

(No Model.)

S. T. WOODWARD.  
SHOE HORN.

No. 537,881.

Patented Apr. 23, 1895.

Fig. 1

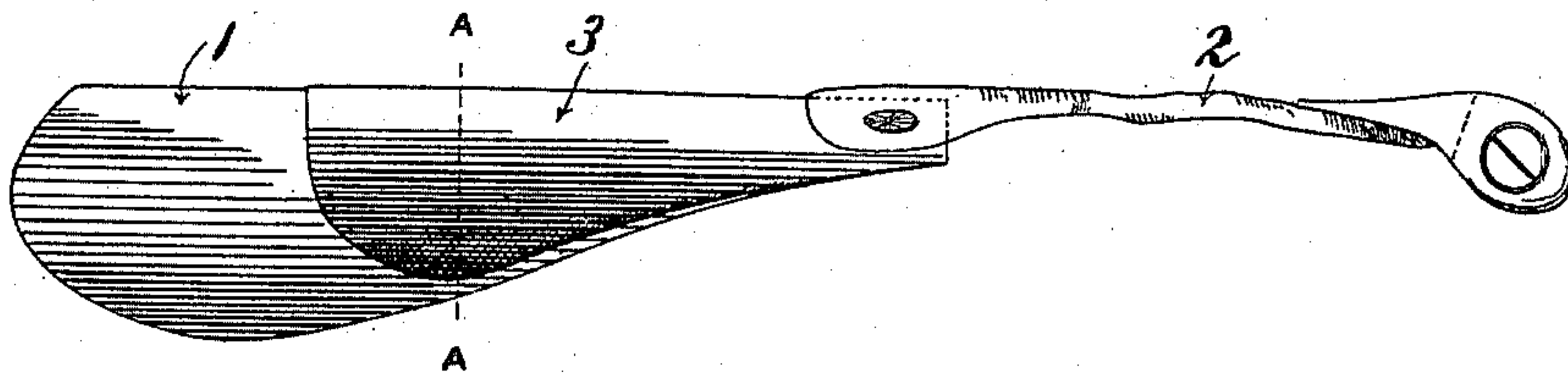


Fig. 2

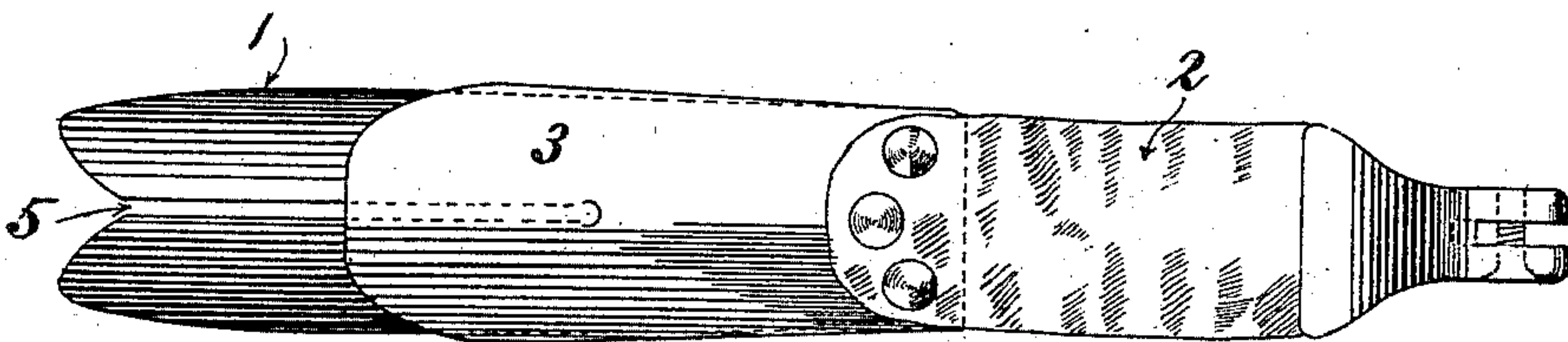
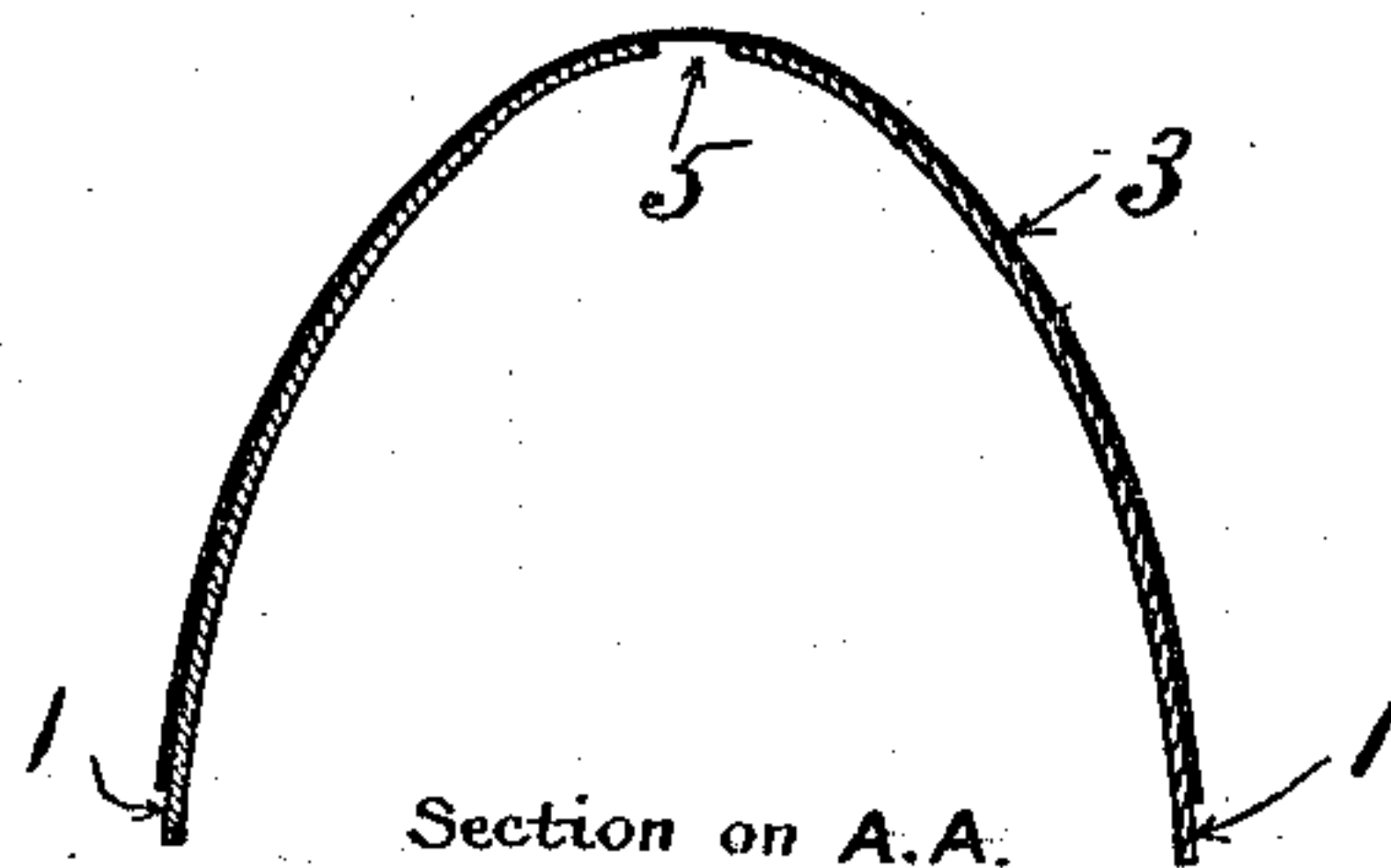


Fig. 3



WITNESSES

A. E. Thayer.  
C. D. Chadwell.

INVENTOR

Stephen T. Woodward  
By his Attorney  
Benjamin Phillips

# UNITED STATES PATENT OFFICE.

STEPHEN T. WOODWARD, OF LYNN, MASSACHUSETTS.

## SHOE-HORN.

SPECIFICATION forming part of Letters Patent No. 537,881, dated April 23, 1895.

Application filed January 25, 1895. Serial No. 536,204. (No model.)

*To all whom it may concern:*

Be it known that I, STEPHEN T. WOODWARD, a citizen of the United States, and a resident of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful Shoe-Horn, of which the following, in connection with the accompanying drawings, is a specification.

My invention relates generally to devices of the above class and more particularly to such devices adapted to be used as a part of a relasting machine and commonly called relasting horns.

In relasting machines as commonly constructed, the boot or shoe, in the operation of relasting, is drawn on to the last, supported on the usual spindle, by a horn, which is interposed between the last and boot or shoe, and then drawn over the last by means of a treadle and suitable connections. To successfully accomplish this result the fore part of the horn must have sufficient lateral flexibility or pliancy to enable its sides to conform to or "hug" the last particularly at the heel, while having sufficient longitudinal rigidity to bring the shoe over the last. The required flexibility or pliancy of the fore part has been heretofore secured by grinding or otherwise thinning the horn toward the front of the fore part, but horns so constructed have been found to be unsatisfactory owing to their liability to split longitudinally and break laterally in the fore part.

The object of this invention is to secure flexibility of the fore part of the horn without materially weakening the same or rendering it liable to split or break, and to this end it consists in providing the horn with a longitudinal slot extending from the front of the fore part toward the shank, and in further providing the horn with a reinforcement arranged to strengthen the same without materially diminishing its required pliancy.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a relasting horn embodying the same. Fig. 2 is a plan view; and Fig. 3 is a section on line A, A Fig. 1.

Similar figures of reference refer to similar parts throughout the several views.

In the drawings 1 represents the fore part of the horn and 2 the shank of the horn. The shank 2 is shown as formed by a strip of leather or other flexible material, but such construction is not essential as my invention is applicable to horns having a rigid shank.

The longitudinal slot is represented at 5, and extends from front of the fore part 1, toward the shank 2, a sufficient distance to give the desired degree of pliancy to the sides of the fore part 1. The slot 5 is conveniently placed at the center of the fore part 1 and a hole 6 drilled at the end thereof adjacent to the shank to prevent splitting.

The reinforcement is shown at 3, and is preferably in the form of a reinforcing shield riveted or otherwise suitably secured to the horn at or near the shank 2, and extending toward the front of the fore part 1 a sufficient distance to take up a portion of the strain as the horn is tipped over the heel of the last.

The shield 3 is curved laterally to conform substantially to that portion of the fore part to which it is applied, and its sides preferably extend along the sides of the fore part 1, reinforcing the fore part 1 laterally and tending to prevent the splitting thereof as hereinbefore described. The front of the fore part 1 projects beyond the shield 3, and the above described arrangement is such that although the fore part 1 is laterally and longitudinally reinforced by the shield 3 as above described the required pliancy of the parts, in which such property is essential, is not materially affected thereby.

The reinforcement 3 may be used upon horns without the slot 5 and the form and arrangement of said reinforcement and its position upon the horn may be varied without departing from the essential nature of my invention.

I claim as novel and desire to secure by Letters Patent—

1. A shoe horn having a longitudinal slot extending from the front of the fore part toward the shank, and provided with a reinforcing shield suitably secured thereto, at or near the shank and extending toward the front of the fore part, substantially as described.

2. A relasting horn provided with a reinforcement



ing shield suitably secured thereto at or near the shank, and extending toward the front of the fore part, substantially as described.

3. A relasting horn provided with flexible  
5 or yielding sides and having upon its outer face a reinforcement by which the flexible or yielding sides are retained in their proper relative positions.

4. A relasting horn having flexible or yield-  
10 ing sides formed by a longitudinal slot extending from the front of the fore part toward

the shank and having a reinforcement upon its outer face for holding the flexible or yielding sides in their proper relative positions.

In testimony whereof I have hereunto set 15  
my hand, in the presence of two attesting witnesses, this 15th day of January, 1895.

STEPHEN T. WOODWARD.

Witnesses:

A. E. WHYTE,  
BENJ. PHILLIPS.