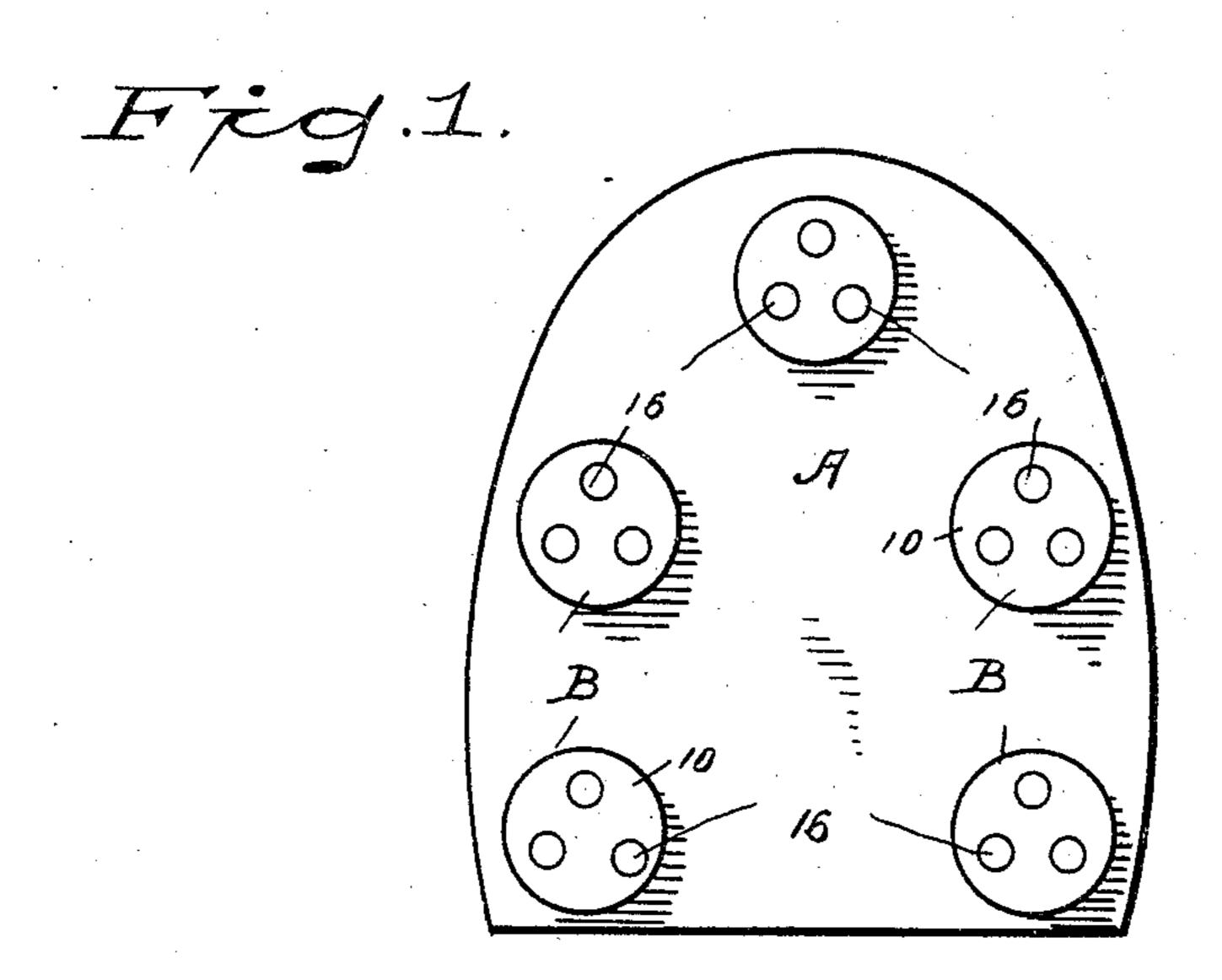
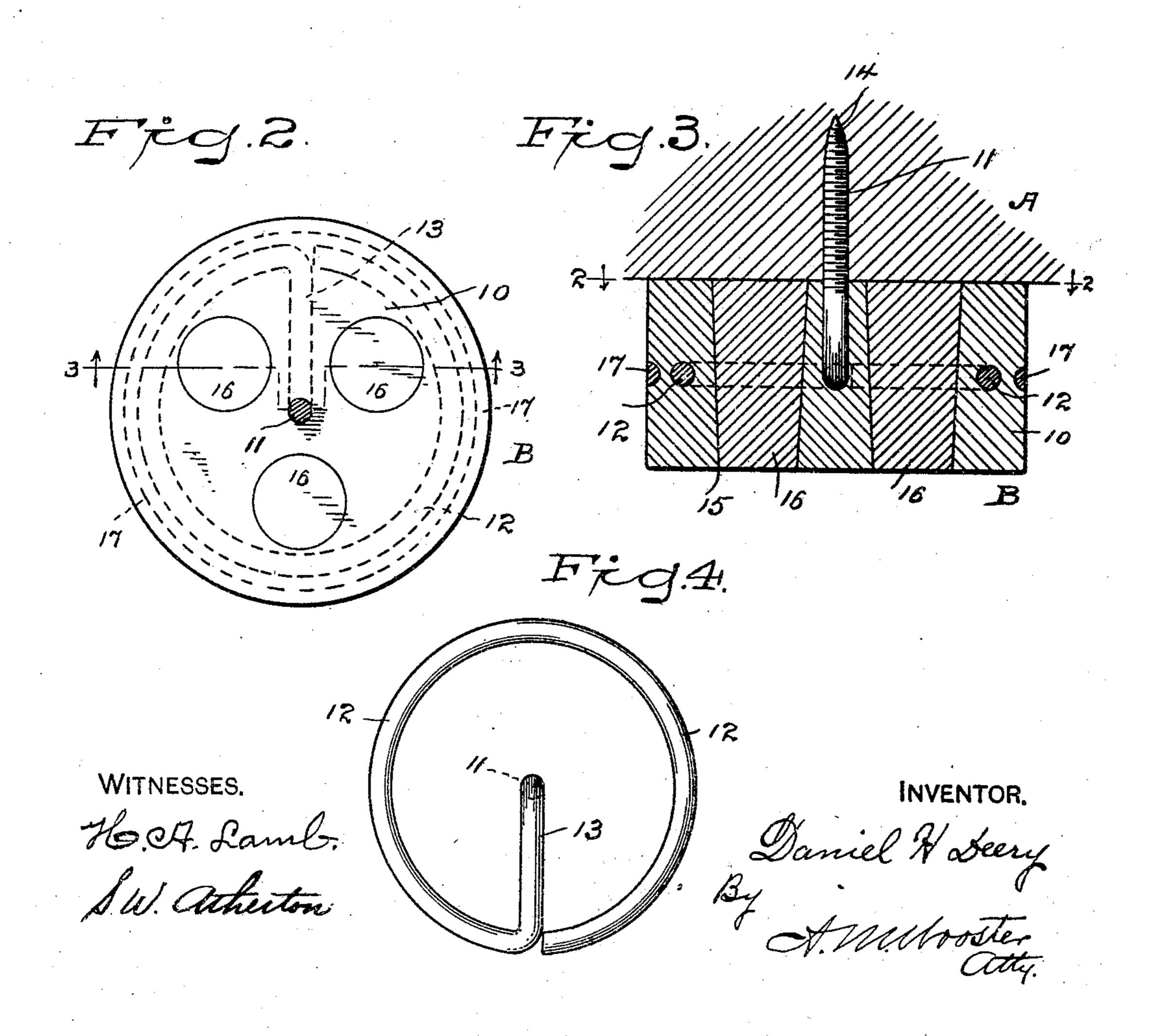
D. H. DEERY.
ELASTIC HEEL PROTECTOR.
APPLICATION FILED JUNE 6, 1904.





United States Patent Office.

DANIEL H. DEERY, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR OF ONE-HALF TO CHARLES J. MERCER, OF BRIDGEPORT, CONNECTICUT.

ELASTIC HEEL-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 788,191, dated April 25, 1905.

Application filed June 6, 1904. Serial No. 211,249.

To all whom it may concern:

Be it known that I, DANIEL H. DEERY, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecti-5 cut, have invented a new and useful Elastic Heel-Protector, of which the following is a

specification.

My invention has for its object to provide elastic heel pads or protectors which shall be 10 adapted for attachment by any person without any tools whatever to the ordinary leather heels of boots and shoes, which will possess all the advantages without the disadvantages and cost of rubber heels, will be more durable 15 than ordinary rubber heels, will hold against slipping on wet or icy sidewalks, and which shall be so inexpensive to manufacture that they may be placed upon the market at a price easily within the reach of all.

With these and other objects in view I have devised the novel elastic heel pad or protector which I will now describe, referring to the accompanying drawings, forming a part of this specification, and using reference charac-

25 ters to indicate the several parts.

Figure 1 is an inverted plan view of an ordinary leather boot or shoe heel, showing the application thereto of a set—in the present instance five—of my novel elastic protectors; 30 Fig. 2, a plan view, on a greatly-enlarged scale, of one of my novel elastic protectors detached; Fig. 3, a section of the protector on the line 3 3 in Fig. 2, also showing the heel in section to illustrate the mode of attaching the pro-35 tector thereto; and Fig. 4 is a plan view of the attaching-screw detached.

A denotes an ordinary leather heel, and B my novel elastic protector as a whole.

My novel protector consists, essentially, of 40 a pad 10, which I make of high-grade soft vulcanized rubber, and 11 the attaching-screw, which is securely molded within it. The pad may be molded to any desired shape, size, and thickness, but is ordinarily made round and 45 of about the relative size and thickness indicated in Figs. 1 and 3. The screws which I use for attaching the pads or protectors in place are preferably made from wire, like ordinary screw-eyes, and are provided with ring-

shaped heads 12, which lie in a plane at a right 50 angle to the longitudinal plane of the screws and are connected to the screws by shanks 13. These ring-shaped heads are molded into the protectors in the process of manufacture, and the shanks 13 act to effectually prevent the 55 protectors from turning on the screws, so that as the screws are of course gimlet-pointed the protectors may be easily attached or removed and new ones substituted without the use of any tools whatever, although it will assist in 60 the attachment of the protectors to first make holes in the heels, at the proper places to receive them, with an awl. In order to increase the wearing qualities of my novel pads or protectors and also to cause them to ad- 65 here firmly without slipping when worn upon wet or icy sidewalks, I preferably form in the process of molding outwardly-converging holes 15 through the pads or protectors, in which I place tapering rawhide plugs 16, the 70 larger end of the plugs being placed inward and the taper being sufficient to retain the plugs in place and effectually prevent them from working out in use. It will be noted that the plugs are inclosed by the ring-shaped 75 heads of the attaching-screws, which act to prevent the pads from flattening out. By making these plugs of rawhide I provide an excellent wearing substance and a substance that will not slip on wet or icy sidewalks and, 80 furthermore, a substance that will be wholly free from the objectionable qualities of metal, as it will make no sound in use and will not impair the yielding soft-walking qualities of the rubber pads. This yielding soft-walking 85 quality is the one great advantage of rubber heels and is possessed to an equal extent by my novel pads or protectors, which have the additional advantage of not necessitating the removal of the leather heel. This is an im- 90 portant advantage in the matter of appearance, as it is of course well understood that rubber heels cannot be made to retain dye and polish and that they are always unsightly and always show that the outer portion of the heel 95 is of a different material. 17 denotes a retaining-band, which may be made of wire and may be molded into the exterior of the pad

or protector at about its mid-height. This retaining band when used supplements the action of the ring-shaped head of the attaching-screw in preventing the protector from flattening out in use.

Having thus described my invention, I

claim—

1. An elastic heel-protector comprising a rubber pad and an attaching-screw provided with a ring-shaped head lying in a plane at a right angle to the longitudinal plane of the screw and connected to the screw by a shank, said ring-shaped head and shank being molded into the protector and the shank serving to prevent the protector from turning on the screw.

2. A heel-protector consisting of an elastic pad provided with outwardly - converging holes, tapering rawhide plugs in said holes, and an attaching-screw having a ring-shaped head molded in the pad and inclosing the plugs.

3. An elastic heel-protector consisting of a rubber plug, an attaching-screw provided with a ring-shaped head molded therein and 25 an exterior retaining-band at its mid-height.

4. In a heel-protector, the combination with a soft-rubber pad having a plurality of outwardly-converging holes, of an attaching-screw having a head molded in the pad and 3°

rawhide plugs secured in the holes.

5. In a heel-protector, the combination with a soft-rubber pad having a plurality of outwardly converging holes, of an attaching-screw having a ring-shaped head molded 35 therein and tapering rawhide plugs in the holes, said plugs being inclosed by the head.

In testimony whereof I affix my signature in

presence of two witnesses.

DANIEL H. DEERY.

Witnesses:

MARY V. AMBROSE, MARGARET E. WILES.