

No. 828,779.

PATENTED AUG. 14, 1906.

A. T. SCHROEDER.

SHOE HEEL.

APPLICATION FILED NOV. 7, 1905.

Fig. 1.

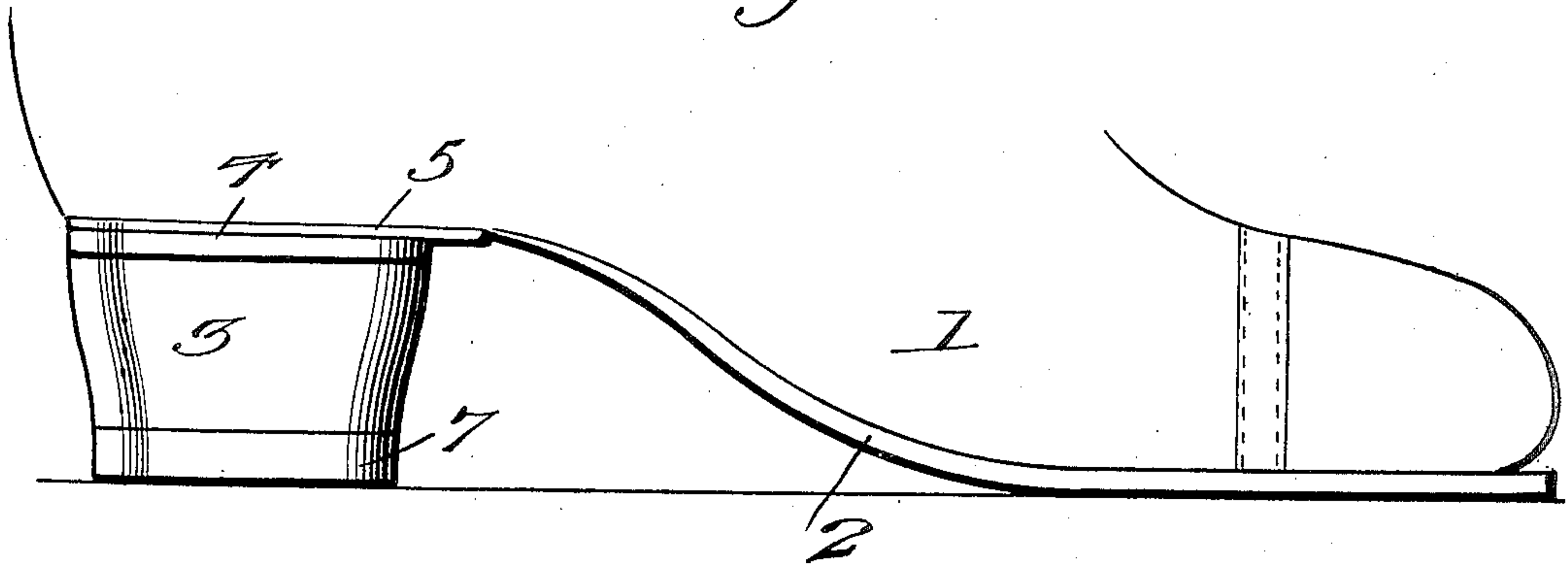


Fig. 3.

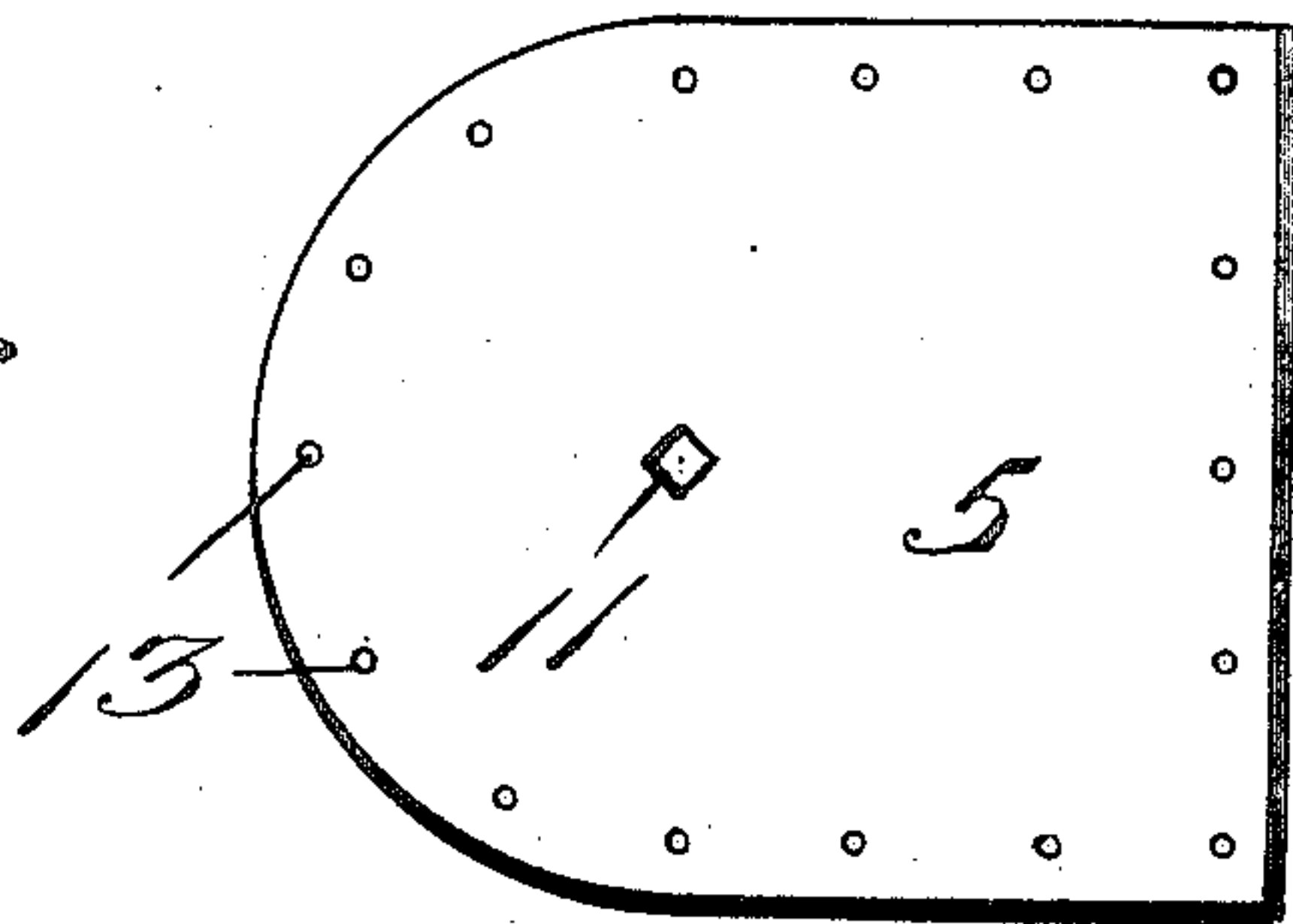


Fig. 2.

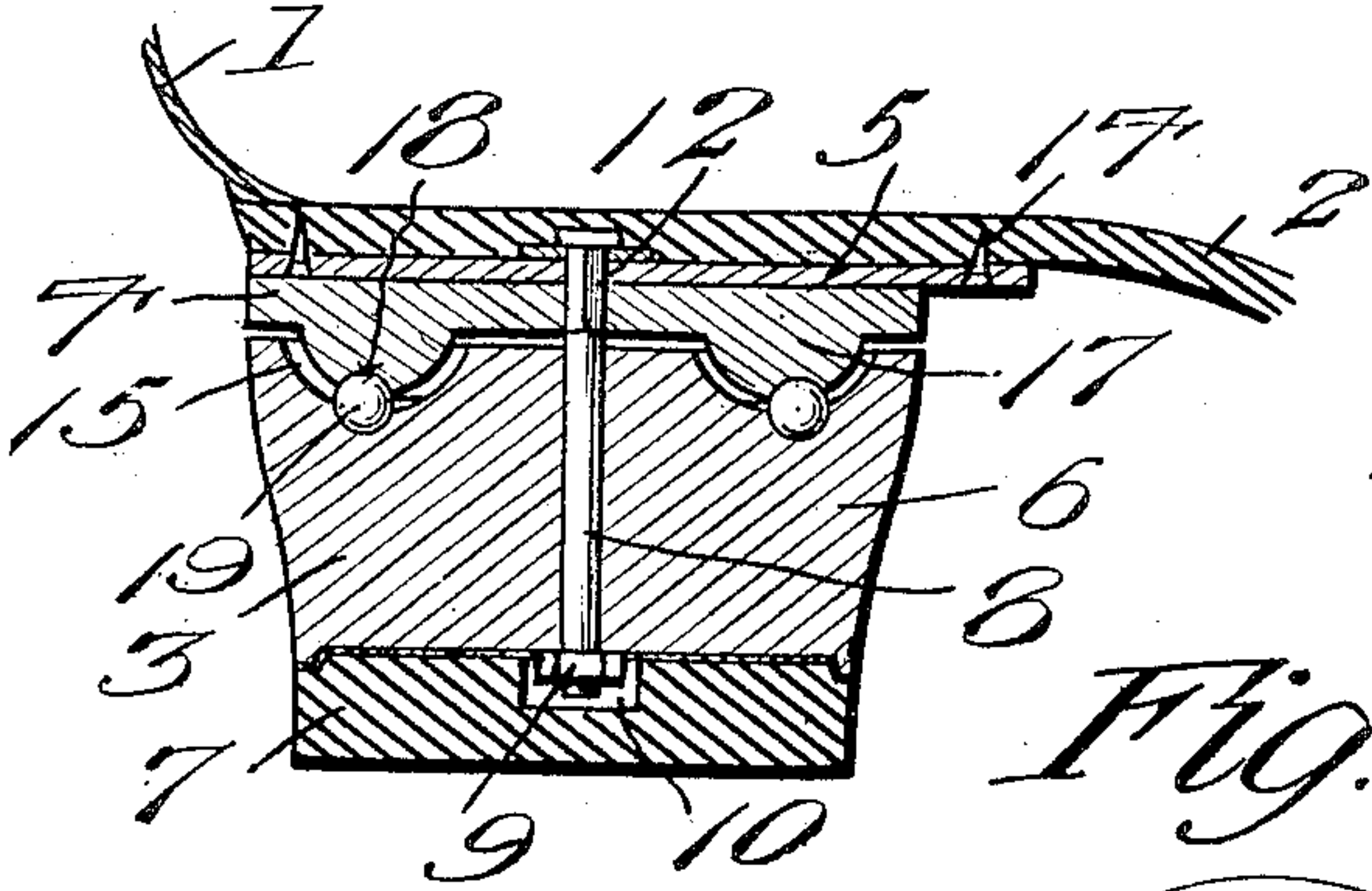
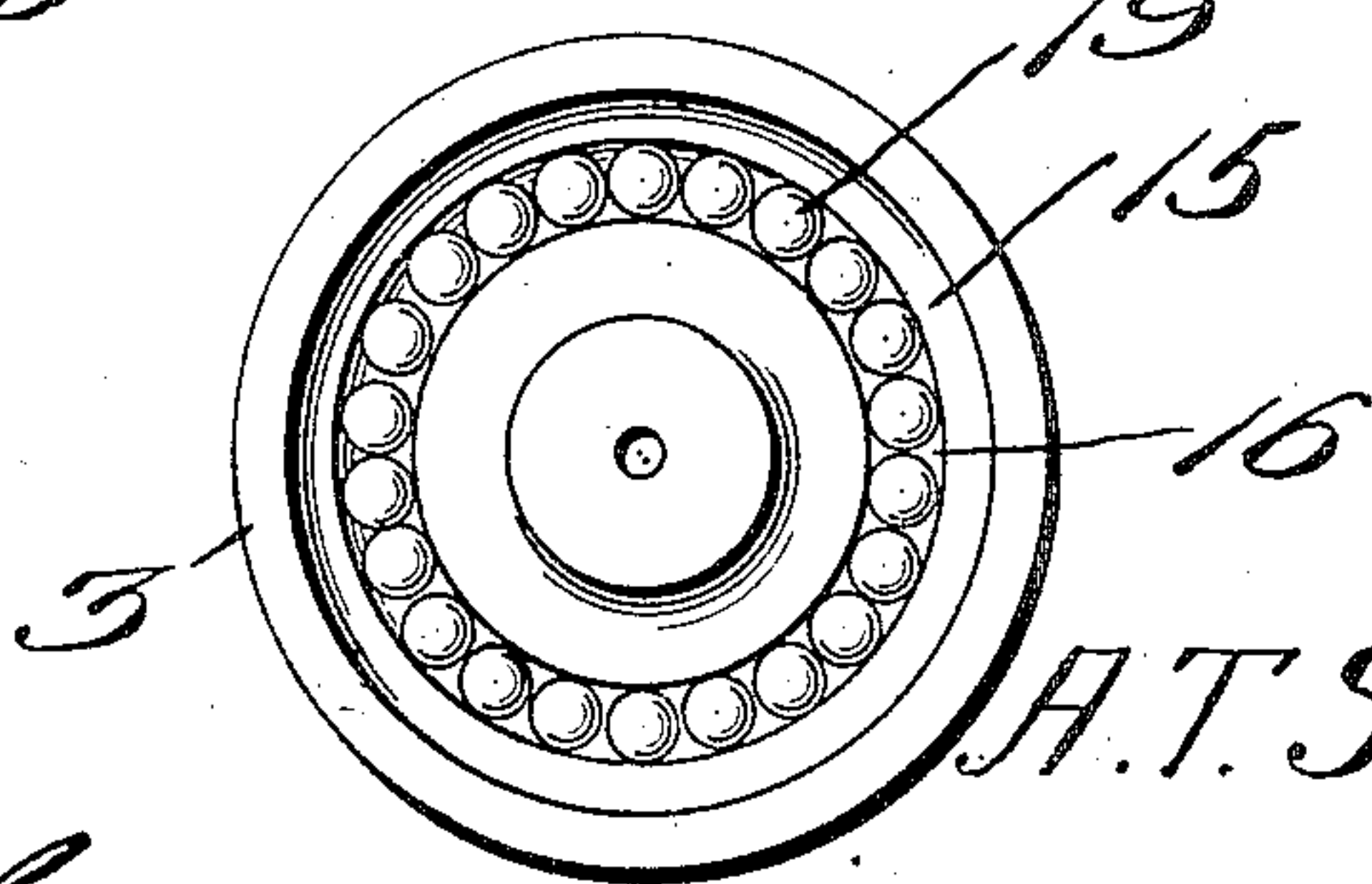


Fig. 7.



Witnesses
Wm. Koerth,
J. S. Elmore

Inventor

A. T. Schroeder,

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

ALWIN T. SCHROEDER, OF PHILADELPHIA, PENNSYLVANIA.

SHOE-HEEL.

No. 828,779.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed November 7, 1905. Serial No. 286,244.

To all whom it may concern:

Be it known that I, ALWIN T. SCHROEDER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Shoe-Heels, of which the following is a specification.

This invention relates to shoes, and especially to an improved form of heel therefor, and has for its objects to produce a simple inexpensive device of this character which may be readily applied to the shoe, one which will wear evenly, thus to prolong the life of the heel, and one whereby true walking is insured and ready turning upon the heel permitted.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a detail side elevation of a portion of a shoe equipped with a heel embodying the invention. Fig. 2 is a vertical section taken centrally through the heel. Fig. 3 is a plan view of the head-plate. Fig. 4 is a top plan view of the movable section of the heel, showing the antifriction-balls in place.

Referring to the drawings, 1 designates a shoe having a sole 2 and a heel 3, these parts, except as hereinafter described, being of the usual or any appropriate construction and material and adapted in practice to perform their ordinary functions.

The heel 3, constituting the subject-matter of the present invention, comprises an upper fixed section 4, attached to a head-plate 5, and a lower relatively movable section 6, having a rubber or other suitable wearing-face 7, there being fixed in the section 4 the upper end of a central connecting-rod or pintle 8, on which the heel-section 6 is rotatively mounted and secured by means of a nut 9, tapped onto the lower end of the rod within a recess 10, provided therefor in the rubber race-piece 7. The plate 5, which is provided with a squared opening 11 to receive the upper squared end 12 of the pintle 8 for fixing the latter against rotation, has a marginal series of openings or perforations 13 to receive tacks or other fastening members 14, by which the plate is secured to the sole 2.

Formed in the upper face of the section 6 is an annular cone-groove 15, provided with a supplemental ball-receiving groove or raceway 16, while formed upon the adjacent face of the section 4 is an annular cone rib or projection 17 of substantially semicircular form in cross-section, designed to seat within the groove 15 and having a ball-receiving groove or raceway 18 formed therein in position to register with the raceway 16 and serve, in conjunction with the latter, to receive antifriction devices or balls 19, disposed between the heel-sections 4 and 6, whereby the latter may be turned freely upon the connecting-bolt or pintle 8.

In practice the plate 5, having the section 4 secured thereto, is attached to the shoe-sole by means of the fastening members 14, as heretofore explained, the pintle 8 having been previously positioned in the opening 11. The antifriction-balls 19 are next arranged in the raceway 16 and the heel-section 6 applied to the pintle 8 and secured by means of the nut 10, after which the wearing-piece 7 is cemented or otherwise secured in place. It is apparent that under this construction the section 6 may rotate freely to insure uniform wearing of the lower face of the heel and that the wearer of the shoe may turn freely on the heel without scraping the latter over the ground-surface.

From the foregoing it is apparent that I produce a simple device admirably adapted for the attainment of the ends in view, it being understood that in attaining these ends minor changes in the details herein set forth may be resorted to without departing from the spirit of the invention.

Having thus described my invention, what I claim is—

In a device of the class described and in combination with a shoe, of a head-plate detachably secured thereto, an upper heel-section fixed to said head-plate, a pintle having its upper end fixed against rotation in the upper section, a lower heel-section rotatively mounted on said pintle, one of said sections being provided in its inner face with an annular cone-groove and the other with an annular cone-rib formed to fit in said groove and the sections having a raceway formed

between their meeting faces within the area of the groove and rib, antifriction devices disposed in the raceway, a nut applied to the outer end of the pintle and a facing-piece applied to the lower face of the lowermost heel-section, said facing-piece being provided in its inner face with a recess to receive the nut.

In testimony whereof I affix my signature in presence of two witnesses.

ALWIN T. SCHROEDER.

Witnesses:

HENRY W. SMITH,
WALTER M. HILLIARD.