## J. H. PETERS.

## HEEL FOR BOOTS OR SHOES.

No. 343,062.

Patented June 1, 1886.

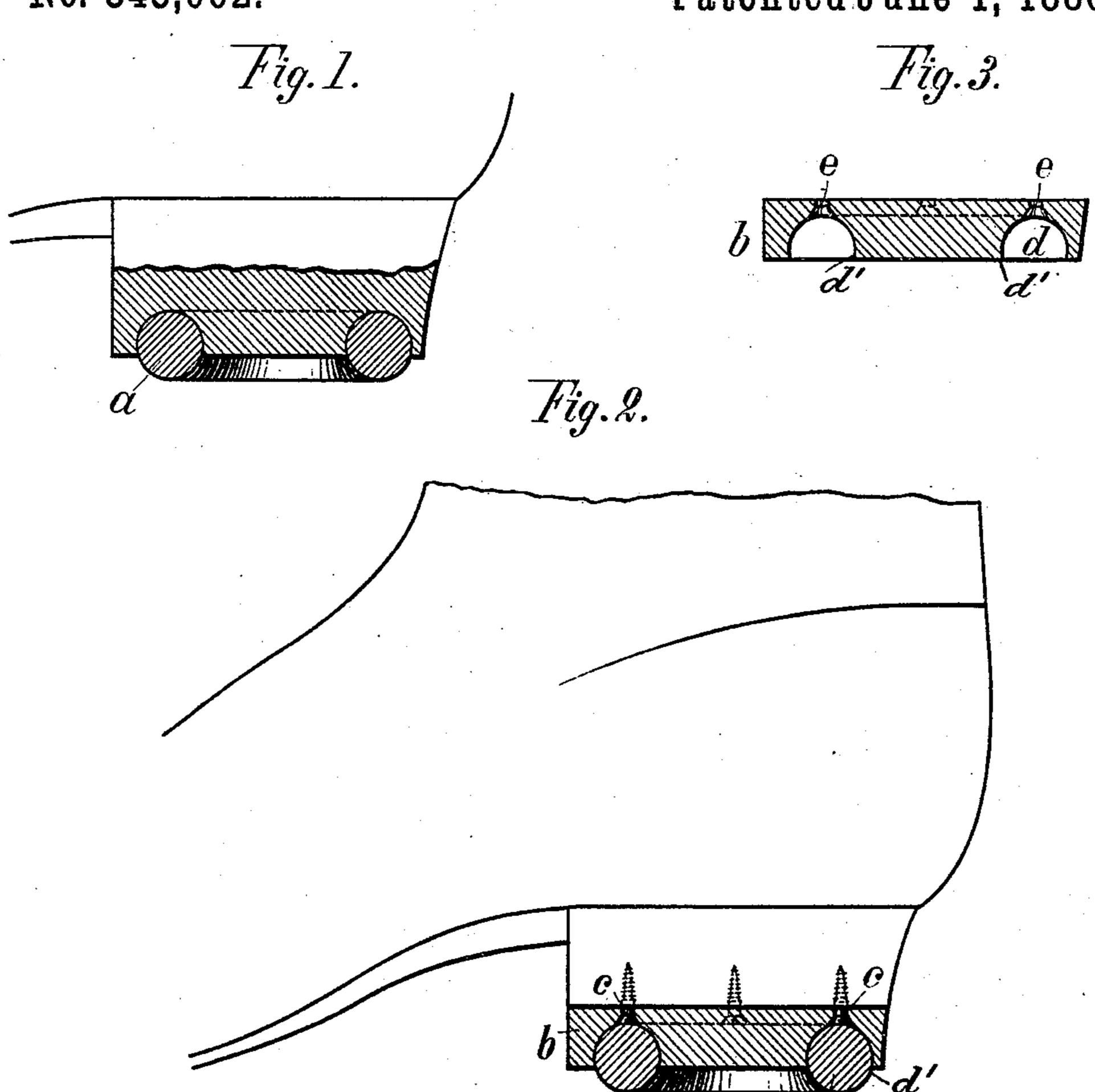
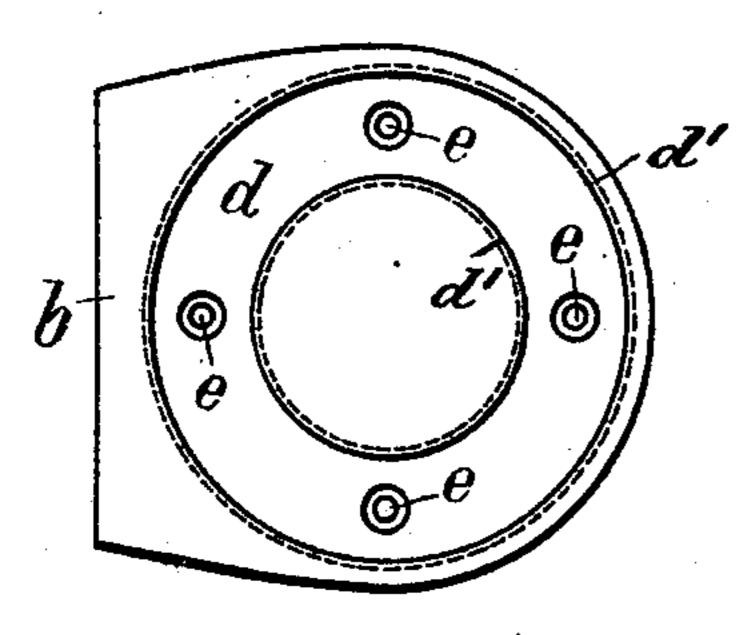


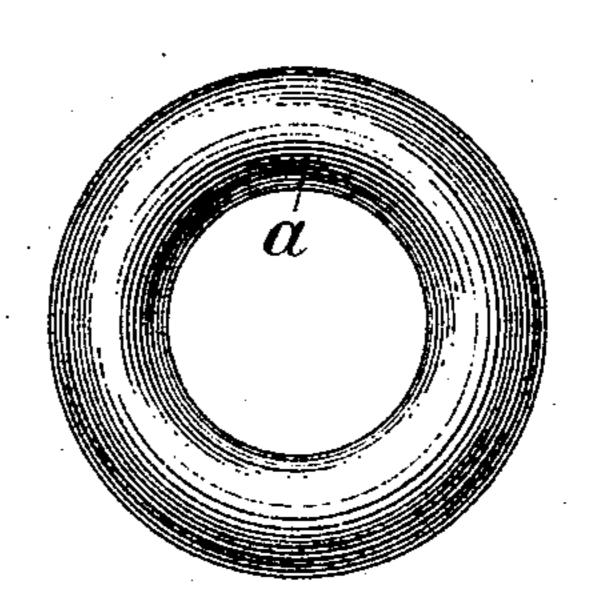
Fig.4.

Fig. 5.



Witnesses;

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Inventor,

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## United States Patent Office.

JACOB HANS PETERS, OF HAMBURG, GERMANY.

## HEEL FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 343,062, dated June 1, 1886.

Application filed April 1, 1886. Serial No. 197,373. (No model.) Patented in Germany July 22, 1885, No. 34,073; in France August 11, 1885, No. 170,585, and in England August 27, 1885, No. 10,162.

To all whom it may concern:

Be it known that I, JACOB HANS PETERS, a subject of the German Emperor, and a resident of Hamburg, in the German Empire, have invented certain new and useful Improvements in Protecting Heels of Boots and Shoes, of which the following is a specification.

My invention relates to improved means for preventing the heels of boots and shoes from being worn out unequally. This effect is attained by placing under the ordinary heel a plate provided at its lower surface with an annular groove of substantially semicircular cross section. In some cases I may form the heel of stamped leather or other suitable material with such circular groove, which serves for the reception of a rubber ring.

It will be easily understood that the elastic rubber ring will suffer compression on one side when the heel undergoes an unequal strain; but such compression will cease as soon as the foot is lifted. If such rubber ring should be worn out at that side where it has been compressed continuously, it may be easily shifted to bring another part of the ring under that side of the heel which is submitted to the most strain.

In the accompanying drawings, Figure 1 is the side elevation, partly in section, of a heel 30 provided at its lower surface with an annular groove wherein the rubber ring a is placed. Fig. 2 is the side elevation of the hind part of a shoe to the heel of which is attached the plate b by means of screws c. Holes e are 35 provided for passing the screws c, preferably at the upper part of the annular groove d, as shown in Figs. 3 and 4, being respectively a vertical section and a bottom view of the plate b.

The circular groove d is made of rather 40 more than a semicircle in cross-section, so that projecting lips d' are formed upon its edges, which, together with the elasticity of the material, keep the ring in position, and allow a sufficient portion of it to project from 45

the groove.
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The rubber ring a is illustrated in detail in Fig. 5, the cross-section of such ring not being limited to the circular one, as in the drawings; but rings of polygonal cross-section may 50 be used in conformity with the character of this invention; also, I do not limit myself to the described manner of attaching the plate to the heel, but any convenient manner may be employed therefor, as most suitable to the 55 material and shape of the heel and the plate.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim is—

The combination, with the heel of a boot or shoe, of the plate b, provided with the annular groove d, having projecting lips d' round its lower edges, and the holes e, the screws e' for securing the said plate to the heel, and the 65 revoluble cylindrical ring a, of elastic material, partially embedded in the said groove, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in the pres-70 ence of two witnesses, this 12th day of March, 1886.

JACOB HANS PETERS.

Witnesses:

ALEXANDER SPECHT, EMIL HAASE.