

# SYLVANUS WARD.

## Improvement in Boot and Shoe Heel Gages.

No. 118,499.

Patented Aug. 29, 1871.

Fig. I

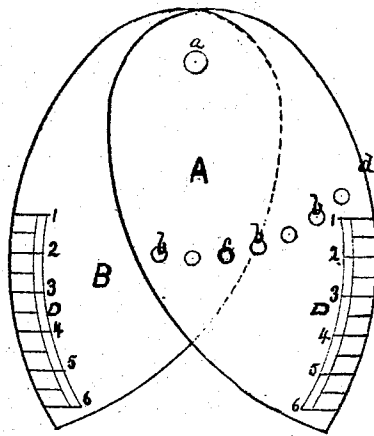
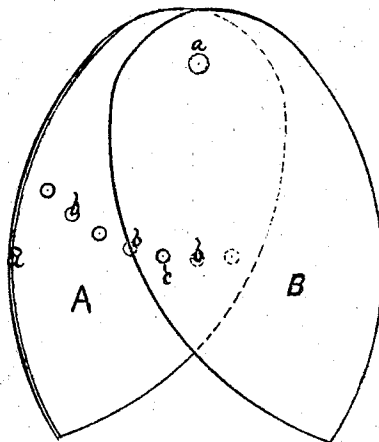


Fig. III



Fig. II



WITNESSES.

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SYLVANUS WARD, OF WESTFIELD, NEW YORK.

## IMPROVEMENT IN BOOT AND SHOE-HEEL GAUGES.

Specification forming part of Letters Patent No. 118,499, dated August 29, 1871.

*To all whom it may concern:*

Be it known that I, SYLVANUS WARD, of Westfield, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Boot and Shoe-Heel Gauges, of which the following is a specification:

My invention relates to devices for marking out boot-heels, made of two flat, nearly-oval metal leaves, pivoted together at one end; and my invention consists in forming in the upper leaf (see Fig. 1) a regular series of perforations or holes set in a circle, and a pin or projection in the lower leaf which fits these holes and permits the gauge being set to any size and holds it at any desired point; also, in providing the outer edge of the upper leaf with a flange to keep the device level; and furthermore, in having a regular scale of sizes marked on the leaves.

In the drawing, Figure 1 is a top-plan view. Fig. 2 is a bottom-plan view. Fig. 3 is a cross-section through the perforations and pin.

A and B are the top and bottom leaves or pieces, respectively, made in the form shown, of thin metal, and pivoted, one on top of the other, at the upper end, shown at *a*. The top piece or leaf A has a series of holes, *b b b*, arranged in the segment of a circle, with the pivot-pin A as a center. The bottom leaf B has an upright pin, *c*, secured in it near the edge, and comes through any one of the holes *b* desired, (see Figs. 1 and 3,) and thus holds the leaves at any desired width for use. By slightly raising the upper leaf the pin *c* is released. The gauge may be widened or narrowed by moving it to any other hole, as shown.

In forming boot and shoe-heels by hand much time, practice, cutting, and skill are required to get them precisely alike, but by this device any number may be made exactly alike by setting the gauge at the desired width. To further insure getting heels of precisely the same size I form a scale, D, 1, 2, 3, &c., on the surface of each leaf, so that the length can be arrived at with the same accuracy as the width. The top leaf A has a flange or rim, *d*, formed on its outer edge to steady it when the leaves are expanded; otherwise it would depress when touched and interfere with the correct marking of the heel.

The leaves are set at the right width and placed on the leather to be cut, and the operator marks around them with a pencil, stopping at the desired point previously indicated on the scale D D'. This is continued on as many pieces of leather as may be required for the same set of heels.

I do not claim, broadly, the two pivoted leaves; but

I claim—

The oval plate B, provided with the stud C and scale D, in combination with the oval plate A, formed with a series of openings, *b b*, flange *d*, and scale D, all constructed and arranged as and for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

S. WARD.

Witnesses:

J. R. DRAKE,

C. N. WOODWARD.