

No. 691,910.

Patented Jan. 28, 1902.

T. H. MAYO.
HEEL FOR BOOTS OR SHOES.

(Application filed May 4, 1900.)

(Model.)

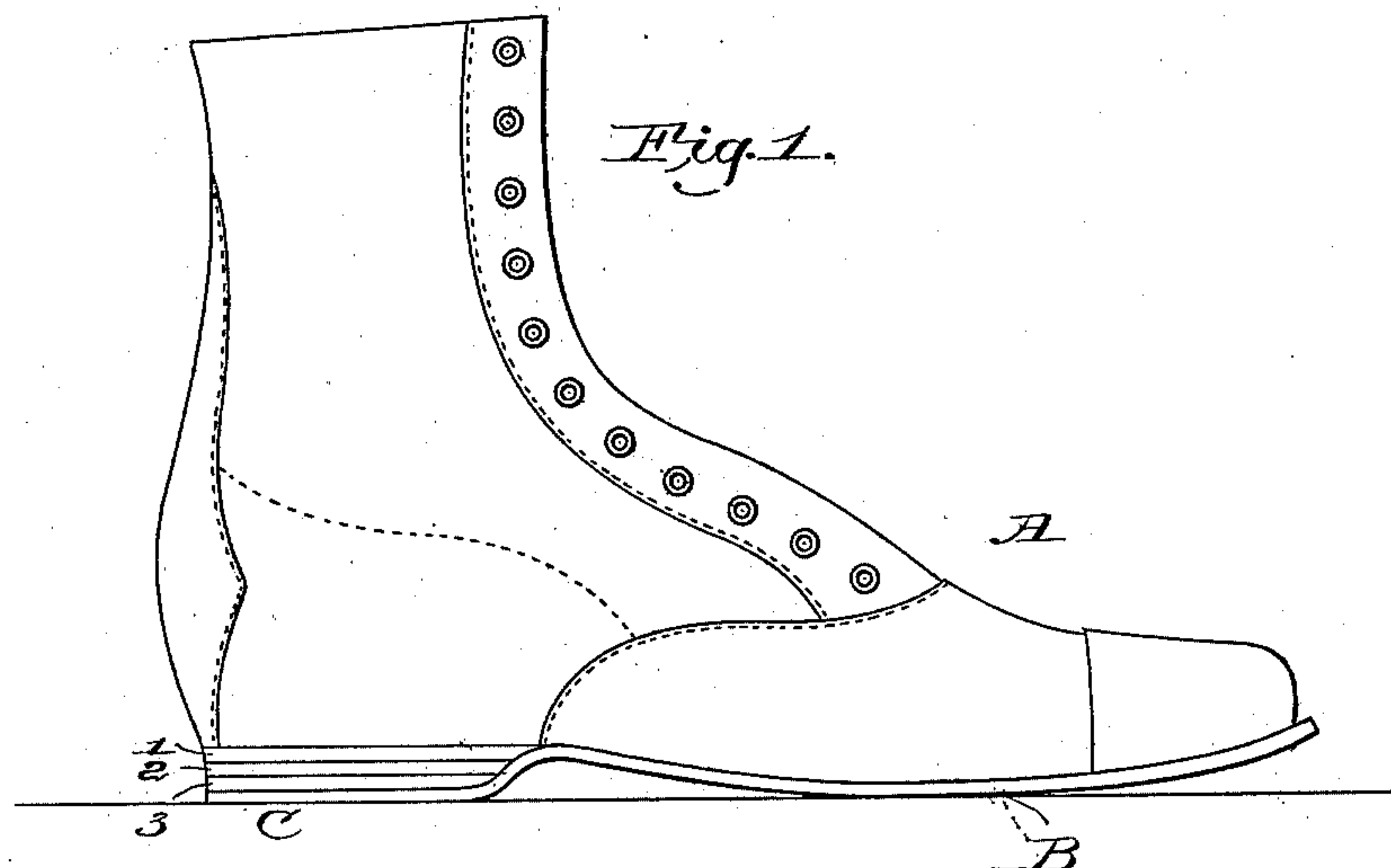


Fig. 2.

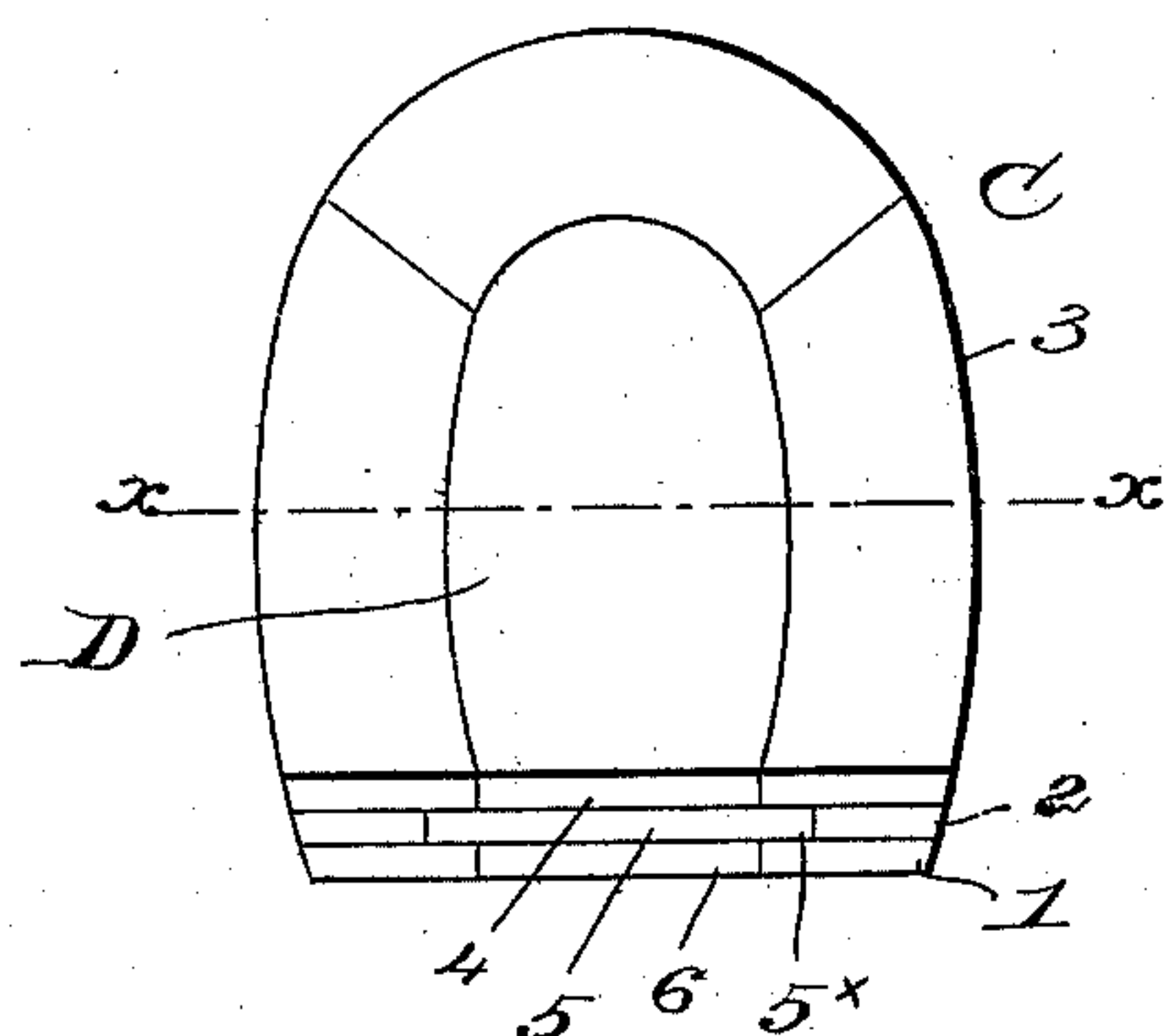


Fig. 3.

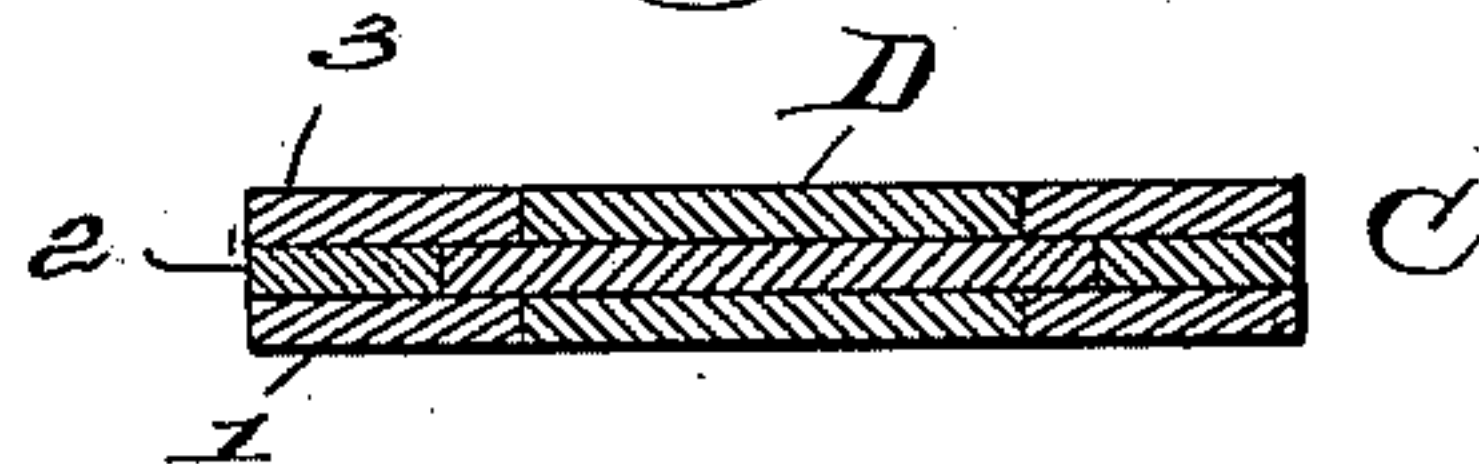


Fig. 4.



Witnesses.

Thomas Drummond,
Edward F. Allen.

Inventor.
Thomas H. Mayo,
by Leroy Gregory
attys.

UNITED STATES PATENT OFFICE.

THOMAS H. MAYO, OF MELROSE HIGHLANDS, MASSACHUSETTS.

HEEL FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 691,910, dated January 28, 1902.

Application filed May 4, 1900. Serial No. 15,488. (Model.)

To all whom it may concern:

Be it known that I, THOMAS HENRY MAYO, a citizen of the United States, residing at Melrose Highlands, county of Middlesex, State of Massachusetts, have invented an Improvement in Heels for Boots or Shoes, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawings representing like parts.

In the production of boots and shoes very considerable leather is employed in making up the heels; and this invention has for its object the production of a novel heel which may be produced at less cost than a heel wholly of leather, my novel heel presenting great strength and durability.

In accordance with my invention my improved heel is composed of an outer rim of superimposed layers and an interior filling, the filling and the layers being so constructed that one overlies the other at the junction of the filling with the inner sides of the layers. The filling may be of any usual material—such, for instance, as wood, fiber, or other sheet material—and as herein illustrated the number of layers of filling corresponds substantially in number with the layers of the outer rim or walls of the heel.

My invention therefore comprehends a heel having a rim composed of superimposed layers and a filling also composed of layers, one of the layers of the filling being larger and projecting beyond the adjacent layers of the filling, the projecting portion of the said larger layer of the filling being overlapped by the adjacent layers of the rim, whereby the rim and filling are interlocked together. A heel made in accordance with my invention, therefore, is comprised of a series of lifts or layers, each lift or layer comprising a rim-section and a center section or filling-section, the rim and filling sections of the adjacent layers being of different widths, whereby the inner edge of the rim-section of one layer is overlapped by the outer edge of the filling-section of the adjacent layer or the outer edge of one filling-section is overlapped by the inner edge of the rim-section of the adjacent lift or layer.

Figure 1 of the drawings represents in side elevation a shoe having a heel embodying my

invention, the heel being illustrated as of the kind designated by the name "spring-heel." Fig. 2 is a view of one of said heels detached, looking at it from its under side. Fig. 3 is a section taken through the heel, Fig. 2, in the line x ; and Fig. 4 shows a modification of my invention.

In the drawings, A represents the upper, and B the sole, of a shoe, and the same may be of any usual material or form.

My improved heel is designated by C. The rim or outer wall of this heel is composed of a series of layers 1 2 3, represented in Fig. 2 as of U shape, and for cheapness each layer may be composed of a plurality of abutting pieces of, it may be, leather or usual material commonly employed in the manufacture of boot and shoe heels.

The central part or filling D for the body of the heel is represented in Figs. 2 and 3 as composed of several layers, as 4 5 6. It may be of wood, fiber, or other sheet material, each layer of the filling D being shown as of the same thickness as the adjacent or abutting layer of the rim. In said figures one of the layers of the filling extends beyond other layers thereof or projects beyond the main body of the sides of the filling, as at 5^x, and enters a suitable groove or notch between the upper and lower layers 1 and 3, so that the filling and the shell or outer wall are firmly bound one to the other. This method of uniting the filling with the shell or outer wall of the heel constitutes a durable and serviceable means for maintaining the outer wall and filling in the proper relative positions.

As a modification of my invention instead of making the rim-section 2 of the middle layer or lift of the heel narrower than the rim-sections 1 and 3 of the layers or lifts above and below, as in Figs. 2 and 3, I may make the rim-section of the middle layer or lift wider than the rim-sections of the adjacent layers or lifts, as represented by 7 in Fig. 4, the inner edge of the rim-section 7 overlapping the outer edges of the center or filling sections of the adjacent layers.

From the above description it will be seen that my improved heel is, in effect, made up of a series of layers, each layer comprising a rim-section and a filling or center section, and the rim-sections of adjacent layers are of

different widths, so that the filling-sections of those layers which have a narrow rim-section are overlapped by the wider rim-sections, thus interlocking the rim and filling sections.

5 The rim-section of any one layer is U-shaped, as described, and preferably each section will be of uniform width throughout its extent, although of course the rim-sections of adjacent layers are of different widths. With
10 this construction of heel the overlapping portion between the rim and center sections is confined entirely in the body of the heel and appears only at the breast of the heel. The heel therefore when made has the appearance of a heel made of solid lifts or layers.

Although my invention is shown, as illustrated, in connection with a spring-heel, yet it is obvious that it is applicable to any heel.

Having described my invention, what I
20 claim, and desire to secure by Letters Patent, is—

1. A heel presenting a rim composed of a series of layers, and a filling also composed of a series of layers, each layer of the filling being of the same thickness as the abutting or
25 corresponding layer of the rim, and one of the layers of the filling being larger and projecting beyond the adjacent layers of the filling, the projecting portion of said larger layer being overlapped by adjacent layers of the rim, whereby the filling and rim are interlocked together.

2. A heel presenting a rim composed of a series of layers, and a filling composed of layers abutting those of the rim, the adjacent layers of the filling being of different sizes whereby the layers of the filling are interlocked with those of the rim.

3. A heel composed of a rim extending
40 around the sides and back thereof and formed of layers of material, and a filling for the center of the heel, said filling coming flush with the front edge of the rim and forming therewith the front of the heel, said filling being
45 formed of layers of material, one of said layers being larger and projecting beyond the adjacent layers, the projecting portion of such layer overlapping the adjacent layers of the rim.

50 4. A heel composed of a series of layers, each layer comprising a rim-section and a center or filling section, the rim and filling

sections of the adjacent layers being of different widths whereby the inner edge of the rim-section of one layer is overlapped by the
55 outer edge of the filling-section of the adjacent layer.

5. A heel for boots or shoes comprising a series of lifts or layers, each lift being composed of a rim-section and a filling or center
60 section, the rim-section of each lift closely embracing and surrounding the filling-section on all sides except at the breast of the heel, and the filling-sections of the adjacent lifts or layers being of different sizes, whereby
65 the inner edge of the rim-section of one lift or layer is overlapped by the outer edge of the filling-section of the next adjacent lift or layer, and the overlapping portions of the center and rim sections are in the body of the
70 heel, and appear only at the breast thereof.

6. A heel comprising a series of lifts or layers each lift composed of a center or filling section and a rim-section of uniform width closely embracing the center section and extending around the sides and back of the
75 heel, the rim-sections of adjacent lifts being of different widths, whereby the inner edge of the rim-section of one lift is overlapped by the outer edge of the filling-section of the
80 next adjacent lift and the overlapping portions of the rim and filling sections appear only at the breast of the heel.

7. A heel composed of three or more lifts or layers each lift comprising a filling-section
85 and a U-shaped rim-section of uniform width closely embracing and surrounding the sides and back of the rim-section, the filling and rim sections of each lift coming flush with each other at the breast of the heel, and the
90 rim-sections of alternate lifts being of the same width and being wider than the rim-sections of the other lifts, whereby the inner edges of alternate rim-sections are overlapped by the outer edges of alternate filling-sections.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS H. MAYO.

Witnesses:

GEO. W. GREGORY,
MARGARET A. DUNN