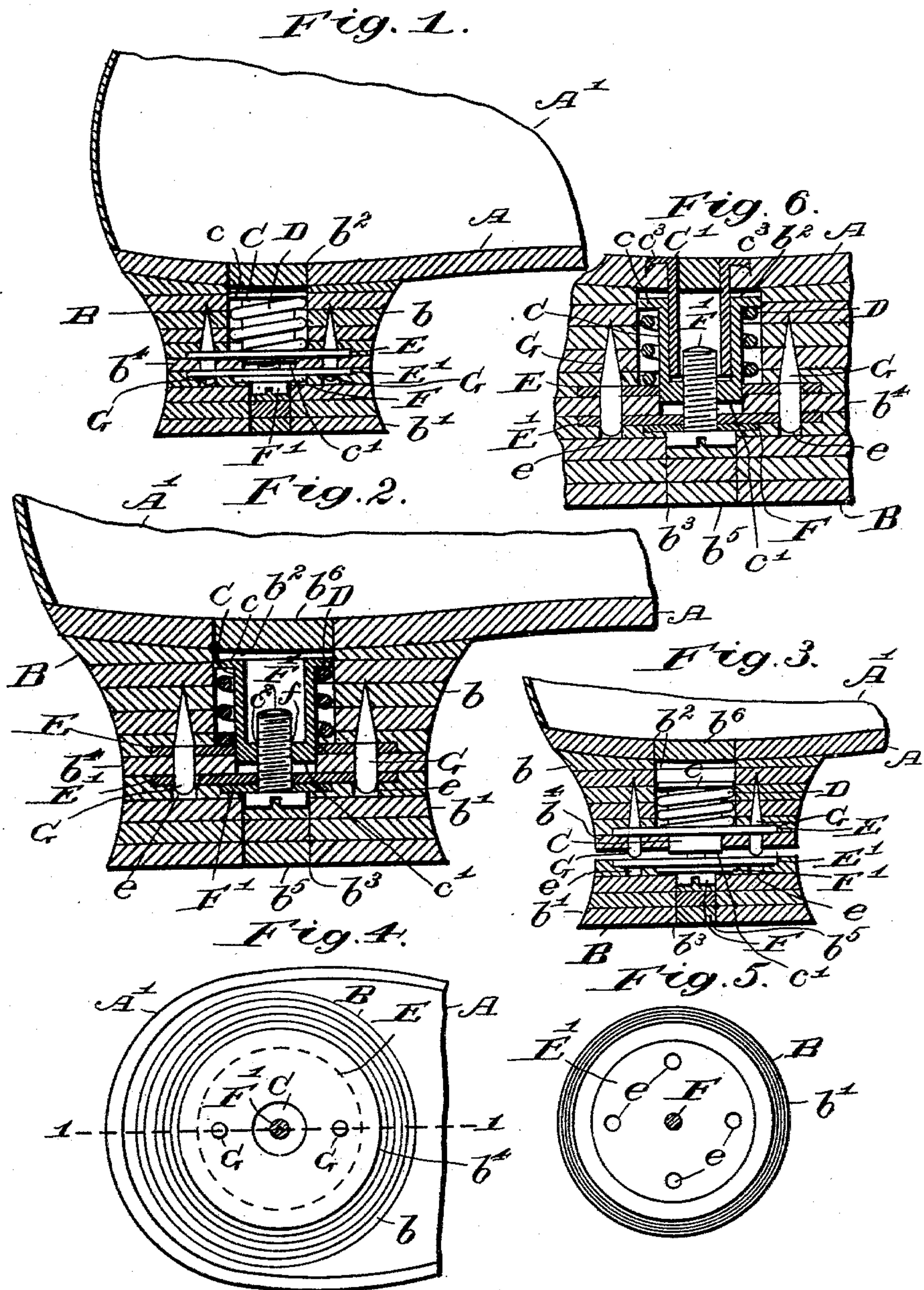


(No Model.)

D. McNABB.
ROTARY HEEL FOR BOOTS OR SHOES.

No. 596,758.

Patented Jan. 4, 1898.



WITNESSES.

Kirkley Hyde.

Otis A. Merrill.

INVENTOR

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By Albert M. Moore,

His ATTORNEY.

UNITED STATES PATENT OFFICE.

DUNCAN McNABB, OF LOWELL, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS
TO ANDREW LIVINGSTON AND JEANNIE COCHRANE, OF SAME PLACE.

ROTARY HEEL FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 596,758, dated January 4, 1898.

Application filed March 15, 1897. Serial No. 627,558. (No model.)

To all whom it may concern:

Be it known that I, DUNCAN McNABB, a citizen of the United States, residing at Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Self-Locking Rotary Heels for Boots or Shoes, of which the following is a specification.

My invention relates to self-locking rotary heels for boots or shoes; and it consists in the devices and combinations hereinafter described and claimed.

The object of this invention is to construct a heel consisting of an upper section secured to the sole of the shoe and a lower rotary section, to maintain the two sections of the heel together by spring-pressure so that said lower section may be revolved simply by pulling down said lower section against the tension of the spring, to disengage certain pins carried by one section from holes in the other section, and to avoid the necessity of any tools or screwing to secure the desired adjustment.

In the accompanying drawings, Figure 1 is a vertical central longitudinal section, on the line 1 1 in Fig. 4, of the upper, sole, and heel of a shoe provided with my improvement, the sleeve, spring, bolt, plates, and pins being in side elevation; Fig. 2, a similar enlarged section of all the parts shown in Fig. 1, except the pins and bolt, which are in side elevation; Fig. 3, similar to Fig. 1, except that in Fig. 3 the heel-sections are drawn apart for adjustment, while in Fig. 1 said heel-sections are in contact; Fig. 4, a plan of the bottom of the upper heel-section and adjacent parts of the sole; Fig. 5, a plan of the lower heel-section; Fig. 6, a section of the heel in the same plane as in Fig. 2, showing also a steady-tube.

A is the sole, and A' the upper, of a shoe, both being of any usual construction.

The heel B is preferably circular in all its horizontal cross-sections and consists of two sections b b' , the upper section b secured by any usual means to the sole A and having a central aperture b^2 to receive a sleeve C. The sleeve C is provided at its upper end with an external annular flange c , of a size to nearly fill said aperture b^2 , but loosely enough to permit said sleeve to move vertically in said

aperture. A spiral spring D surrounds said sleeve and is compressed between said flange c and a horizontal plate E, secured to or near the bottom of the upper heel-section b . The plate E has an opening through which the body of the sleeve C may slide. Another plate E' is secured to the top of the lower section b' of the heel, and through a washer F and said plate E' a bolt F' is passed up into the otherwise closed lower end c' of the sleeve C, said bolt and the central hole c^2 in said lower end being screw-threaded, as shown at f , to engage each other, so that the bolt may be turned to draw down said sleeve and increase the tension of the spring D, the bolt having, preferably, a slot to receive a screw-driver. Obviously the tension of said spring D will normally hold the heel-sections in contact with each other.

A lift b^4 is arranged between the plates E E' to prevent a possible rattling of the same against each other, and this lift is represented, Fig. 3, as secured to the bottom of the upper heel-section b .

Pins G G, two or more, are secured vertically in one heel-section and project from the same and normally enter holes in the plate of the other section to prevent accidental turning of one section on the other, these pins being represented as secured in and normally projecting from the bottom of the upper heel-section into holes $e e e e$ in the plate E' of the other heel-section, there being four such holes, in order that the lower heel-section may be turned quarter-way around at one time.

The non-adjacent ends of the apertures b^2 and b^3 , respectively, in the heel-sections may be closed by plugs b^6 b^5 , of leather or other material.

It is evident that separating the heel-sections by drawing the section b' away from the section b will allow the former to be turned as desired and that the spring and pins prevent any accidental turning of the section b' .

I claim as my invention—

1. A heel for boots and shoes, consisting of an upper section and a lower section, pivoted to each other, pins, rigidly secured in and projecting from one of said sections and engaging holes, with which the other of said sections is provided, and a spring, normally to

maintain such engagement but permitting said lower section to be drawn away from said upper section and to be turned.

2. The combination of the upper heel-section, provided with a vertical aperture, a sleeve, sliding therein and provided with a closed lower end and with a flange, a plate, secured to said upper section at or near the bottom of the same and having a hole to receive said sleeve, a spring, surrounding said sleeve and compressed between said plate and said flange, the lower section, a plate, secured thereto, a bolt, passing up through said plate

and secured in the lower end of said sleeve, to hold said sections in contact, and pins, projecting from said upper section and adapted to engage holes with which said lower section is provided.

In witness whereof I have signed this specification, in the presence of two attesting witnesses, this 8th day of March, A. D. 1897.

DUNCAN McNABB.

Witnesses:

ALBERT M. MOORE,

CHARLES EARLY.