

(No Model.)

C. A. STRASSER.

BOOT OR SHOE HEEL.

No. 413,419.

Patented Oct. 22, 1889.

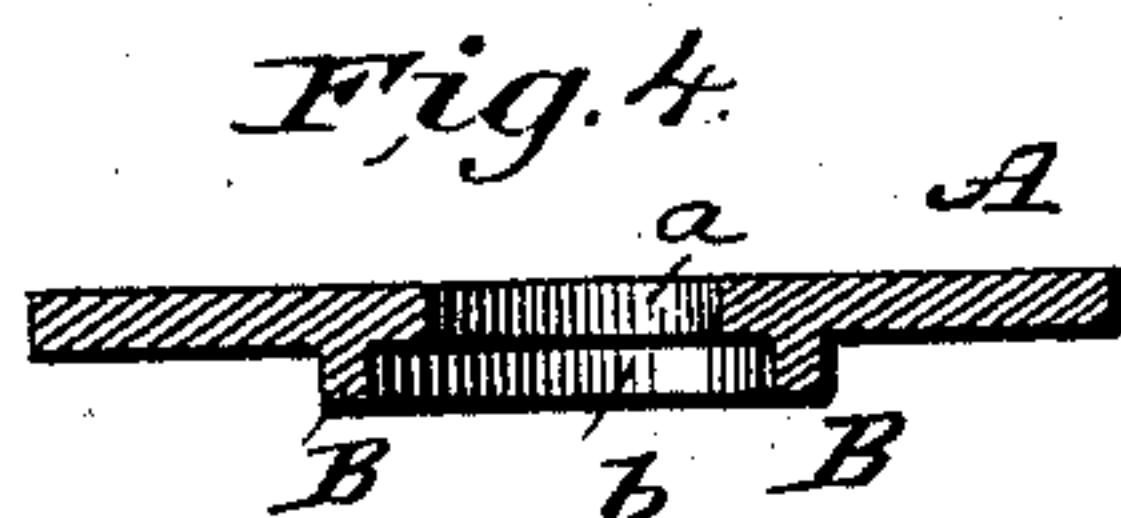
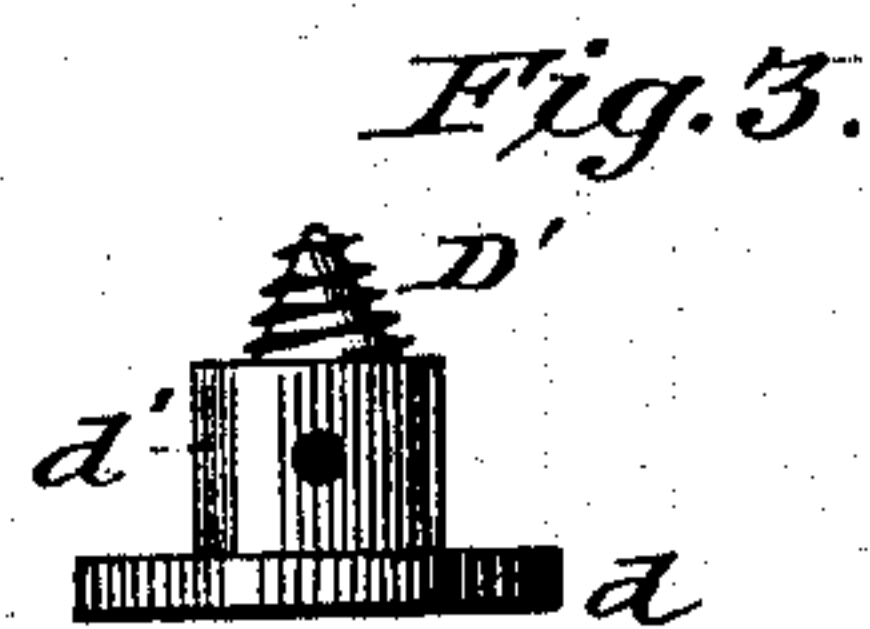
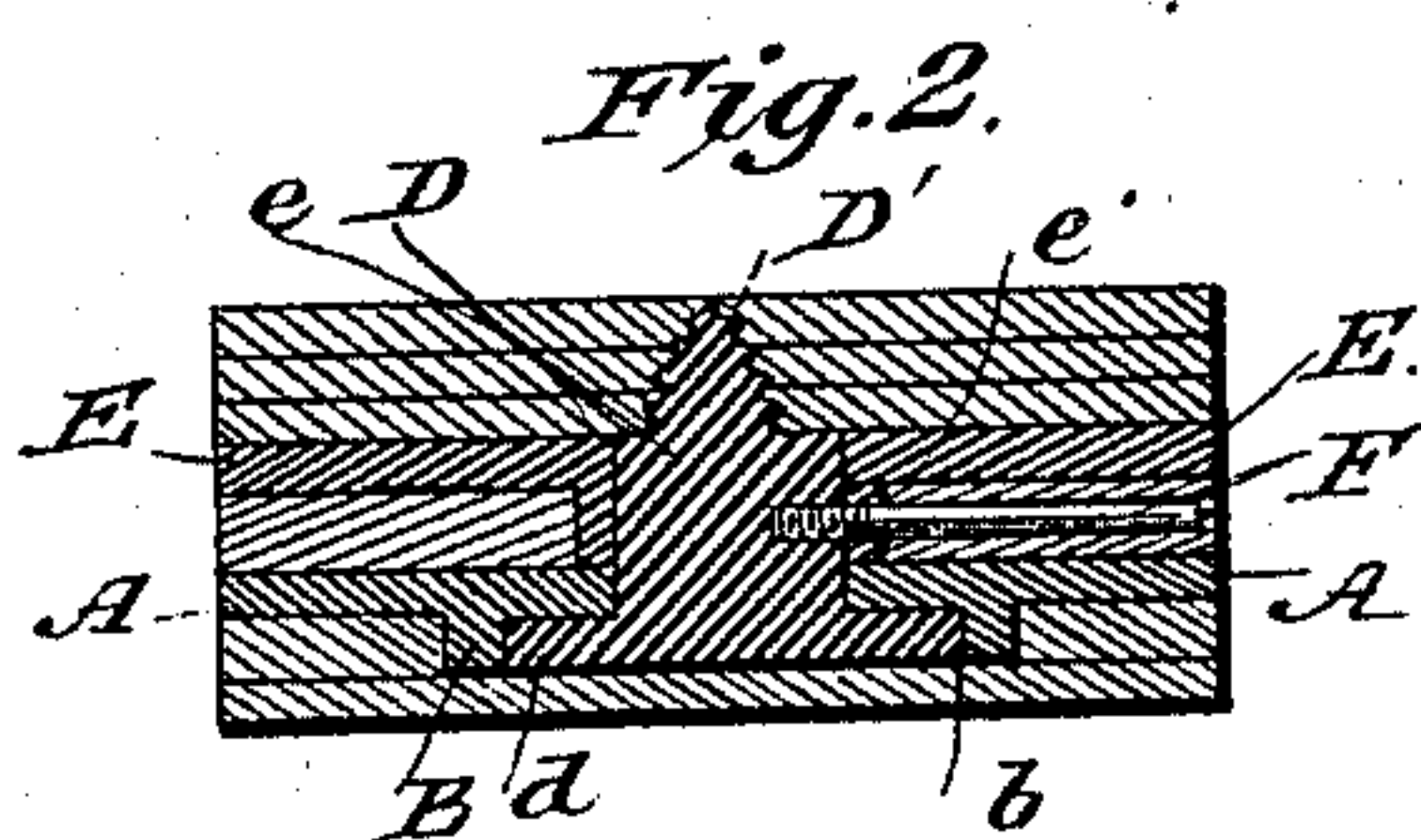
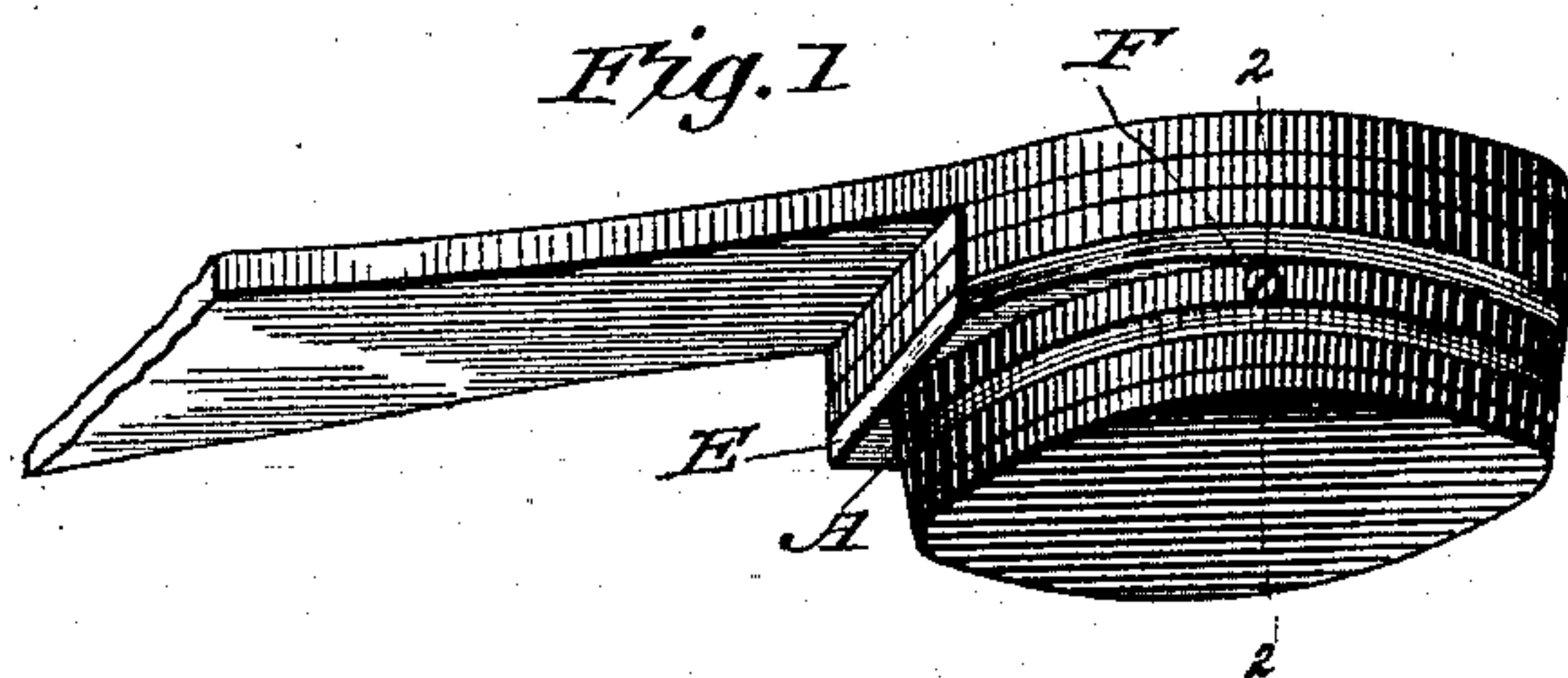
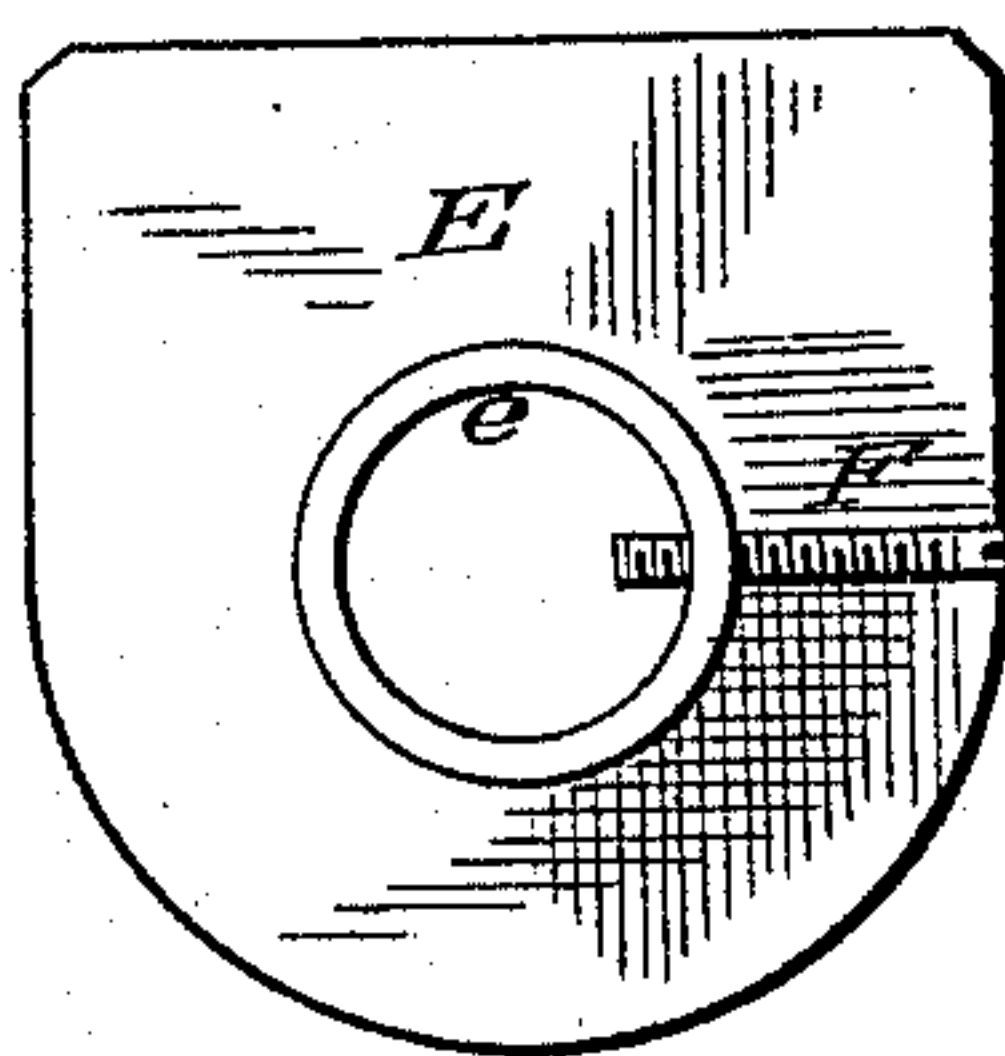


Fig. 6



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CARL A. STRASSER, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF
TO JOSEPH SCHROEDER, OF SAME PLACE.

BOOT OR SHOE HEEL.

SPECIFICATION forming part of Letters Patent No. 413,419, dated October 22, 1889.

Application filed June 26, 1889. Serial No. 315,672. (No model.)

To all whom it may concern:

Be it known that I, CARL A. STRASSER, of Baltimore city, in the State of Maryland, have invented a new and useful Improvement in
5 Boot or Shoe Heels, of which the following is a specification.

My invention is an improvement in heels for boots or shoes, and has for an object to provide a simple, novel construction of an anti-friction heel supported to rotate as the user
10 walks, so that the heel will not be subject to the wear incident to a fixed heel, and the wear will be even and uniform on all sides or portions of the heel.

15 The invention consists in the novel constructions and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective
20 view, and Fig. 2 a sectional view, of my improved heel. Fig. 3 is a detail side view of the axle-section. Fig. 4 is a detail sectional view of the lower section. Fig. 5 is a detail section of the upper section, and Fig. 6 is a
25 bottom view of the upper section.

In carrying out my invention I provide what may be termed a "metallic heel-frame," which is provided with a lower section or disk A, formed with a flat upper side having a central opening *a*, and provided on its under side with a depending hub-like portion or ring B. This ring B is concentric with the opening *a*, and is of an internal diameter in excess of
35 said opening *a*, forming a socket-like recess *b* for the base-plate *d* of the axle-section D. The section D has a stem-like portion *d'*, which extends up through opening *a* and above the upper face of the lower section or disk A. The upper section E is formed with a central opening *e*, fitted to receive the upper end of the
40 stem *d'* of axle-section D, and is provided with a depending tubular portion *e'*, which fits down over the stem *d'* and bears against the upper surface of the lower section A, as shown. The
45 lower section therefore turns on the axle-section and against the under side of the depending tubular portion *e'* of the upper section of the frame.

To unite the upper, lower, and axle sections
50 I pass a screw F through the tube *e'* and into the stem of the axle-section, so as to hold the

several sections together when the axle-section forms a portion about which the lower section can turn. The base-plate *d* of the axle-section forms what may be called a "turn-table,"
55 on which the said lower section is suspended, and the lower end of the tube *e'* forms a bearing which receives the upper pressure of the said lower section, while the upper section E might be tacked to the under side of the sole. 60
To secure the heel in place it is preferred to employ the construction shown. In the said construction, to facilitate the securing of the frame and the lifts applied thereto to the shoe, I provide the axle-section D at its upper end
65 with a threaded or screw-like portion D', which is turned into the shoe, as shown, and operates to securely fasten the heel in place, so it can be quickly removed, if desired.

In applying the heel one or more lifts G
70 may be secured to the under side of the sole at its rear end, to so re-enforce such sole as to provide a proper bearing for the screw D'. A suitable number of lifts are then secured to the under side of the sections E and A, and such
75 parts are secured by the application of the axle-section and of the screw F. It will be understood, however, that the heel would be held together without the screw F; but such screw locks the upper plate to the axle-section, prevents the axle-section from being
80 turned by the rotating of the lower section, and is very much preferred.

In use it will be seen that the heel will turn
85 as it strikes the ground, and will therefore be practically anti-friction, greatly reducing the wear, as well as distributing such wear evenly on the heel.

Having thus described my invention, what I claim as new is—

90 1. The improvement in revolving heels herein described, comprising the metallic frame formed of an upper section having a central opening, a lower section having a central opening in register with that of the upper section, and provided at the lower end of
95 such opening with a circular recess *b*, and the axle-section having a head *d* fitting in the recess *b*, having a portion *d'* fitting in the central openings of the upper and lower sections, 100
and provided at its upper end with a threaded or screw portion projected above the upper

section and adapted to enter the sole or heel lifts, substantially as set forth.

2. In a heel, substantially as described, the combination of the upper section, the lower
5 section, the axle-section extended up through the lower section into the upper section, and the laterally-operating screw by which to secure such axle-section to the upper section, substantially as set forth.

10 3. An improved heel, substantially as described, consisting of the fixed upper section and an axle-section secured rigidly to such upper section and provided above the same
15 with a screw portion to enter the sole or heel lifts, and the lower section suspended and journaled on the axle-section, substantially as set forth.

4. In a heel, substantially as described, the combination of the lower section, the upper
20 section having a depending tubular portion resting on the lower section, the axle-section fitting in said sections, and the lateral screw

turning through the tubular portion of the upper section and extending into the axle-section, substantially as set forth.

5. The improvement in heels, substantially
25 as herein described and shown, consisting of the upper section having a central opening and a depending tubular portion, the lower section having a central opening and provided
30 at the lower end thereof with a circular recess, the axle portion having a head d fitted in such recess, an axle portion fitting in the openings of the upper and lower sections and provided at its upper end with a threaded
35 portion projected above the upper section, and the lateral connecting-screw turned through the tubular portion of the upper section and into the axle-section, substantially as set forth.

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Witnesses:

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