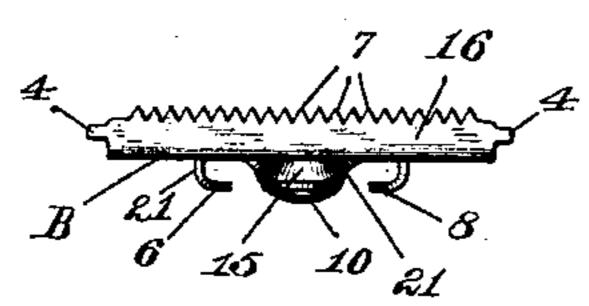
(No Model.)

## F. H. RICHARDS. SUSPENDER BUCKLE.

No. 435,456.

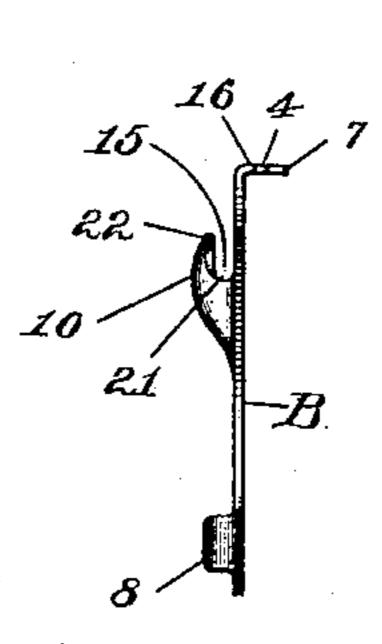
Patented Sept. 2, 1890.

Dig. 1

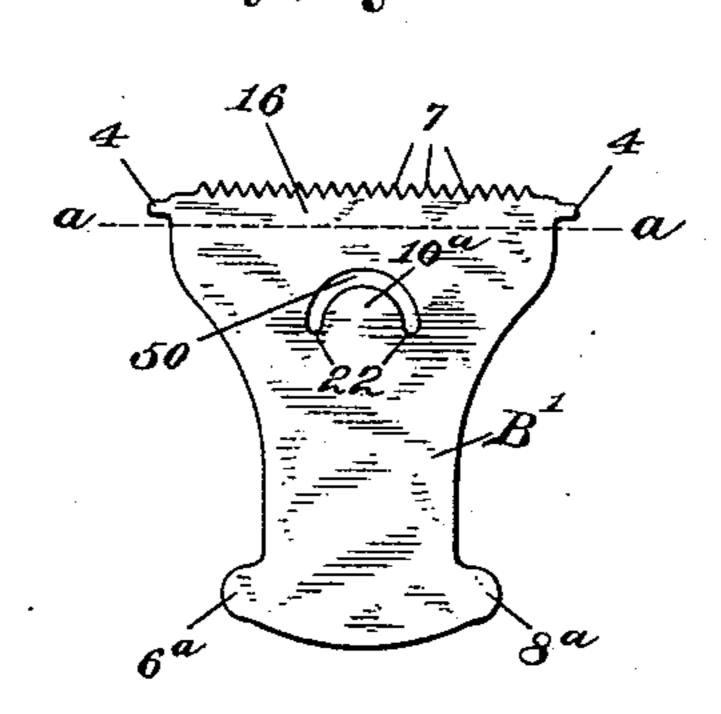


Sing. 2  $21 \quad 50$  21 B

Fig. 3



Dig. 4



Milinesses:

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Snogentor:

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## United States Patent Office.

FRANCIS H. RICHARDS, OF HARTFORD, ASSIGNOR TO THE TRAUT & HINE MANUFACTURING COMPANY, OF NEW BRITAIN, CONNECTICUT.

## SUSPENDER-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 435,456, dated September 2, 1890.

Application filed May 1, 1890. Serial No. 350,239. (No model.)

To all whom it may concern:

Be it known that I, Francis H. Richards, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Suspender-Buckles, of which the following is a specification.

This invention relates to buckle-plates and blanks therefor adapted to be used in the manufacture of any one of the several buckles described and claimed in my applications, Serial Nos. 350,232, 350,233, and 350,234, filed

May 1, 1890.

In the drawings accompanying and forming a part of this specification, Figure 1 is a top view of a buckle-plate embodying my improvements. Fig. 2 is a front or plan view of the plate. Fig. 3 is an edge view of the same. Fig. 4 is a plan view of the blank for said plate.

Similar characters designate like parts in

all the figures.

My improved buckle-plate is adapted to be made as an article of manufacture, and in its 25 complete form consists of a plate B, having the hook 10, formed of a portion 10<sup>a</sup> of the blank B', Fig. 4, and having other minor and incidental details, substantially as shown and herein described. Said hook 10 stands 30 with its edge 22 in a plane forward of the plane of the plate B, so there is a space 15, Figs. 1 and 3, between said planes, which space is for receiving the upper end of the "hanger S," shown in my aforesaid applica-35 tions. The said hook-forming portion 10<sup>a</sup> of said blank is bordered by the curved slot 50, whose convex edge lies toward the line a a, on which line said blank is to be bent when forming the same into a buckle-plate. Said 40 slot is adjacent to said line, as shown, being in that part of the plate which is at the top in the finished buckle. At the lower end of the blank B' there are projections 6° and 8°, 45 catches 6 and 8, respectively, of the finished buckle-plate B. The blank B' is also furnished with suitable web-clamping devices, which, as shown in the drawings, consists of the web-holding teeth 7 and the lever-carry-50 ing pivots 4.4. When the blank is bent on the line a a in the operation of forming said blank into the finished buckle, the narrow l

portion 16 of said blank, which lies above said line, is formed to stand at right angles approximately to the principal portion of the 55 plate, as well shown in Figs. 1, 2, and 3. The hanger-receiving space 15, as best shown in Fig. 3, has the lower end thereof at 21 of the convex shape adapted to fit the shape of the wire of which the strap-supporting hangers 60 of this class of buckles are properly made. As a means for producing this convex form at said point, I form the slot 50 in the buckleblank B' with the curved ends 21, which, when the hook-forming portion 10° is swaged 65 into shape to form the hook 10, naturally results in giving its own curvature to the corresponding portions 21 of said hook. Thus by means of the slot 50, previously formed in the blank and suitably shaped therefor, the 70 said hook is readily formed by suitable swaging-dies to have in its finished form the shape substantially as indicated in Figs. 1, 2, and 3, which gives to said hook a convenient form combined with great strength.

Having thus described my invention, I

claim—

1. The improved buckle-plate herein described, consisting of the plate B, having the web-holding teeth and means for carrying a 80 web-clamping lever, the side catches and the hook 10 standing forward of the plate with the space 15 between the planes of the hook edge 22 and said plate, all substantially as described.

2. The improved buckle-plate blank herein described, consisting of the plate B', having projecting parts for forming side catches and web-holding means, and having the curved slot bordering the hook-forming portion of 90 said plate, substantially as described.

slot is adjacent to said line, as shown, being in that part of the plate which is at the top in the finished buckle. At the lower end of the blank B' there are projections 6° and 8°, adapted to be shaped for forming the side catches 6 and 8, respectively, of the finished buckle-plate B. The blank B' is also furnished with suitable web-clamping devices,

## FRANCIS H. RICHARDS. .

Witnesses:

HENRY L. RECKARD, LEWIS C. HEERMANN.