

No. 691,857.

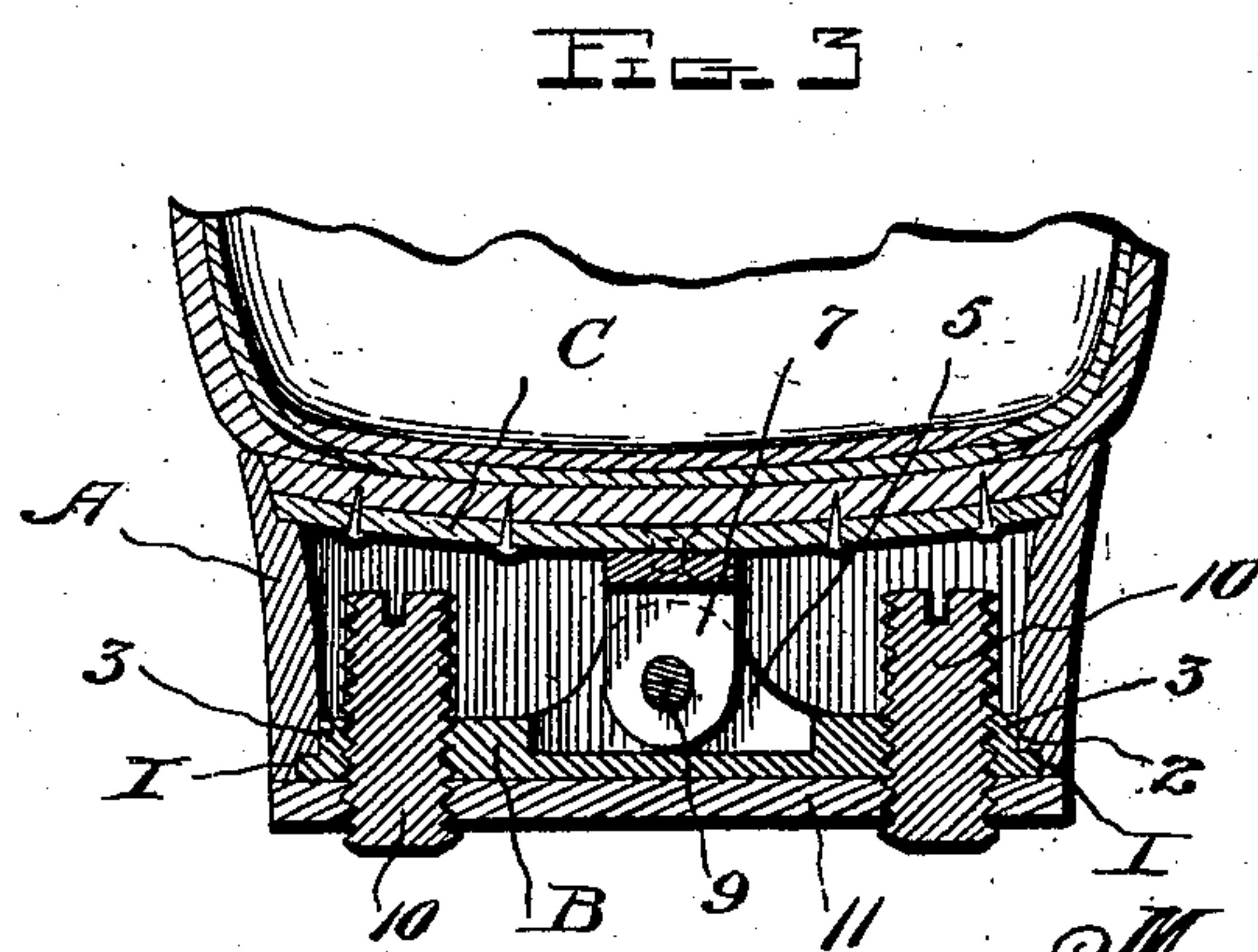
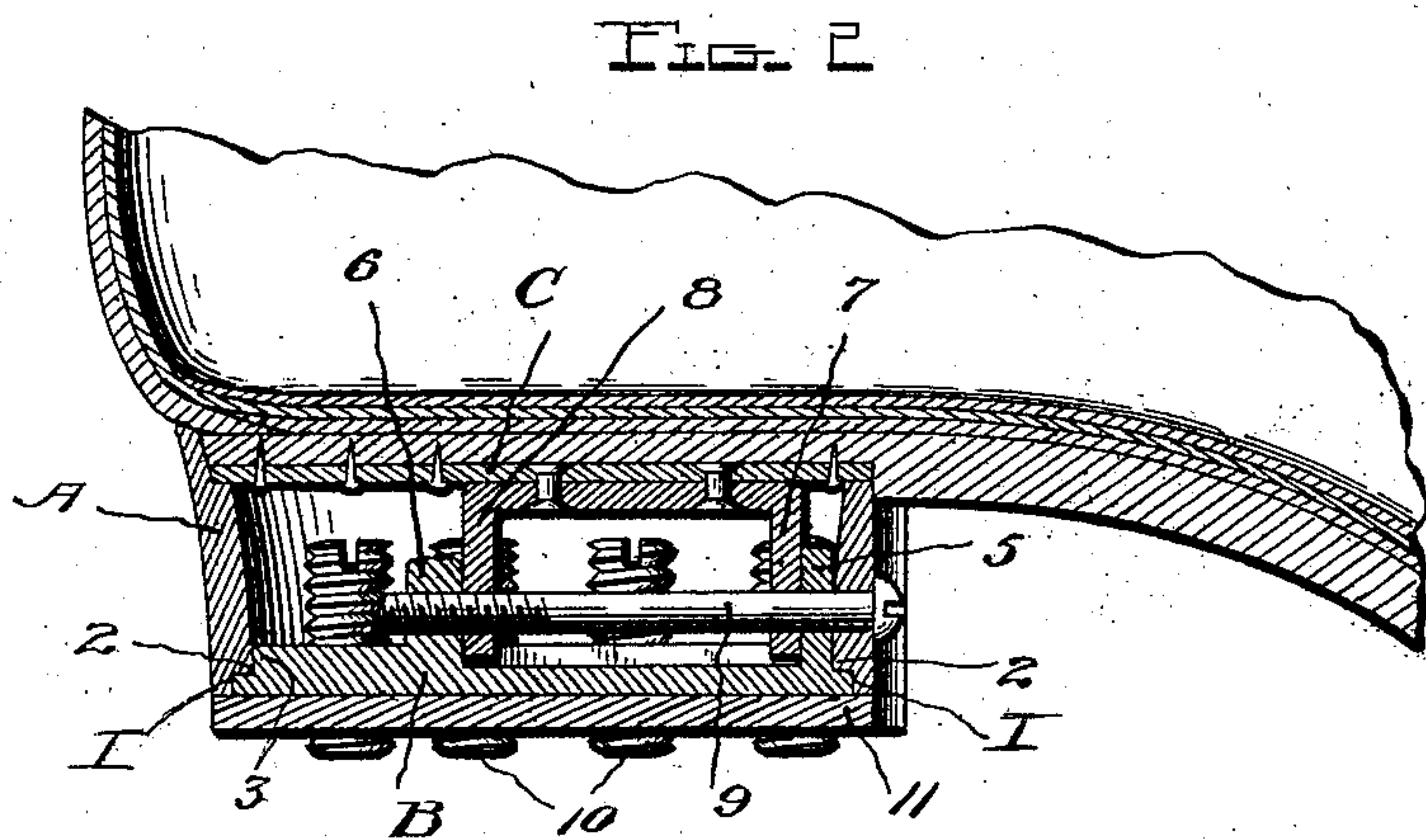
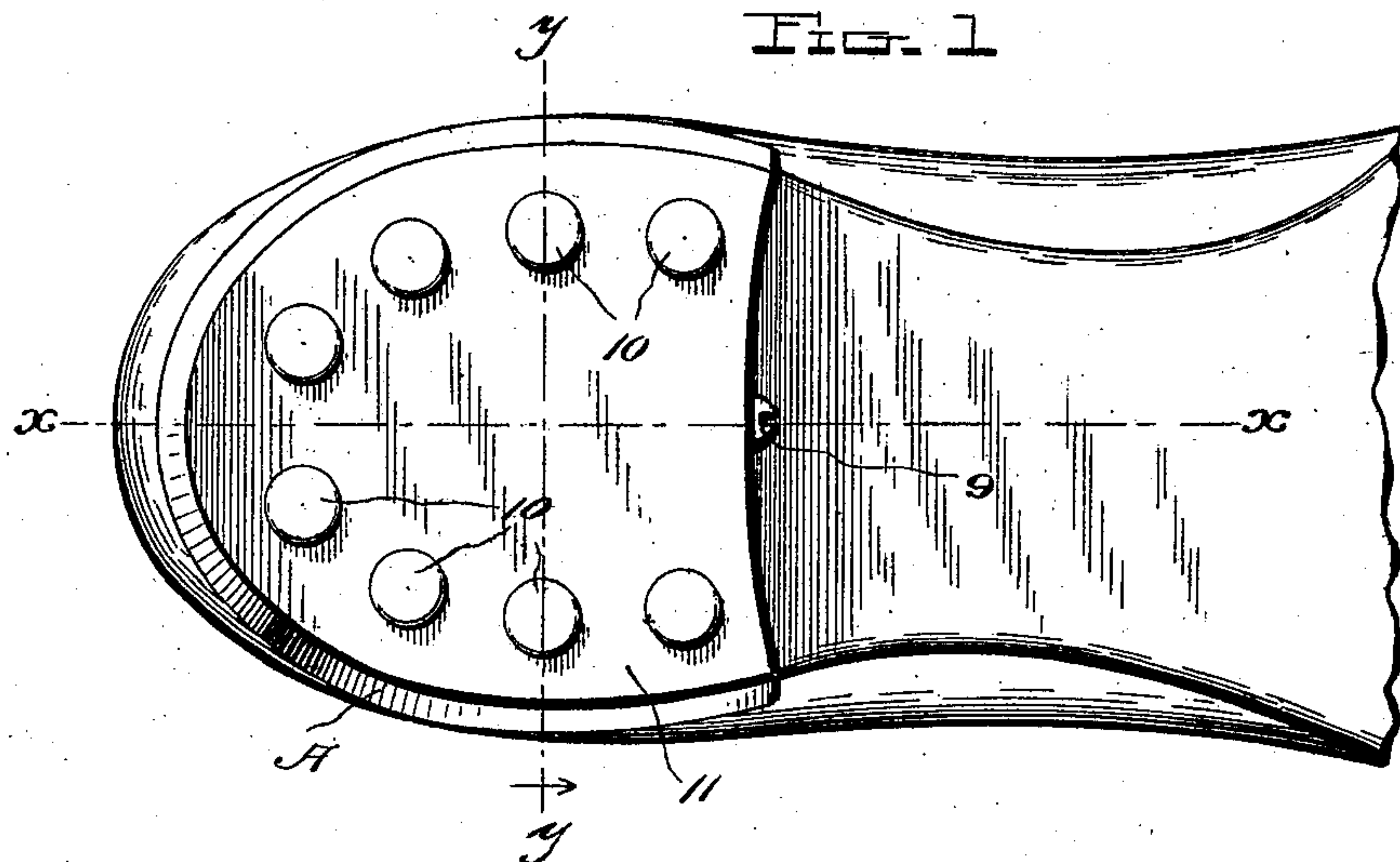
Patented Jan. 28, 1902.

M. L. HANSEN.

DETACHABLE HEEL FOR BOOTS OR SHOES.

(Application filed June 13, 1901.)

(No Model.)



Inventor

M. L. Hansen

Witnesses

J. A. Greenbauer Jr. 334
J. A. Greenbauer Jr.

A. B. Wilson & Co.
Attorneys

UNITED STATES PATENT OFFICE.

MADS L. HANSEN, OF EAST OAKLAND, CALIFORNIA.

DETACHABLE HEEL FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 691,857, dated January 28, 1902.

Application filed June 13, 1901. Serial No. 64,411. (No model.)

To all whom it may concern:

Be it known that I, MADS L. HANSEN, a citizen of the United States, residing at East Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Detachable Heels for Boots or Shoes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain improvements in detachable heels for boots and shoes by which the heel is easily and readily fitted and adjusted and securely held upon the boot or shoe, and it also provides an adjustable base or foundation for the heel which serves instead of the ordinary wear-plate and which can be adjusted to compensate for wear at any point, and thus keep the base or tread of the heel always even and true.

Referring to the accompanying drawings, Figure 1 is a bottom plan view of a heel and a portion of a sole of a boot or shoe. Fig. 2 is a longitudinal vertical sectional view on line *x x*, Fig. 1; and Fig. 3 is a cross-section on line *y y*, Fig. 1.

The heel is made of metal and is either made of an outer rim or shell A, which forms the wall of the heel in a separate piece, and a cap or cover B, which fits upon the bottom of the wall A and forms the base of the heel, or the wall and cap or cover can be cast or otherwise made in a single integral piece. When these two pieces are made in separate parts, the wall A is made with a rabbeted groove I, extending entirely around its inner edge, as shown at Fig. 2, so as to provide a shoulder 2 for the purpose hereinafter described. The base-piece B is then formed with a reduced portion 3, which projects into the wall or shell A and allows its edge to fit into the rabbeted groove, while the lower edge of the wall fits against the shoulder 2, thereby permitting the two parts to interlock when they are put together and giving a smooth exterior finish to the joint. On the upper side of the base-piece B, I cast or otherwise form two lugs 5 6, one, 5, at the front edge of the base and at about the middle of the straight portion of the heel and the other, 6, near its rear edge, so that the two will be

in line with each other. Through the lugs 5 6 I make horizontal holes, and the hole in lug 6 is provided with screw-threads for the purpose hereinafter described.

To fasten this heel upon the shoe or boot, I secure a thin metallic plate C by nails or otherwise to the leather sole where the heel is to be applied; but before applying this plate I reduce the thickness of the sole-leather sufficiently to permit the plate to lie flush with the bottom of the sole. This plate C has secured to it or forming a part of it two downward-projecting lugs 7 and 8, which pass alongside the lugs 5 and 6 on the interior of the heel, and they have each a hole passing horizontally through them in line with the holes in the lugs 5 and 6, so that all of the holes are in the same horizontal line. A hole is also made through the vertical front wall of the heel in line with the several holes in the lugs referred to, and when the parts are put together a bolt or screw-rod 9 is passed through the front wall of the heel and through the holes in the overlapping lugs, and its rear end screws into the threaded hole of the rear lug 6, thereby firmly securing the heel to the plate and shoe-sole.

In order to provide a wearing-plate for the bottom of the heel, I make a series of screw-holes through the base-plate B, near the outer rim of the plate, and insert from the interior of the heel or upper side of the plate a large screw 10 through each of these screw-holes, so that the flat end of each screw will project below the bottom of the heel. Each screw 10 has a nick in its end inside the heel, so that when the parts of the heel are separated each screw can be turned so as to project it farther out or withdraw it, as desired. These screws are placed close enough together so that their flat exposed ends will form a wearing-surface for the heel to rest upon. Whenever any of these screws wear down so as to destroy the evenness of the tread, they can be readily adjusted by turning the proper screws with a screw-driver, and thus preserve an even base or wearing-surface for the heel. If desired, a thin layer or lift of leather 11 can be placed upon the plate B of the heel, in which case the screws will pass through the leather as well. By this means I provide a detachable heel of simple construction, which

can be easily adjusted and which has a wearing-surface that can be kept perpetually even.

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

A detachable heel for boots and shoes consisting of a top plate fitted and fastened in a concavity formed in the sole of the heel, a detachable shell in the form of a heel, said shell
10 being closed at top by said plate, a detachable base-plate closing the bottom of the shell, lugs projecting upward from the base-plate into the interior of the shell, lugs projecting downward from the top plate into the
15 interior of the shell and arranged in line with

the first-named lugs, a screw or bolt passed through the breast of the heel and lugs and securing the aforementioned parts together, bolts or screws passing vertically through the
20 base-plate and adjustable to form an even bearing-surface, and a lift closing the joint between the shell and base-plate and secured in position by the latter-named bolts or screws,
25 substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

MADS L. HANSEN.

Witnesses:

NICHOLAS T. ARRINGTON,
E. S. POWERS.