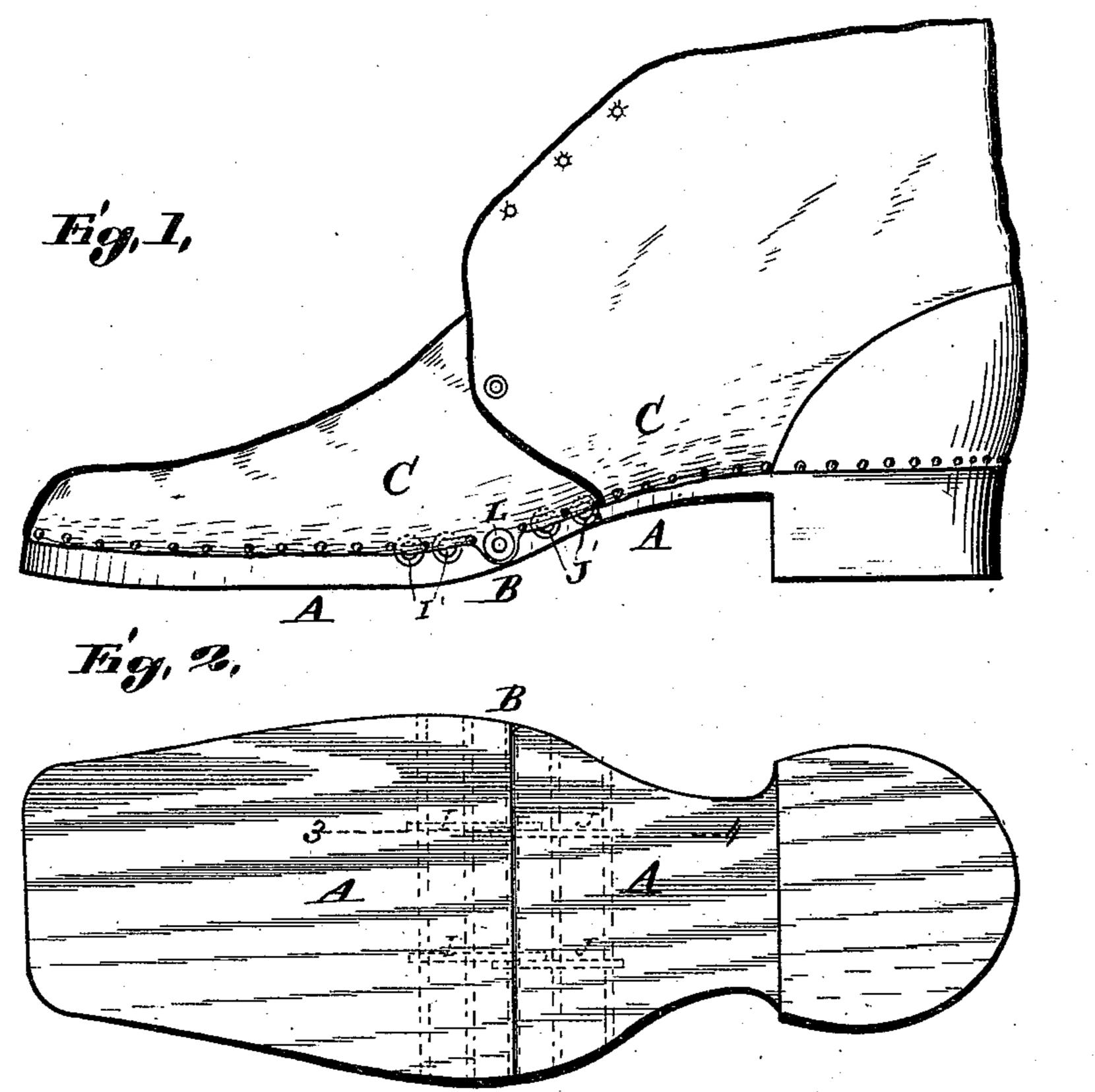
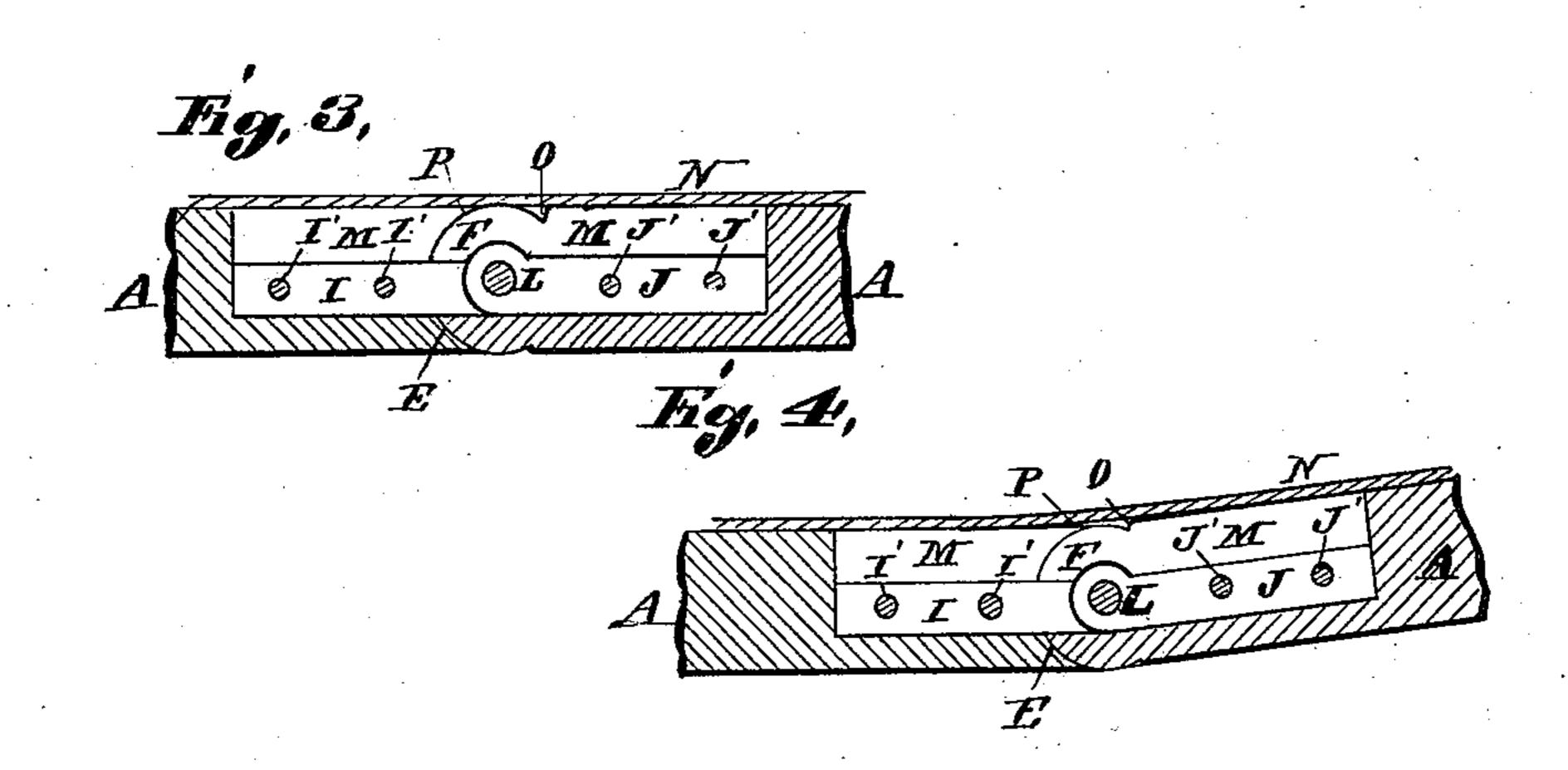
C. H. FRETZ.

SHOE OR BOOT.

No. 354,832.

Patented Dec. 21, 1886.





Witnesses G.W. Windmantr. Hothinghil Inventor Chas. H. Fretz By his attorneys Kaniah Bros

United States Patent Office.

CHARLES H. FRETZ, OF ST. LOUIS, MISSOURI.

SHOE OR BOOT.

SPECIFICATION forming part of Letters Patent No. 354,832, dated December 21, 1886.

Application filed September 9, 1886. Serial No. 213,133. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. FRETZ, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Walking Shoes or Boots, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a side view illustrating my improved shoe. Fig. 2 is a bottom view. Figs. 3 and 4 are detail longitudinal sections taken on line 3 4, Fig. 2, Fig. 3 showing the two parts of the sole of the shoe in a horizontal line, and Fig. 4 showing the heel turned slightly from a horizontal position.

My invention relates to certain improvements in walking shoes or boots, (the invention being shown applied to a shoe, but which may also be used on boots;) and my invention consists in features of novelty, hereinafter fully described, and pointed out in the claims.

Referring to the drawings, A represents the 25 sole of the shoe or boot, which is made in two parts, hinged together at B, and which is preferably made of wood, and to the sole the upper C is secured by tacks or other suitable form of attachment. The toe part of the sole 30 A is made with a semicircular recess or concavity, E, in which fits a semicircular extension or convexity, F, on the heel part of the sole, the parts when held together working against each other in the manner of a ball-35 and-socket joint, allowing the heel part of the sole to rise from a horizontal to an inclined position, as shown in Fig. 4, to afford ease in walking. The two parts are held together-or, in other words, are connected—by hinges con-40 sisting of two sets of plates, I and J, the plates I being secured by rods or rivets I' to the toe part of the sole A, as shown in Figs. 3 and 4, and by dotted lines in Fig. 2, and the parts J being secured by rivets or rods J' to the heel 45 part of the sole. The ends of the plates overlap slightly at the projection F, and are connected at this point by a rod or long rivet, L. The two parts of the sole are thus held together, but are allowed to work freely on each other at the joint.

Slots M are made in the parts from the inside, as shown in Figs. 3 and 4, to receive the plates I and J. The slots do not extend through the sole, so that dampness is not admitted into the shoe.

The heel part of the sole has a recess forming a shoulder, O, against which comes the upper part, P, formed by the groove E in the front part of the sole. The object of this is to prevent the inner part of the sole turning too 60 far into a vertical position.

N represents an insole, with which the shoe may be provided.

I claim as my invention—

1. In a shoe or boot, a sole divided trans- 65 versely into two parts, one part having a concave groove and the other part having a convex projection fitting in the groove at the division-line of the sole, in combination with hinges connecting the parts together, as set 70 forth.

2. In a shoe or boot, in combination with the two-part sole, one part having a semicircular groove forming a point, P, and the other part having a semicircular projection forming 75 a shoulder, O, the hinges for connecting the parts together, substantially as set forth.

3. The combination, with the sections A A, of the plates I and J, having perforations I', J', and L, said sections being provided at 80 points intermediate of their edges with a groove for receiving each plate and supporting it in a vertical plane, and rods passed through said perforations for securing the plates to the respective sections and to each 85 other, substantially as set forth.

CHAS. H. FRETZ.

In presence of— GEO. H. KNIGHT, J. WAHLE.