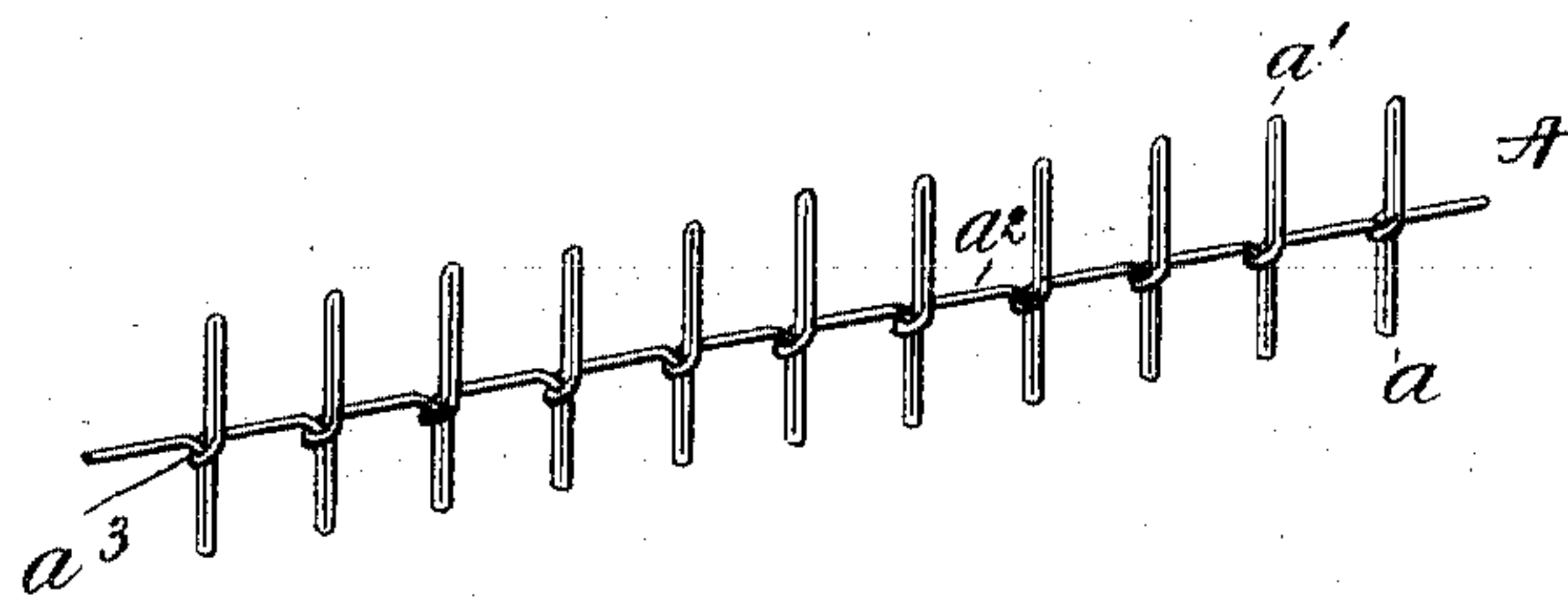


Fig. 1.

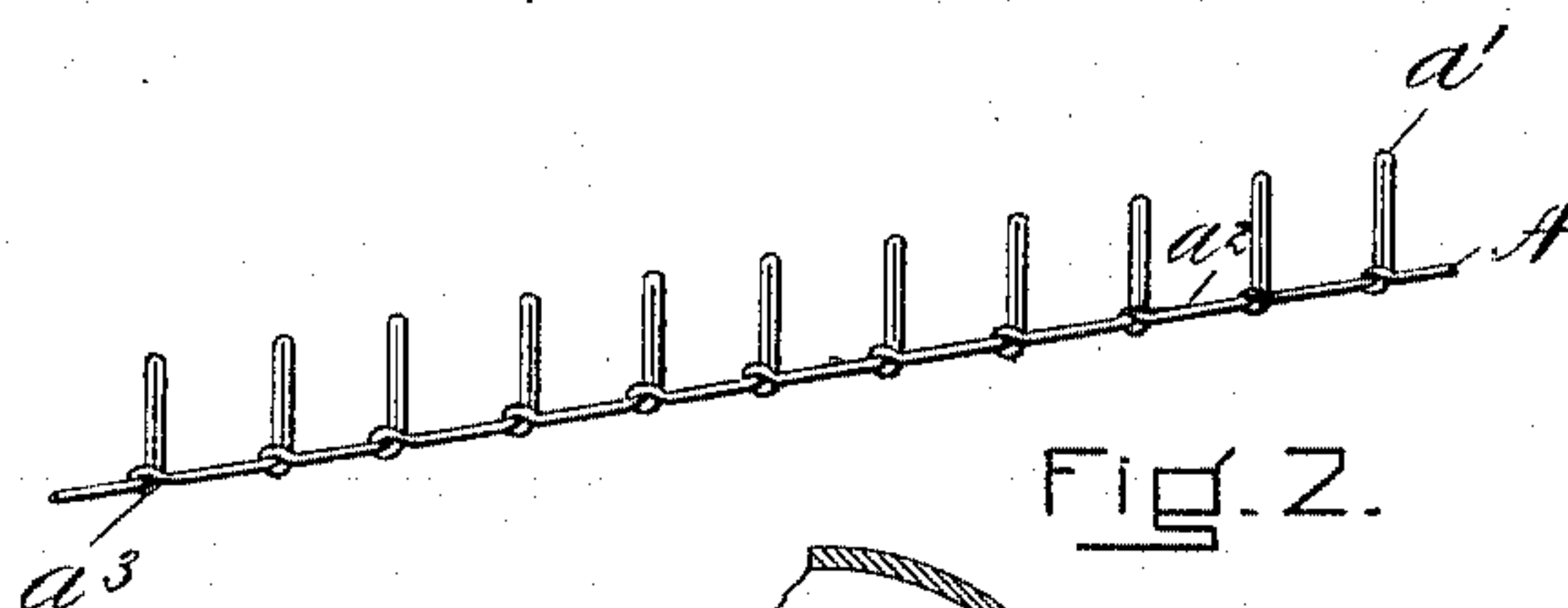


Fig. 2.

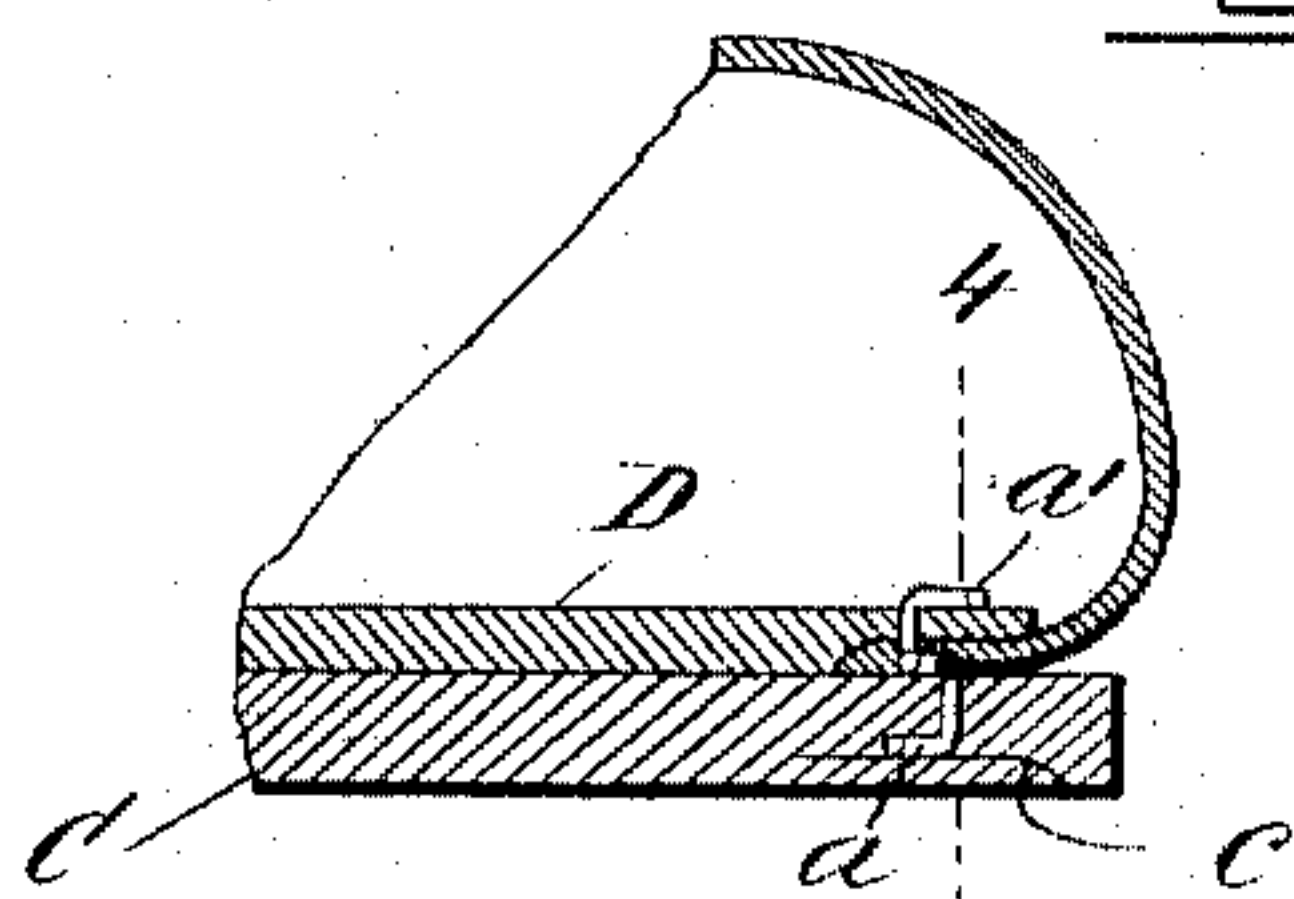


Fig. 3.

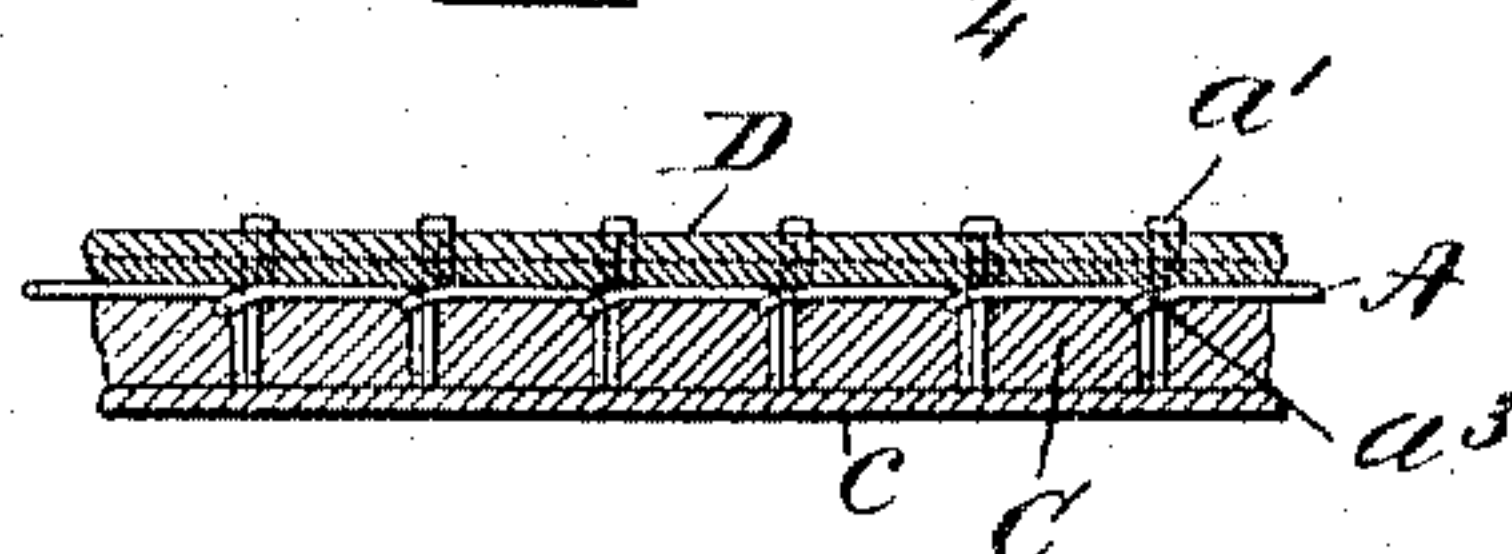


Fig. 4.

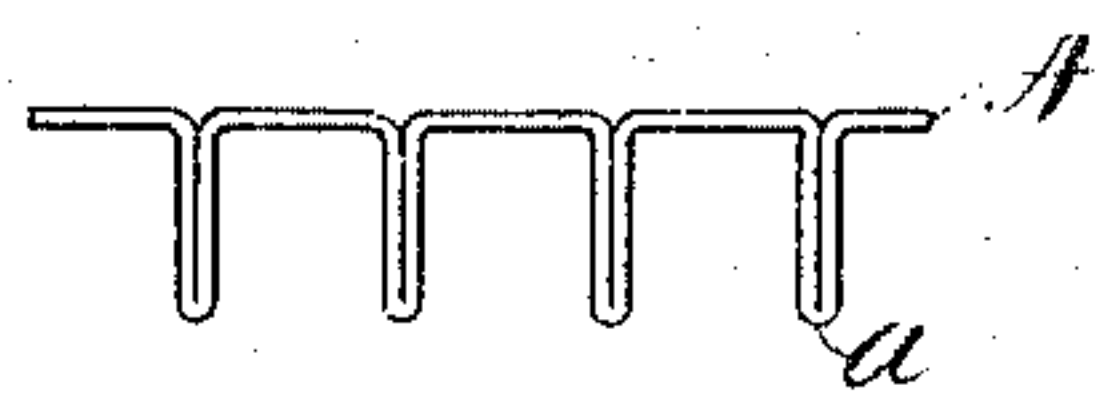


Fig. 5.

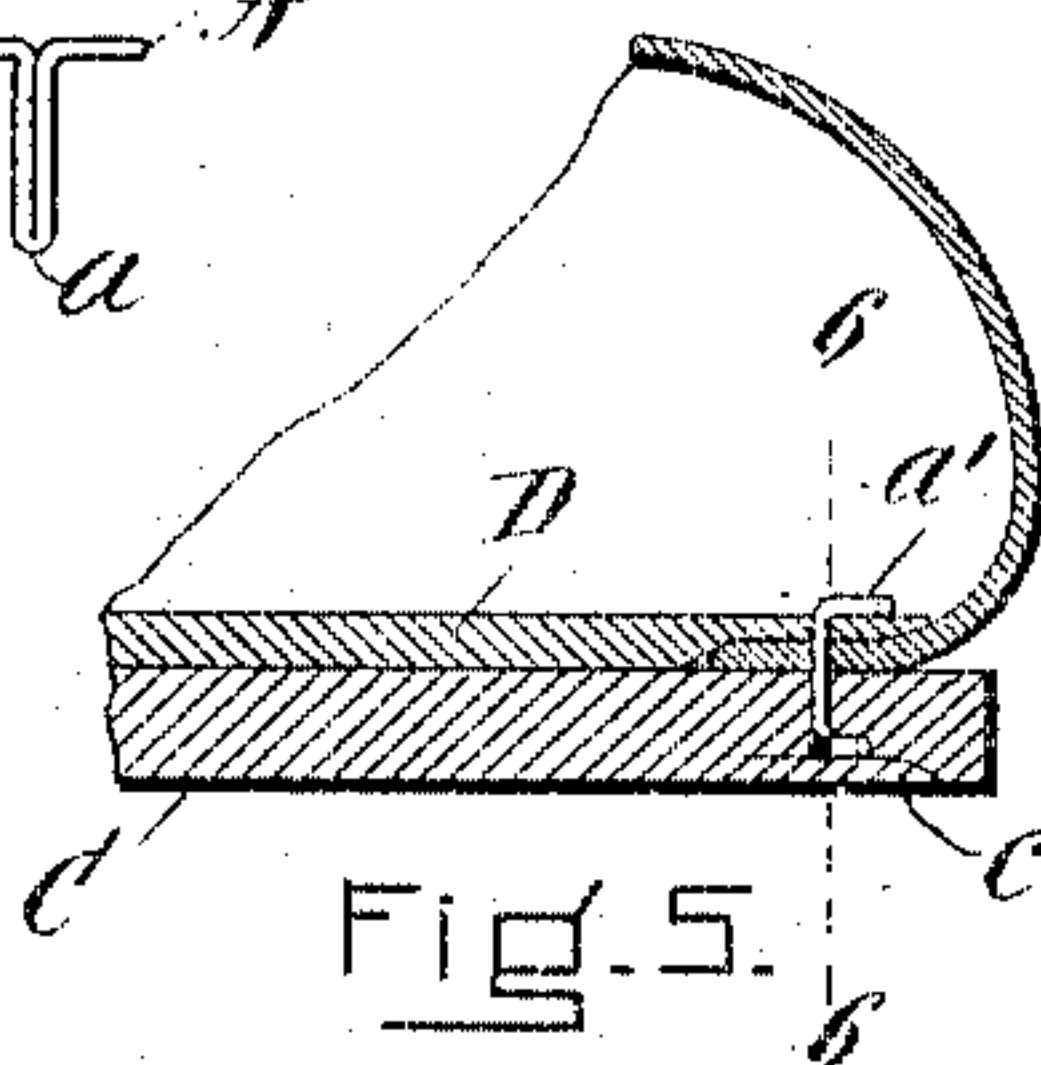


Fig. 6.

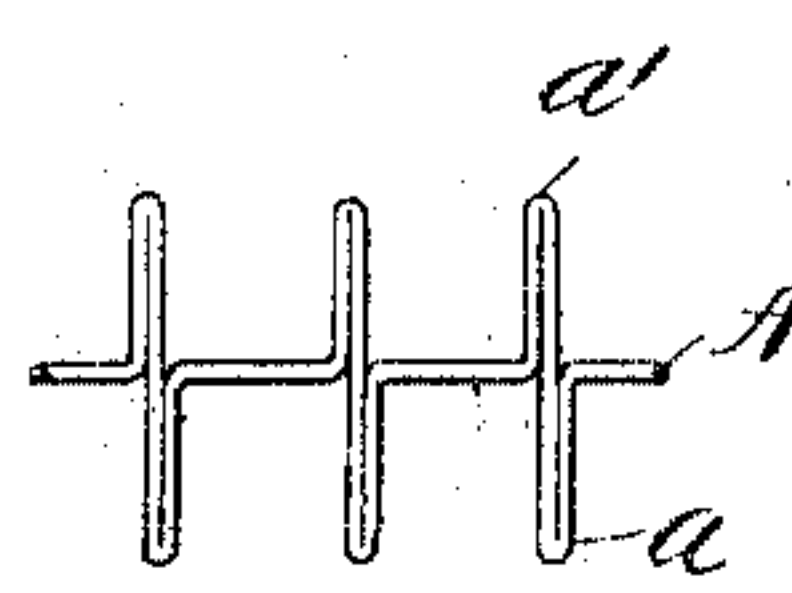


Fig. 7.

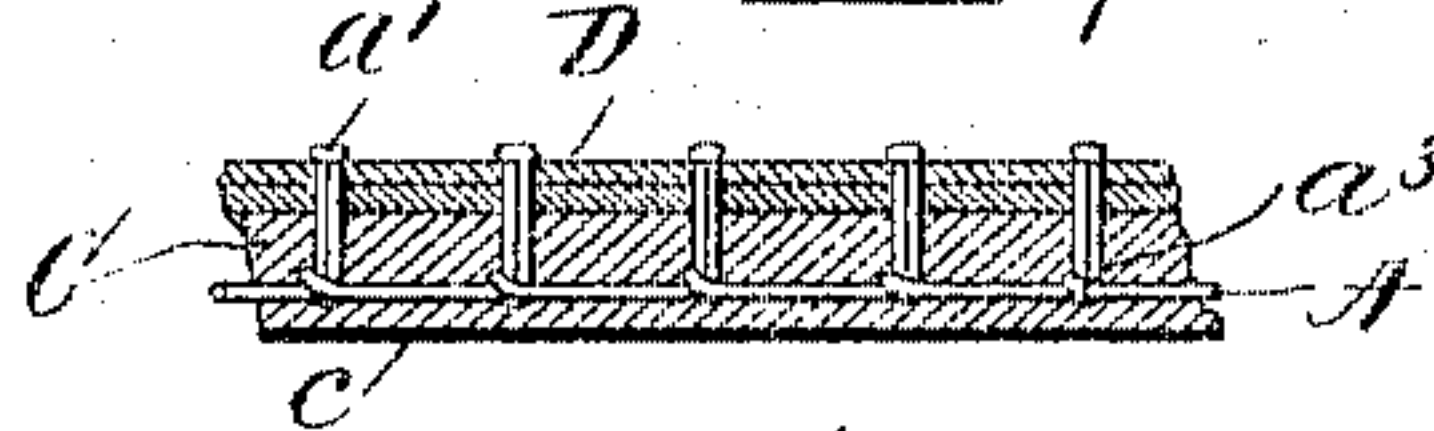


Fig. 8.

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UNITED STATES PATENT OFFICE.

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FASTENER FOR SHOE-SOLES.

SPECIFICATION forming part of Letters Patent No. 777,453, dated December 13, 1904.

Application filed August 25, 1902. Serial No. 120,937. (No model.)

To all whom it may concern:

Be it known that I, JOHN PORTER WAKEFIELD, of Winthrop, in the county of Suffolk and State of Massachusetts, have invented a
5 new and useful Improvement in Fasteners for Shoe-Soles, of which the following is a specification.

My invention consists in a fastening for shoe-soles made of a continuous wire, which
10 is so bent and looped as to form a series of prongs, each prong being made of doubled wire and all connected together and adapted to be driven either as a whole or progressively into the shoe to attach the sole to the upper.

15 My invention will be understood by reference to the drawings, in which—

Figure 1 shows the preferred form of fastener embodying my invention, Fig. 2 being a modification thereof. Fig. 3 is a sectional
20 detail of a shoe the sole of which is attached by means of the fastener shown in Fig. 1, Fig. 4 being a section on line 4 4 of Fig. 3. Fig. 5 is a sectional detail showing a shoe fastened by the form of my invention shown in
25 Fig. 2, Fig. 6 being a section on line 6 6 of Fig. 5. Figs. 7 and 8 show modifications.

A is a wire which is bent, as shown in Fig. 1, to form a fastener comprising downwardly-projecting prongs a , upwardly-projecting
30 prongs a' , and connecting portions a^2 . By examining Fig. 1 it will be seen that the wire is first bent downward and then back upon itself to form the downwardly-projecting prong a , its upward bend being continued
35 above the connecting portion a^2 and again bent back upon itself to form the upward-projecting prong a' . A turn is preferably given to it, as shown at a^3 , to bind the prongs to the connecting portion a^2 of the fastener,
40 after which the wire is extended at right angles to the prongs for a short distance and then bent to make the next pair of prongs. This is a simple and very desirable way of making a fastener of this character, although
45 I do not mean to limit myself to exactly this

construction. I have shown in Fig. 2 a similar construction, in which, however, the lower prongs are omitted.

In using this fastener I prefer that the outer sole C shall have the usual channel c . The
50 fastener may be made of indefinite length and when applied to the shoe, if the form of the fastener is that shown in Fig. 1, the connecting portions a^2 thereof lie between the upper B and the outer sole C, the upwardly-
55 projecting prongs a' being driven through the upper B and the inner sole D and clenched against the last, the downwardly-projecting prongs a being driven through the outer sole C and clenched in the channel c . It is best
60 to attach the fastener in the outer sole C first and then apply the outer sole to the upper and inner sole. Where the form of fastener shown in Fig. 2 is used, it is preferable to
65 drive the fastener through from the outside of the outer sole C, so that the connecting portion a^2 will lie in the channel c , the tips of the prongs being clenched within the shoe.

One advantage of this form of fastener is its great flexibility, as it can be made of a
70 strong but small flexible wire which serves as a connection between the prongs, so that the sole will yield to every movement of the foot, the prongs themselves being made of double wire, which will give them ample strength,
75 and as the fastener now merely perforates the leather to the extent done by ordinary sewing it can be used on a turned shoe or slipper without danger of unduly wearing the leather,
80 making the shoe heavy, or restricting its flexibility.

What I claim as my invention is—

1. The shoe-fastener above described comprising a continuous length of wire having a
85 series of prongs integral therewith and projecting at right angles therefrom, said prongs being arranged in pairs projecting from opposite sides of said fastener, each pair of prongs being connected by a wire at right
90 angles to the length of the fastener and ex-

tending from the tip of one prong to the tip of the opposite prong and forming part of both prongs, as described.

2. The shoe-fastener above described comprising a continuous length of wire having a series of prongs integral therewith and extending therefrom at right angles thereto, each prong comprising a loop of parallel sections of wire bound together and to that part

of the wire from which said prongs project by a turn in said wire, as described.

In testimony whereof I hereunto set my name this 22d day of August, 1902.

JOHN PORTER WAKEFIELD.

Witnesses:

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