

W. Sheill,

Shoe Pattern.

No. 104894.

Patented June 28. 1870.

Fig. 1.

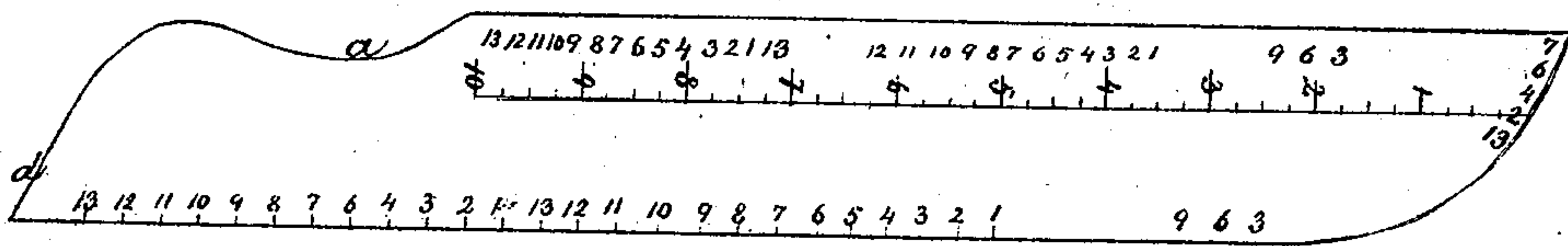
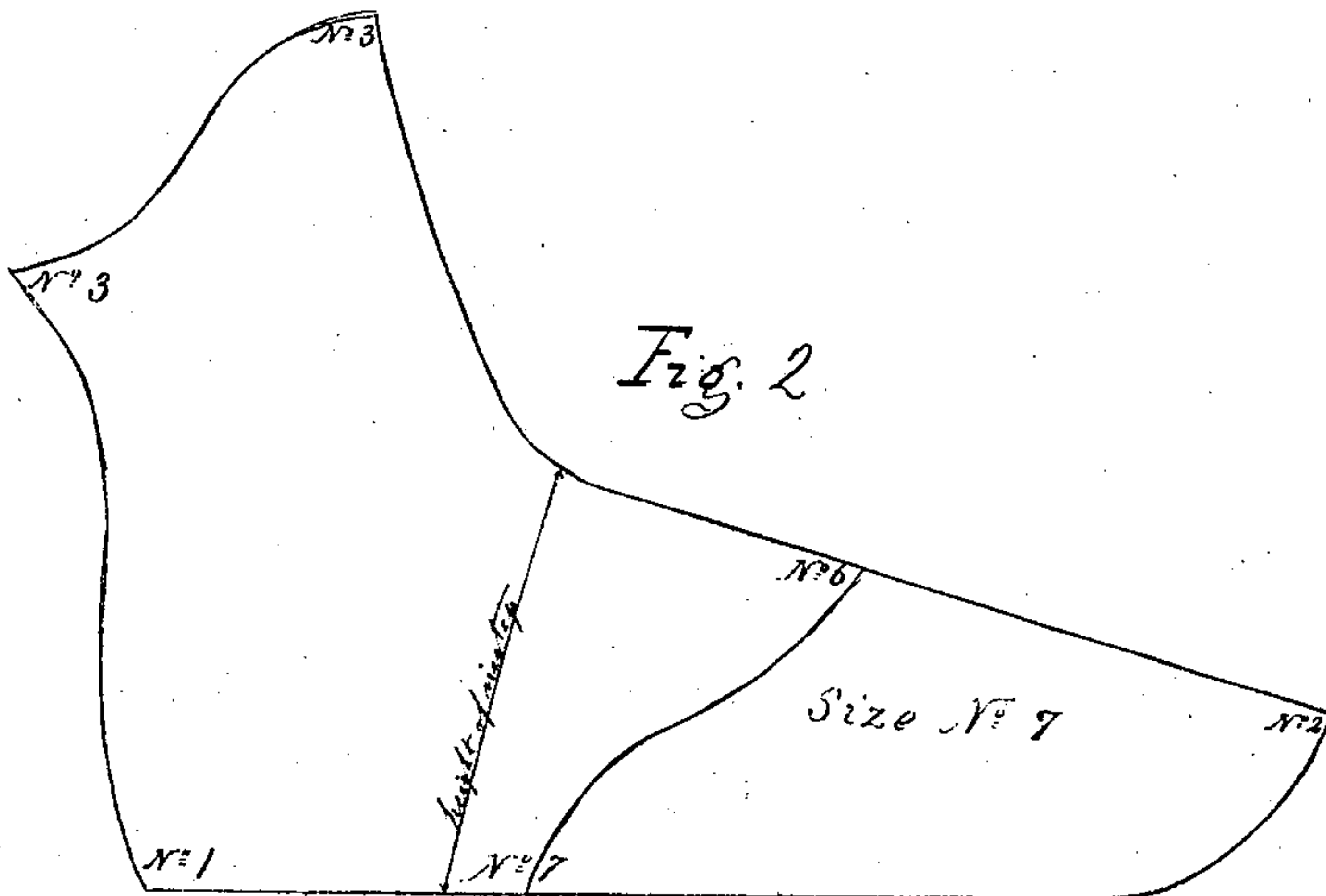


Fig. 2.



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WILLIAM SHEILL, OF DAYTON, OHIO.

Letters Patent No. 104,894, dated June 28, 1870.

IMPROVED SCALE FOR LAYING OUT SHOE-PATTERNS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM SHEILL, of Dayton, in the county of Montgomery and State of Ohio, have invented an Improved Scale for Laying Out Shoe-Patterns; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making part of this specification, in which—

Figure 1 is a plan view of my improved scale, less than natural size.

Figure 2 represents a shoe-pattern, laid out by means of my improved scale.

This invention relates to a device which I term a scale, to be used for laying out all kinds of shoe-patterns; and

It consists in the construction of the same, as will more fully appear from the following specification and claim.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In fig. 1 of the annexed drawing, my improved scale is represented somewhat smaller than full size.

It is made of sheet metal, or other suitable material, with sides which run parallel to each other for some distance.

Along the straight portions of these sides the "size-sticks" are marked off, containing all the sizes for men, women, misses, and children, namely:

Beginning at the right, children's sizes run from 1 to 9; misses', from 9 to 13; women's, in the succeeding series of numbers from 1 to 7; and men's, from 5 to 13, in the same series.

Along the curved forward end the "spring" numbers are arranged to be used as follows:

For children's sizes, spring 13.

For misses' sizes, spring 2.

For women's sizes, (from 1 to 4,) spring 4.

For men and women's sizes, (from 5 to 9,) spring 6.

For men's sizes, (from 10 to 13,) spring 7.

The "spring" is somewhat varied, in accordance with the form of the particular foot to be fitted.

Between the two "size-sticks" the "measure-strap" is marked on the scale, divided off into inches and fractions of inches, to be used to measure the height of instep on the pattern.

The numbers 3 6 9, between the springs and the size-sticks, will indicate the points where the seam should be made, between the uppers and the vamp; from the sizes 1 to 13, right-hand series, namely: 3 for the first four, 6 for the next five, and 9 for the remaining four sizes.

For all other sizes in the left-hand series, this seam is indicated by numbers in the right-hand series of the size-sticks, corresponding with the size of pattern to be marked out.

From the rear end of the upper size-stick, the outline of the side of the scale is waved, as at *a*, to its juncture with the straight end *a'*, which latter forms an acute angle with the base-line.

This waved portion is used to mark the heel of the pattern, as well as the line of the seam between the uppers and the vamp, and the upper end of the leg, to give to it the "Polish" cut.

This scale is used to mark or lay out a shoe-pattern, for instance, a No. 7, men's size, in the following manner:

It is placed upon a sheet of paper, if that is used, and a line drawn along its lower side, starting at the number 7, in the left-hand series of the lower size-stick, and stopping at spring number 6.

A point is also marked in the line at or opposite the number 7 in the right-hand series of the lower size-stick.

The height of instep is then marked at the proper point by means of the "measure-strap," and the scale having been shifted so that the forward point of the upper side coincides with the point of spring already obtained, and so that the number 7 in the left-hand series of the upper size-stick also coincides with the point marking the height of instep, a line is drawn along the upper side of the scale, to unite those points.

A mark is also made in this line opposite the number 7 in the right-hand series of the upper size-stick.

The seam-line between the vamp and uppers is drawn along the curved or waved portion *a* of the scale, uniting the two points marked in the top and bottom lines.

The straight end *a*, being placed along the bottom line, the heel is marked by drawing from the end of said line, along the waved portion of scale, upward.

The front line of the leg, from its juncture with the instep, is determined by the size of the leg, and drawn along the curved forward end and lower side of the scale.

The height of uppers having been determined, the end of the heel and front line are united by drawing along the wave *a* of scale.

What I claim as my invention, and desire to secure by Letters Patent, is—

The within-described pattern, with its graduated scales, and its curve, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM SHEILL.

Witnesses:

C. H. COLDWATER,
THOS. D. MITCHELL.