

No. 839,886.

PATENTED JAN. 1, 1907.

E. G. PERKINS.  
SAFETY RUBBER HEEL.  
APPLICATION FILED JULY 10, 1906.

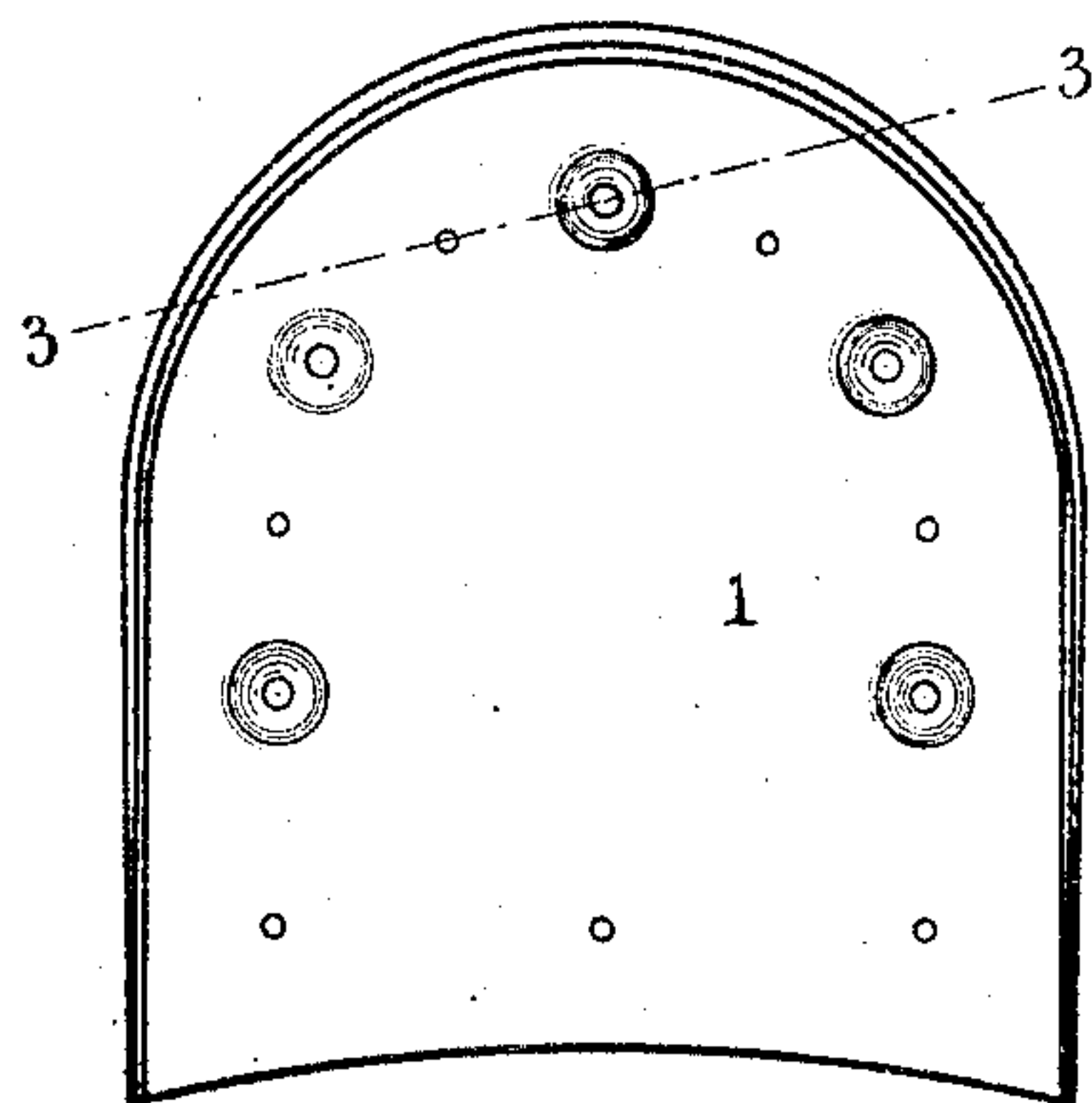


Fig 1

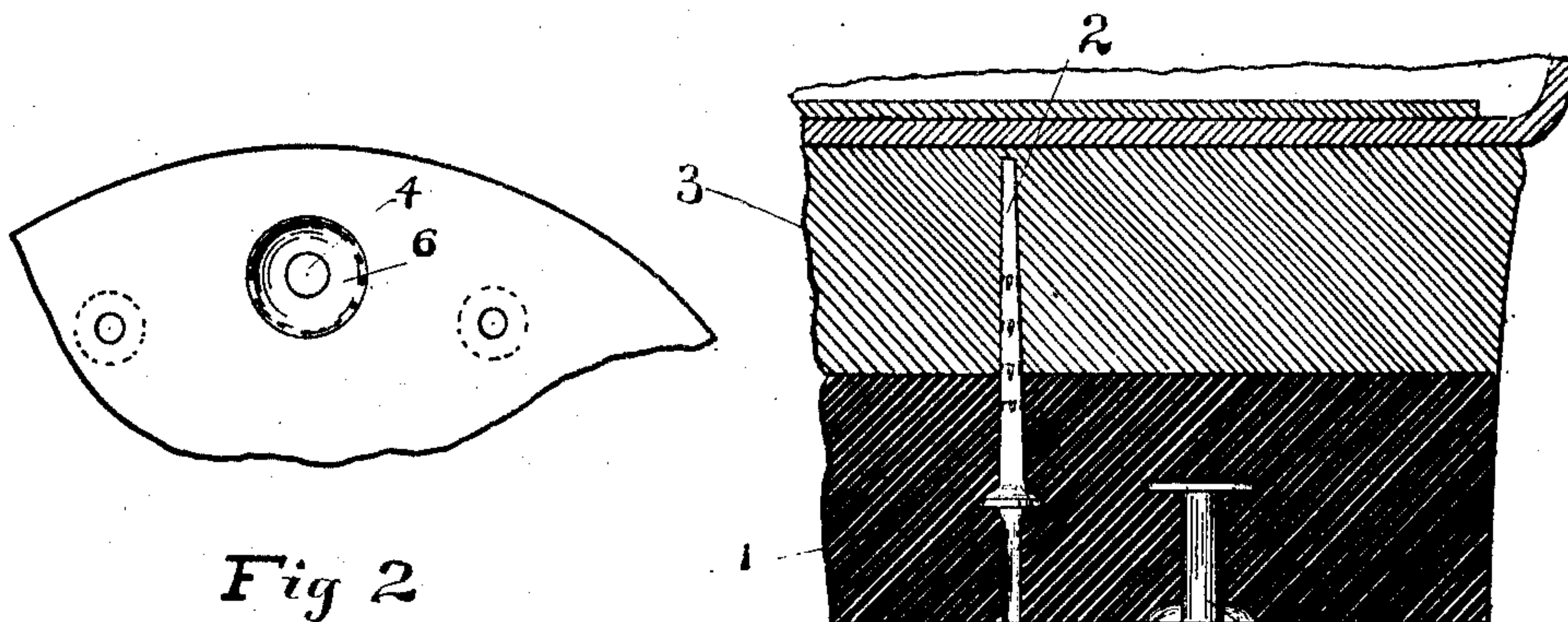


Fig 2

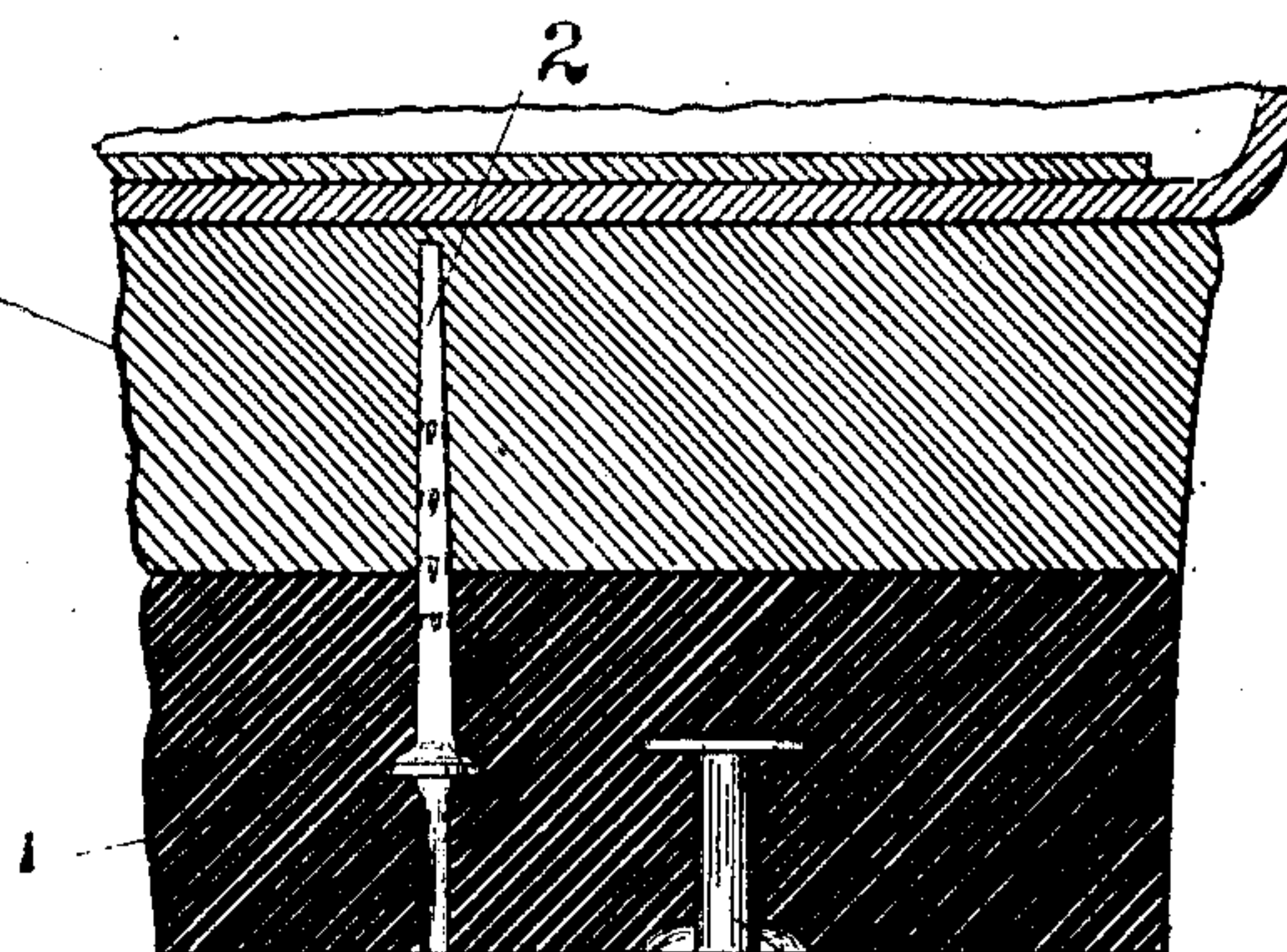


Fig 3

WITNESSES:  
*J. E. Grant*  
*B. Naggs*

INVENTOR.  
*E. G. Perkins*  
BY  
*J. M. Wright*  
ATTORNEY.

# UNITED STATES PATENT OFFICE.

ELBERT G. PERKINS, OF VALLEJO, CALIFORNIA, ASSIGNOR OF ONE-HALF  
TO A. R. POLSKY, OF VALLEJO, CALIFORNIA.

## SAFETY RUBBER HEEL.

No. 839,886.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed July 10, 1906. Serial No. 325,450.

*To all whom it may concern:*

Be it known that I, ELBERT G. PERKINS, a citizen of the United States, residing at Vallejo, in the county of Solano and State of California, have invented new and useful Improvements in Safety Rubber Heels, of which the following is a specification.

This invention relates to rubber heels; and the object of the invention is to provide a cheap and simple improvement in rubber heels for preventing the slipping of the same upon a wet sidewalk or other slippery surface.

The improvement may also be applied to the sole of the shoe.

In the accompanying drawings, Figure 1 is a bottom plan view of the heel. Fig. 2 is an enlarged bottom plan view of a portion thereof. Fig. 3 is a vertical section on the line 3 3 of Fig. 2.

Referring to the drawings, 1 indicates the rubber heel, which is attached in the usual manner by nails 2 to the leather heel 3 of the shoe. Embedded in said rubber heel are a suitable number of safety-studs 4, having flat heads 5, located at about the center of the thickness of the rubber heel, although the depth at which they are embedded may vary, according to the required conditions. The lower ends of these studs extend to the plane of the bottom of the heel, and both for convenience in molding and to render the studs more effective in preventing slipping the bottom surface of the heel is formed with shallow recesses 6 around the ends of the studs. The effect of this construction is that when unusual pressure is placed upon the heel, and particularly at the commencement of a slipping motion of the heel upon the pavement the studs themselves then project slightly below the bottom surface of the heel and by their engagement with the sur-

face of the pavement or other floor arrest the slipping movement. Notwithstanding this, partly because of the thickness of the rubber around the studs and partly because of the thickness resting upon the top of the studs, the heel is not deprived of its elasticity. Hence by this construction there are obtained all the advantages of a cushioning rubber heel, while avoiding the objection heretofore raised thereto of its tendency to slip on a wet smooth surface.

While I have for the purpose of illustration shown the studs as five in number and arranged in a curve following the curved contour of the heel, it is to be well understood that the number and specific arrangement of the studs form no part of my present invention; but the studs may be provided in any number and in any desired or preferred arrangement.

While the invention is primarily intended for rubber heels, it may also be used with advantage in rubber soles.

I claim—

A shoe-bottom provided with a plurality of rigid studs suitably arranged therein, their lower ends extending downward to terminate in substantially the same plane as the lowermost surface of the shoe and being sufficiently small to prevent slipping by their engagement with the surface upon which the shoe rests, and the lowermost surface of the shoe having shallow concavities around the lower ends of the respective studs, substantially as described.

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

ELBERT G. PERKINS.

Witnesses:

FRANCIS M. WRIGHT,  
B. NAGGS.