

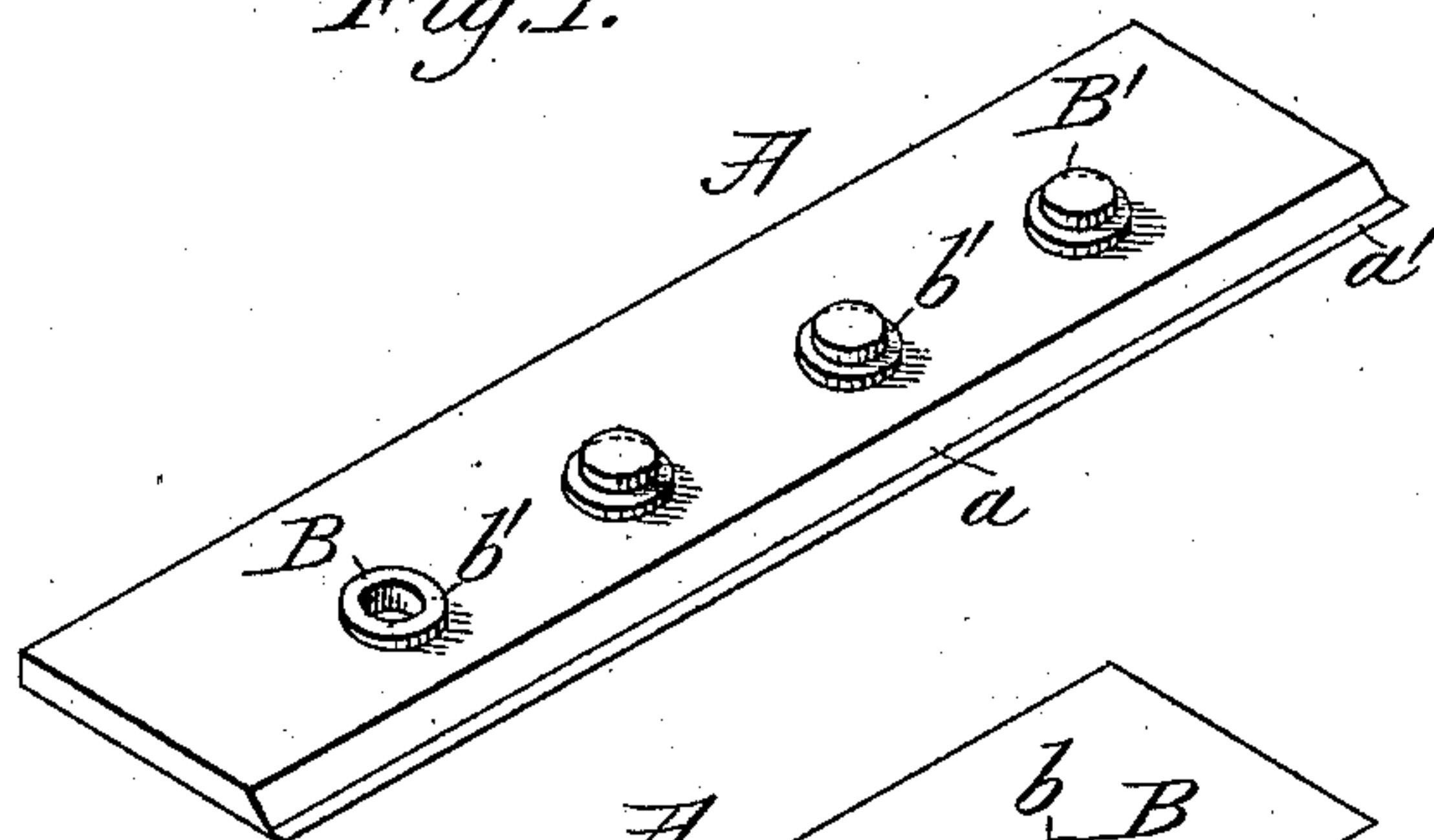
(No Model.)

J. E. EMERSON.  
TAB PLATE FOR SAWS.

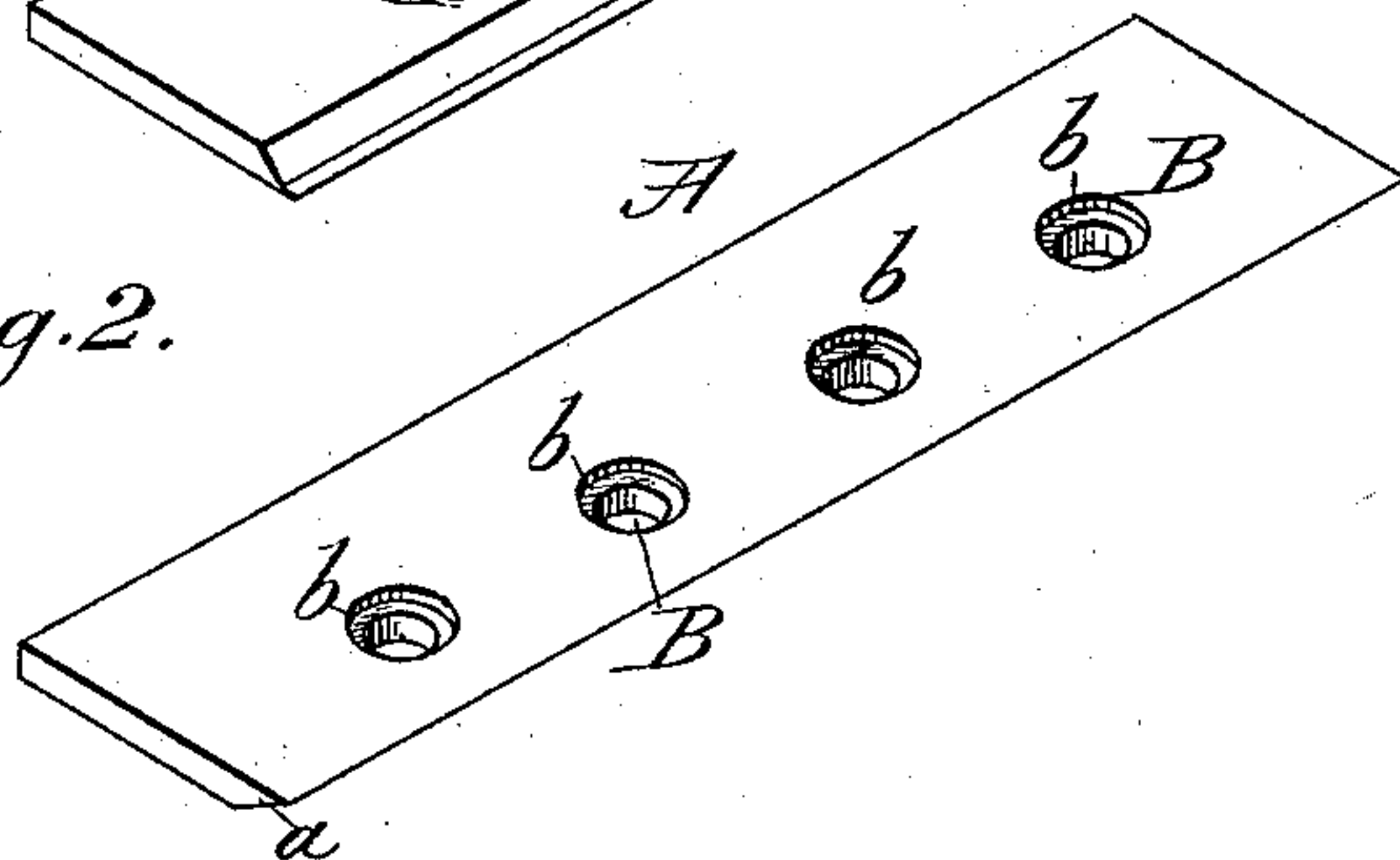
No. 297,242.

Patented Apr. 22, 1884.

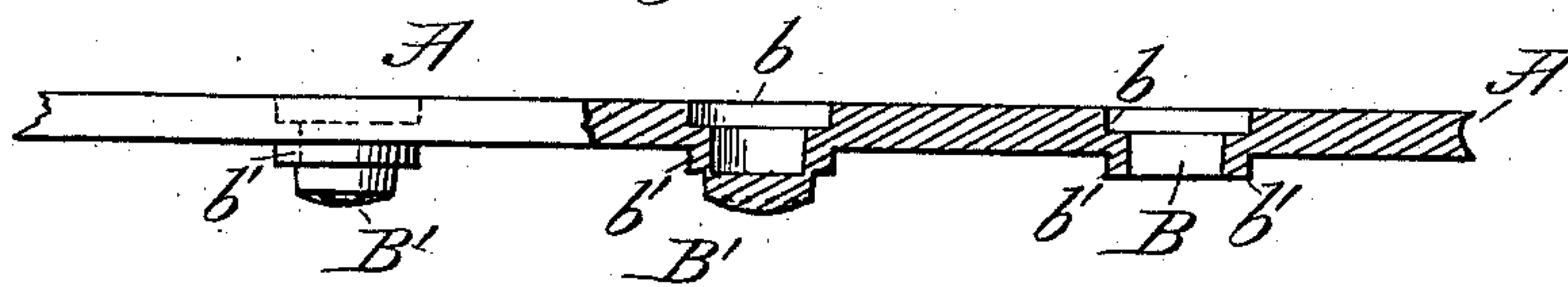
*Fig. 1.*



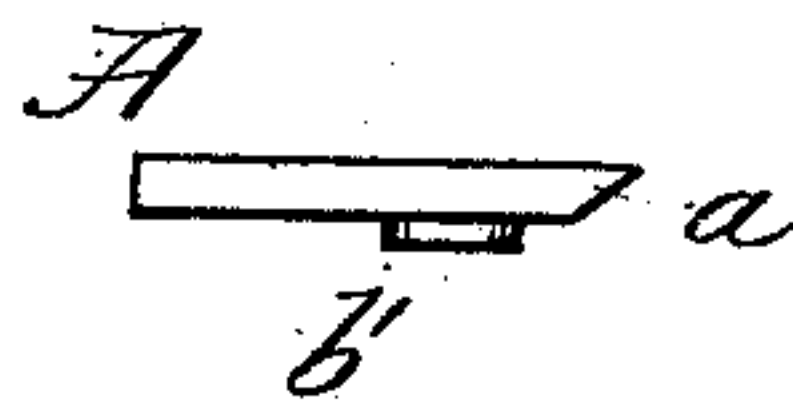
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Attest:*

*H. H. Schott*  
*A. Lockhart*

*Inventor:*  
*James E. Emerson*  
*By Newton Cranford*  
*atty.*

# UNITED STATES PATENT OFFICE.

JAMES E. EMERSON, OF BEAVER FALLS, PENNSYLVANIA.

## TAB-PLATE FOR SAWS.

SPECIFICATION forming part of Letters Patent No. 297,242, dated April 22, 1884.

Application filed March 10, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES E. EMERSON, a citizen of the United States, residing in Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Tab-Plates for Saws, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to the construction of the metal plates known as "tabs," that are to be attached to saws that are strained in reciprocating sashes or frames, and more especially what are termed "gang-saws;" and it consists  
15 in the construction of the plates that form the tabs, as an article of manufacture, as will be fully hereinafter described.

In the drawings, Figure 1 represents in perspective an unfinished tab-plate, showing the  
20 side of the plate that is next the saw-plate when attached thereto and one bolt-hole therein finished. Fig. 2 represents in perspective the opposite or outside of the plate when finished. Fig. 3 represents an edge view of a plate  
25 partly in section, but broken at its ends; and Fig. 4 represents an end view of a finished plate.

These tab-plates are constructed from strips of steel of the proper thickness, and cut to  
30 the proper length, then heated to a cherry-red heat, and when in such heated condition the blanks are placed over proper forming-dies, with a gang of punches over the dies, that are to be forced down upon the heated plate, when  
35 the plate will be perforated with the necessary number of holes, countersinks, and projecting flanges around the holes and beveled edge, as seen in Figs. 1 and 2, by a series of drop or press punches; or a single punch can be used  
40 with proper gages, to give the right distance to the holes from the edges and ends of the plate, and also between the holes in the plates themselves; but I prefer to use a gang of punches with corresponding dies, so that by a  
45 single reciprocation of the press or drop the forging the plate into form is completed. The plate as it comes from the drop or press is shown at Fig. 1, with the exception that the

burr, or that part of the metal punched out, is removed from the left-hand hole, so as to show  
50 the projecting ring or flange around the hole, while in Fig. 2 the opposite side of a plate is shown with its rivet or screw holes through the plate, to receive either a rivet or screw-bolt or headed nut, and a countersink to re-  
55 ceive the thickness of the head of such rivet or screw-bolt, or to receive the upset of a rivet, or a headed nut, into which the screw-bolt is to be screwed.

A represents the tab-plate, of steel of proper  
60 length and width, and having one edge, *a*, beveled its entire length, and as many holes B punched through it as the width of the saw-blade to which the plates are to be attached may require.

65 B' represents the burr, or that portion of metal forward of the punch to be removed entirely from the plate.

*b b* represent countersinks around the holes B, and indented into the tab-plate deep enough  
70 to receive the thickness of the head or upset of a rivet or head of a screw-bolt without projecting beyond the outside face of the plate.

*b' b'* represent inwardly-projecting flanges or rings around the holes B.

75 These plates are to be constructed in pairs, or so that when the inside, or that side that the flanges or rings *b'* project from, shall come against the saw-plate, the holes B will be coincident with each other and with holes in  
80 the saw-blade to which the plates are to be attached.

The method and use of so attaching the tab-plates to saws constructed as above described are fully shown in another application  
85 filed simultaneously herewith, and in which the use of tab-plates so constructed is claimed in connection with the saw to which they are attached. After the plates A are taken from the drop or press, the burrs B' are removed  
90 from the flanges or rings *b'*, and the surplus metal or fin *a'* is removed from the extreme edge of the bevel *a*. The plate can then be passed through a finishing process that will leave them all of the same width, and the beveled edges straight, of the same bevel, and ex-  
95



actly true, when the flanges *b'* can be tempered, if necessary, and the plates are complete.

Having thus described my invention, what I  
5 claim, and desire to secure by Letters Patent, is—

The tab-plates A, as an article of manufacture, having rivet or screw holes B, counter-sinks *b*, inwardly-projecting flanges or rings

*b'*, and beveled edge *a*, substantially as described. 10

In testimony whereof I affix my signature in presence of two witnesses.

JAMES E. EMERSON.

Witnesses:

NEWTON CRAWFORD,  
M. P. CALLAN.