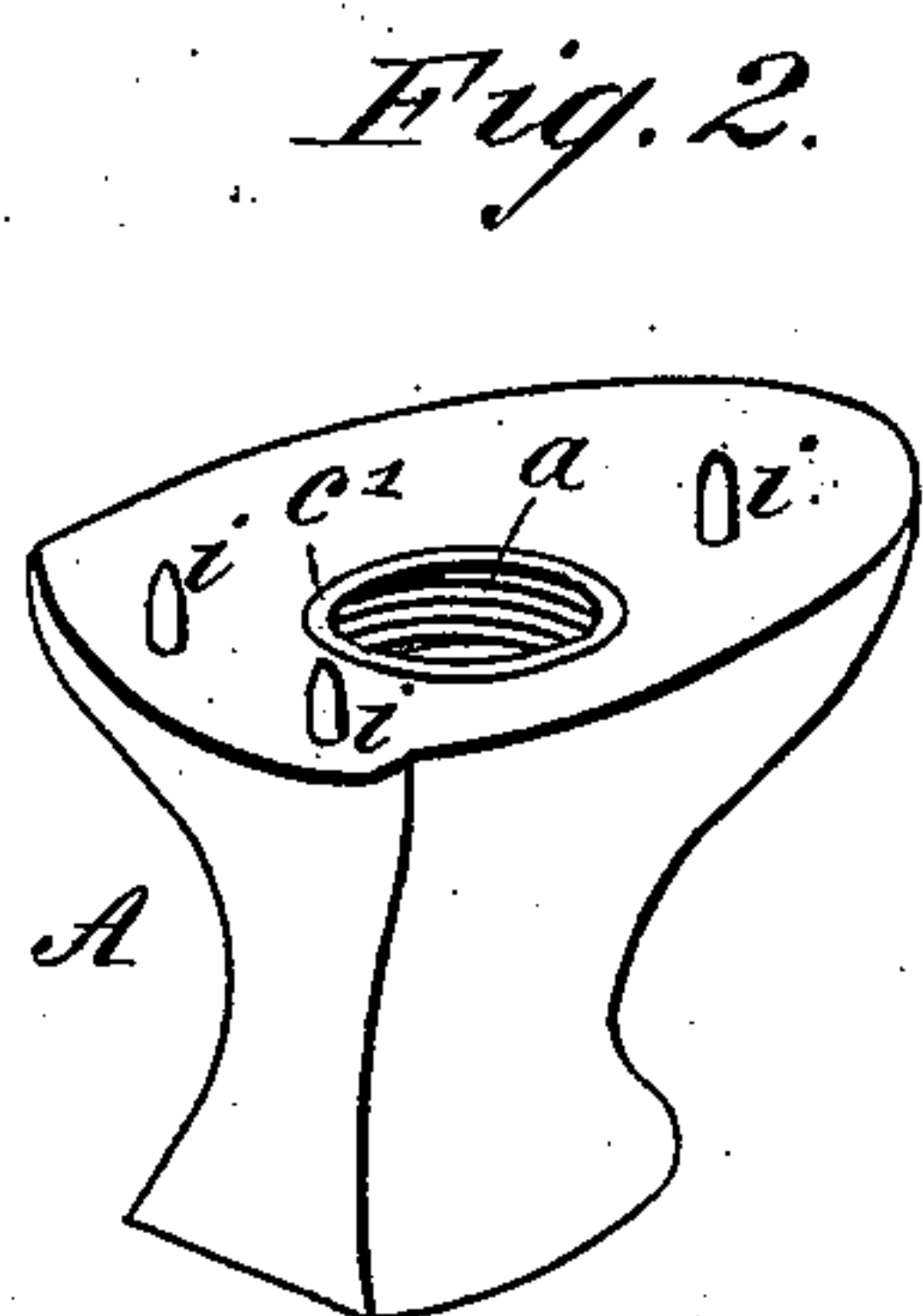
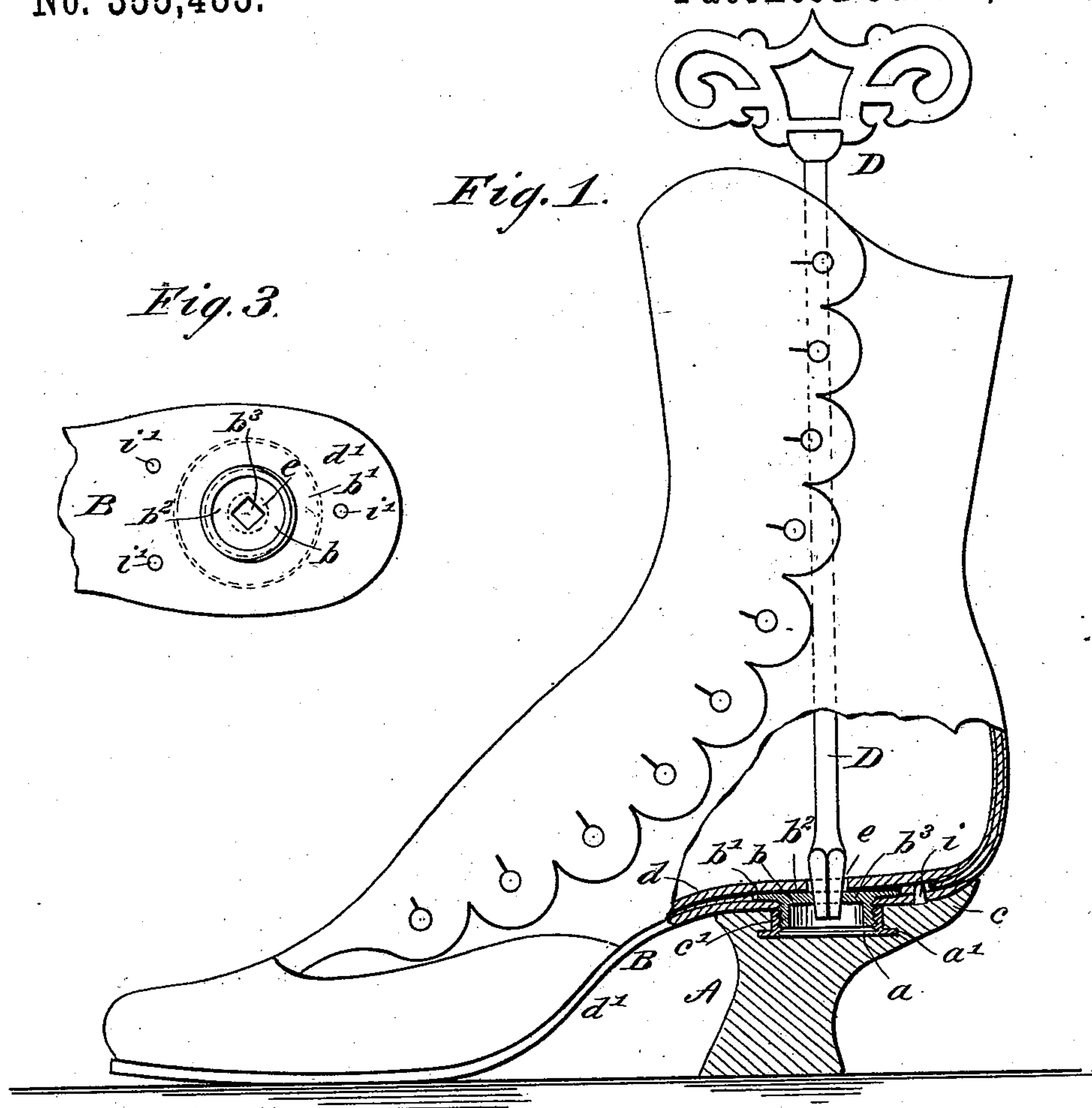


(No Model.)

P. STUCKER & C. NEU.
HEEL FOR BOOTS OR SHOES.

No. 355,483.

Patented Jan. 4, 1887.



WITNESSES:

Donn Twitchell.
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UNITED STATES PATENT OFFICE.

PAUL STUCKER AND CHRISTIAN NEU, OF BROOKLYN, NEW YORK.

HEEL FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 355,483, dated January 4, 1887.

Application filed July 20, 1886. Serial No. 208,546. (No model.)

To all whom it may concern:

Be it known that we, PAUL STUCKER and CHRISTIAN NEU, both of Brooklyn, in the county of Kings and State of New York, have
5 invented certain new and useful Improvements in Heels for Boots or Shoes, of which the following is a full, clear, and exact description.

Our invention relates to detachable heels
10 for boots or shoes; and the invention consists, principally, of screw-connections connected to the sole and heel—one permanently and the other adapted to be revolved by a key or other device—whereby the heel may be quickly and
15 easily detached from and attached to the boot or shoe, and when attached will be firmly and securely held in place.

The invention also consists of the construction, arrangement, and combination of parts,
20 all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

25 Figure 1 is a sectional elevation of a shoe having our invention applied thereto, and showing the key in place for detaching the heel. Fig. 2 is a perspective view of the heel removed, and Fig. 3 is a detailed view showing the heel portion of the shoe with the heel
30 removed.

The heel A of the shoe is provided with the screw-socket *a*, rigidly affixed to the heel, while the sole B of the shoe is provided with
35 the screw *b*, arranged to enter the socket *a*, for attaching the heel to the shoes. The socket *a* is formed with the flange *a'*, on which a portion of the heel is built, so the socket will be held from turning and from being drawn out
40 of the heel by the screw *b*. The material *c* over the flange *a'* is cut out, as shown at *c'*, to fit around the tubular or hollow portion of the socket. The screw *b* is formed with the annular flange *b'*, held between the insole *d*
45 and the outer sole, *d'*, the latter being cut out to receive the screw-threaded portion of the screw. The flange *b'* being circular, the screw *b* is permitted to turn, so it may be screwed into the socket *a* in the heel, and for the pur-

pose of turning the screw *b* we form it with
50 the top plate, *b²*, in which is formed the angular opening *b³*, for the reception of a suitable key, D, and for inserting the key D, for attaching or removing the heel, we form the opening *e* in the insole *d* to coincide with the
55 opening *b³*, as shown, so the screw *b* may be operated by the key from the inside of the shoe.

To prevent the heel from shifting, we provide it with the studs *i i*, that are adapted to
60 enter the sockets *i' i'*, made in the outer surface of the sole *d'*, as shown clearly in the drawings, so there will be no danger of the heel turning out of place, and the studs *i* and sockets *i'* act as guides in putting the heel
65 squarely upon the shoe.

Having thus described our invention, What we claim as new, and desire to secure by Letters Patent, is—

1. A boot or shoe provided at the heel, between the inner and outer soles, with a screw,
70 *b*, having an opening or recess to receive a key passed through a corresponding opening in the insole, in combination with the heel A, provided with a screw-threaded socket embedded in its upper surface, substantially as
75 described.

2. The heel A, provided in its upper surface with the screw-threaded socket *a*, having flange
80 *a'* embedded in the heel, in combination with the screw *b*, held between the soles of the shoe and formed with a socket, *b³*, the insole of the shoe covering the socket and formed with a small opening, *e*, to coincide with the socket
85 *b³*, substantially as described.

3. The heel A, provided in its upper surface with the points *i*, and the centrally-located screw-threaded socket *a*, held by the flange *a'*,
90 in combination with the shoe having the screw *b*, held between the two soles and adapted to be screwed into the socket *a*, substantially as described.

PAUL STUCKER.
CHRISTIAN NEU.

Witnesses:

WILLIAM WEBER,
WM. H. DURYEA.