

(Model.)

S. N. SMITH.
Lacing Hook Stock.

No. 232,561.

Patented Sept. 21, 1880.

Fig. 1.

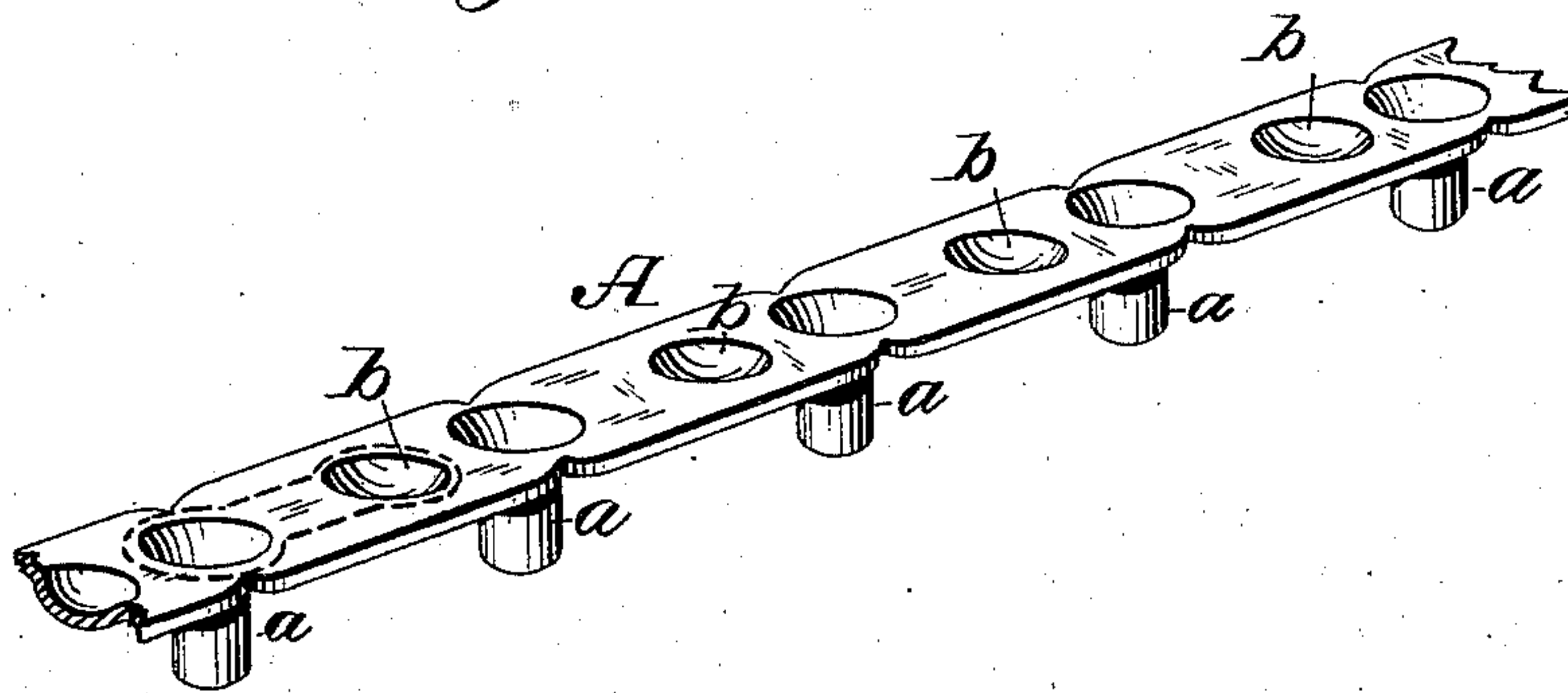
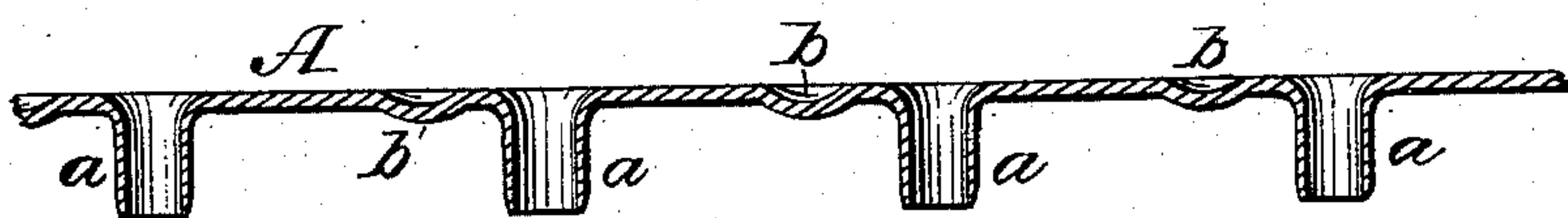


Fig. 2.



Witnesses:
William M. Dodge,

Sidney P. Hollingsworth.

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UNITED STATES PATENT OFFICE.

STEPHEN N. SMITH, OF PROVIDENCE, RHODE ISLAND.

LACING-HOOK STOCK.

SPECIFICATION forming part of Letters Patent No. 232,561, dated September 21, 1880.

Application filed July 2, 1880. (Model.)

To all whom it may concern:

Be it known that I, STEPHEN N. SMITH, of Providence, in the county of Providence and State of Rhode Island, have invented certain
5 Improvements in Lacing-Hook Stocks, of which the following is a specification.

My invention relates to a specially-prepared metal strip or stock from which to cut blanks for the formation of lacing-hooks for shoes; and the invention consists in taking a narrow uniform strip of brass or similar ductile material, of a width slightly greater than the greatest width of the hooks, and forming in said strips, at regular intervals, central tubular
15 necks, and in providing the same between the necks with round indentations, the indented part to form ultimately a rounded head on the hook. The necks are drawn down by a series of punches and dies in successive steps until
20 of suitable size and length to serve as a means of attaching the hooks to the shoe, and have their ends punched through and left open. They are located, as stated, at uniform distances apart, the distance being slightly greater
25 than the length of the required blanks. The indentations, which are produced by means of a punch or otherwise, are located between the necks and in line therewith, each indentation being close to a neck, as shown. The blanks
30 will be punched or cut lengthwise from the strip end to end, each blank embracing, as indicated by the dotted lines, one of the necks and one of the indentations at opposite ends.

In the accompanying drawings, Figure 1

represents a perspective view of my prepared strip or stock, and Fig. 2 a longitudinal central section of the same. 35

A represents the body of the metal, *a* the tubular necks, and *b* the indentations. The dotted lines indicate the manner in which the blanks are cut out. 40

In practice it is found that by preparing the stock in the manner shown greatly improved results are secured. The narrowness of the strip facilitates the flow of the metal in forming the necks and permits them to be drawn out to the full length desired without straining or rupturing the metal and without rendering them so brittle as to require annealing, thus permitting the remaining portion of the hooks
50 to remain hard and stiff, so that they will not bend out of shape when in use. The use of the stock in the manner shown also reduces the amount of labor required, the expense of working, and the amount of scrap or waste. 55

I do not claim, broadly, a metal strip having tubular necks thereon; but

What I do claim is—

The herein-described stock for shoe-lacing hooks, consisting of the metal strip of slightly greater width than the required hooks, provided with the series of alternate necks and indentations. 60

STEPHEN N. SMITH.

Witnesses:

SANFORD C. HOVEY,
GILMAN E. JOPP.