(No Model.)

J. G. ROSS. Boot and Shoe Heels.

No. 234,430.

Patented Nov. 16, 1880.

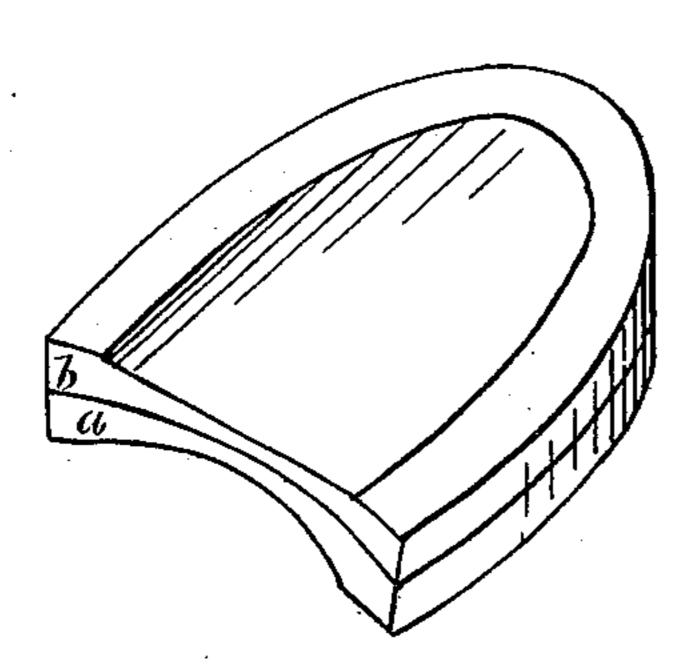
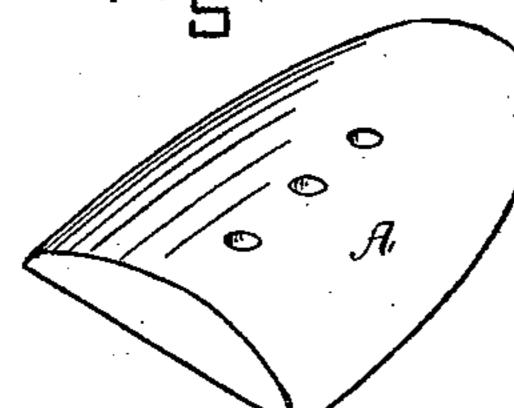


Fig.1_



Fi = 2

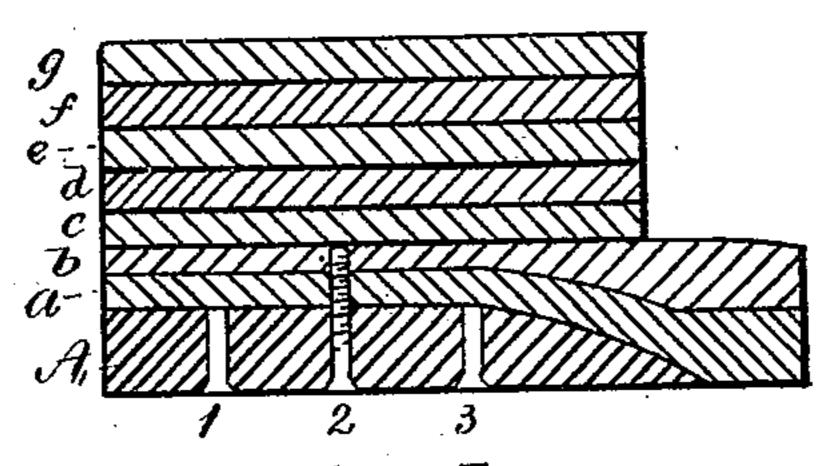


Fig-3.

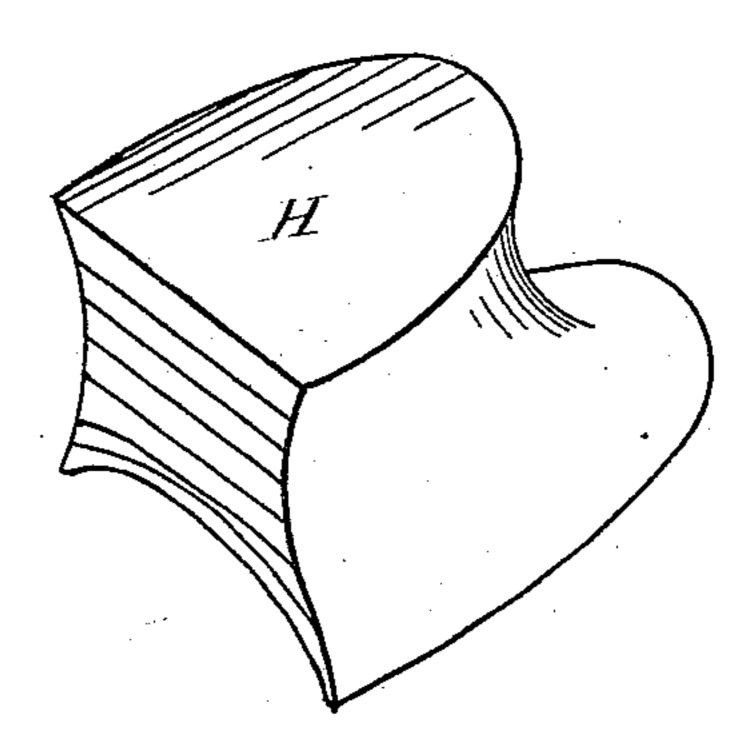


Fig.4.

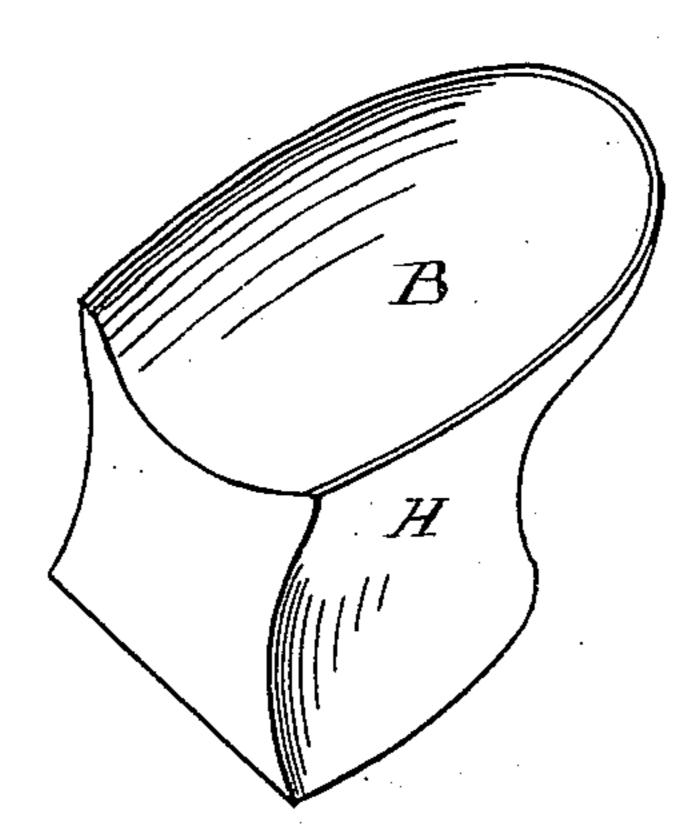


Fig.5-

WITNESSES M. J. Naylor INVENTOR

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JOHN G. ROSS, OF LYNN, MASSACHUSETTS.

BOOT AND SHOE HEEL.

SPECIFICATION forming part of Letters Patent No. 234,430, dated November 16, 1880.

Application filed March 27, 1880. (No model.)

To all whom it may concern:

Be it known that I, John G. Ross, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful Im-5 provement in Boot and Shoe Heels, of which the following is a specification.

The invention relates to a new mode of making heels for boots, shoes, and slippers, the same being also an improved article of manu-10 facture.

In order to explain my improved mode of making said heels, I shall have to refer to the accompanying drawings, which are made a part of the specification, in which-

Figure 1 represents the two lower lifts. Fig. 2 represents a form in the shape of a segment in part, one side of which form is oval and the other side is flat. Fig. 3 represents a vertical section of the several lifts of the heel through 20 its middle, the longest way, before the heel is trimmed. Fig. 4 represents the trimmed heel inverted, and Fig. 5 represents the heel polished and made ready to be fastened to the boot or shoe.

The letter A represents the form; a b c d e f, the several lifts to be formed into the heel.

B represents the concavity of the heel when ready to fasten to the heel part of the boot or shoe, and the figures 123 represent screws 30 or pegs which fasten together the form A and the lifts a and b.

H represents the heel ready for use.

I take the lifts a and b, and, as an easy and practical way of thinning parts of the lifts, I 35 bend them by their edges over the oval part of a form like A by means of a device shaped like a horseshoe, which is operated by a treadle, and which holds or bends down the edge of the lift over the form. I then take a shave or knife 40 and shave or pare off the crown of the lift, making it level, or nearly level, as it is fastened to the form. Both lifts are subjected to the same process, and then they are glued together and dried. The upper surface will then be flat and level and the lower surface concave, taking the shape of the oval part of the form, as seen in Figs. 1 and 3, and shaped to cover the heel |

of the sole. When said lifts a and b are dry, I take the form A, place it in the position shown in Fig. 3, and fasten the form to the 50 said lifts a and b by one or more screws or pegs, as seen in said Fig. 3. I then lay on the lifts c, d, e, f, and g, or any number, as shown in said Fig. 3, and then fasten them all together in any of the well-known ways of fastening heel- 55 lifts together, separating the form from the lifts or heel after they are fastened together. I then trim by subjecting the heel to my newlyinvented heel-trimming machine, or any suitable trimming-machine, until it is trimmed and 60 shaped as shown in Fig. 4, and the heel is then polished, as shown in Fig. 5, and is ready for use as an article of manufacture by itself.

The heel thus formed is solid in every part, without spring or curl of the leather, and is 65 fastened to the boot or shoe prepared for it by gluing, nailing, or fastening the same upon the heel part of the sole of the boot or shoe.

Heels are made of wood and metal as articles of manufacture; but no heel of leather has 70 been made in this way before my methed or process of making the same, and a heel of leather thus formed is superior to a wooden or metallic heel, and can be repaired when needful.

I claim as my invention—

1. That improvement in the art of making boot and shoe heels which consists in depressing the upper central portion of a lift or lifts to form a heel-seat, leveling the projecting 80 under portions, then uniting said heel-seat lift or lifts to other lifts forming the heel, substantially as set forth.

2. The improved leather heel the seat lift or lifts whereof extend the entire width of the 85 heel, and has its natural surface next the sole of the shoe and a skived surface next the lift or lifts of the heel, said seat lift or lifts being of variable thickness, substantially in the man-

ner shown and described.

JOHN G. ROSS.

Witnesses:

J. L. NEWTON, R. F. NAYLOR.