

J. CAIRNS.
CUSHION HEEL.

APPLICATION FILED MAR. 27, 1907.

935,089.

Patented Sept. 28, 1909.

FIG. 1.

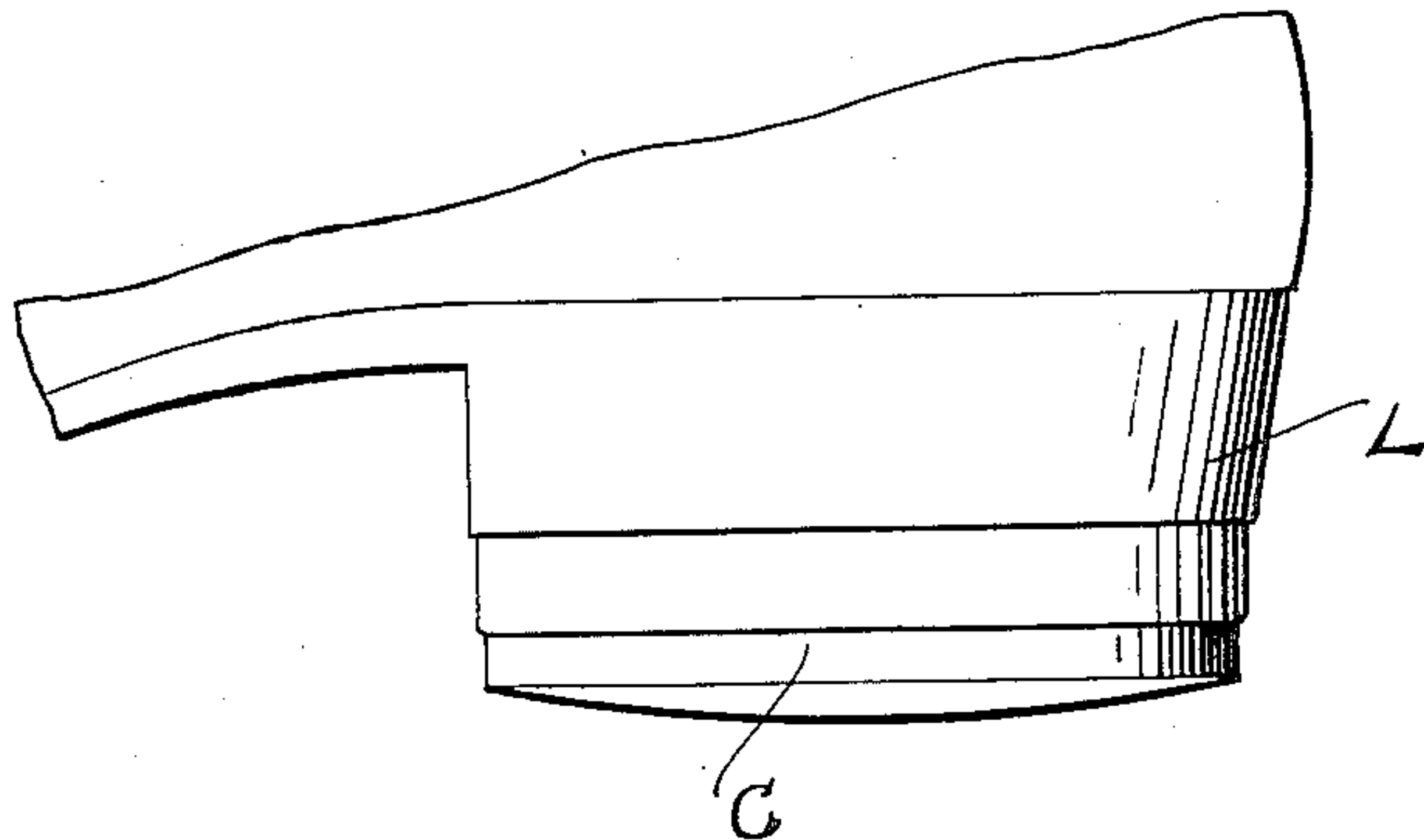


FIG. 2.

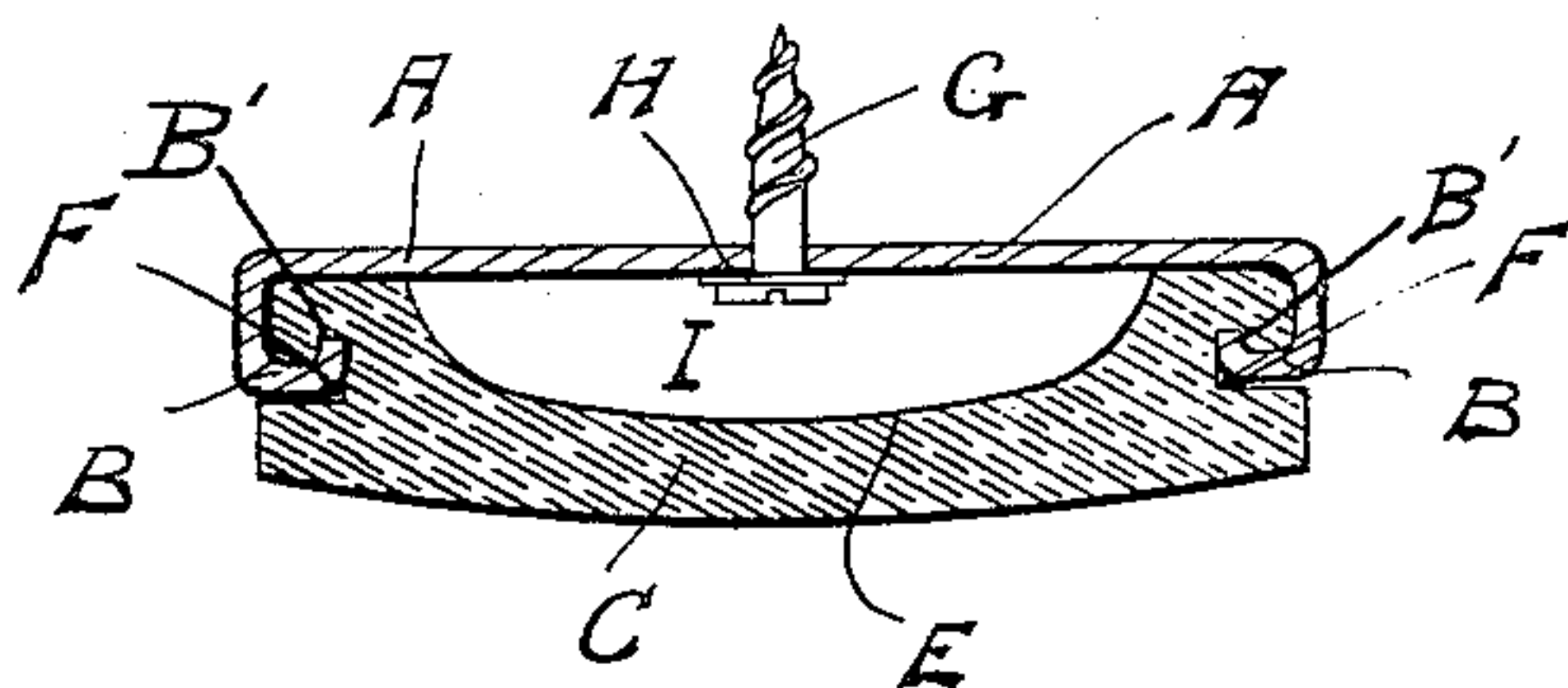
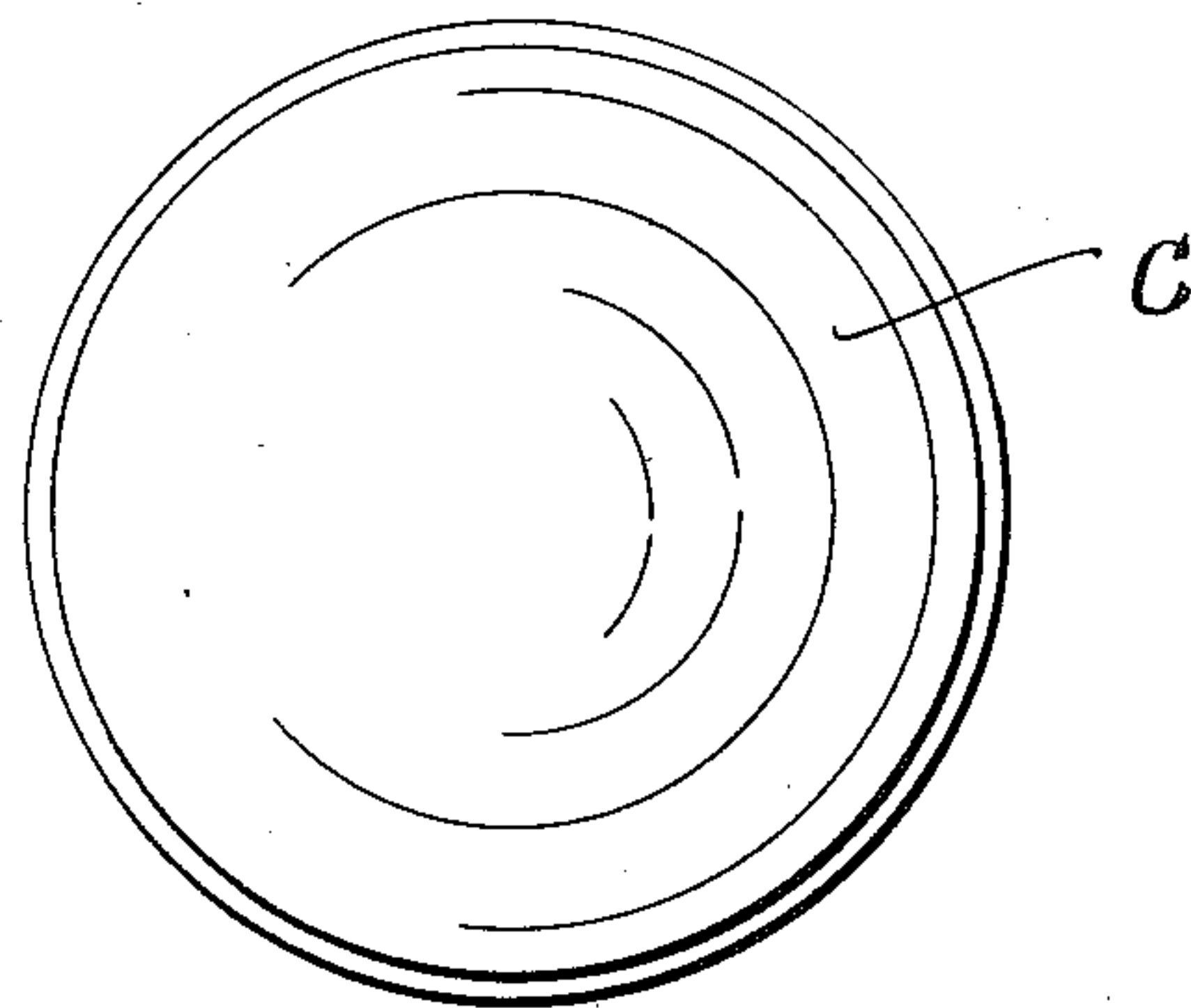


FIG. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN CAIRNS, OF LONDON, ENGLAND.

CUSHION-HEEL.

935,089.

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To all whom it may concern:

Be it known that I, JOHN CAIRNS, subject of the Kingdom of Great Britain, residing at 9 Alloa road, Deptford Park, London, S. E., in the county of Middlesex, England, mechanic, have invented certain new and useful Improvements in or Relating to Cushion-Heels, of which the following is a specification.

10 This invention relates to improvements in pneumatic heel pads for boots, shoes and the like, whereby any vibration or shock to the wearer is absorbed thereby making walking much easier.

15 In order that my invention may be properly understood and readily carried into effect, I have appended hereunto one sheet of drawings, of which—

20 Figure 1 is a view of heel of boot showing my heel pad fixed thereto. Fig. 2 is a section of the pad. Fig. 3 is a plan of pad and heel.

In carrying out my invention I provide an air-tight shell A of aluminum or any other suitable metal having an inwardly-turned flange B and an upwardly turned flange B'. I also provide a pad C of rubber or other elastic material, the pad has a hollow or recess E in the underside thereof, and a groove F which causes it to be held in place, and when the pad is in position, an air space I is formed, as shown more particularly in Fig. 2. The whole thus forms a complete pneumatic pad in itself without co-acting with the heel.

The shell is fixed to the heel L of the boot or shoe by a suitable screw G which is passed through a washer H and hole or opening in the shell. By this means the air is prevented from escaping when the pressure is put on the rubber pad, and this is capable of being revolved, so that the whole of the surface of the rubber may be worn away before a new one need be replaced, and this can be done without the necessity of replacing a new shell. By the use of this combination of metal, rubber and air, I obviate the suction of the present heels of boots and shoes and also prevent the separation of the heel from the upper.

Having described my invention, I declare that what I desire to secure by Letters Patent is:—

A pneumatic heel comprising a metallic heel plate having a down turned peripheral flange with an inward and an upward projection, a resilient pad partly contained within the shell formed by the heel plate and flange having in its surface adjacent to the heel plate an air cavity and in its peripheral surface a channel to receive the inward and upward projection of the peripheral flange, and a means for pivotally connecting the heel plate to the heel.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

JOHN CAIRNS.

Witnesses:

H. D. JAMESON,
F. L. RANDS.