May 20, 1924. 1,494,658

T. R. WILLWERSCHEID

PLATE SECURING DEVICE

Filed March 16 1922

Fig. 1

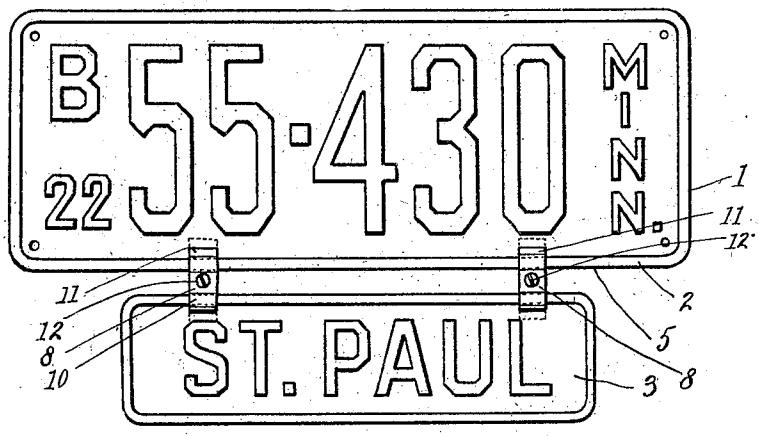


Fig. 4

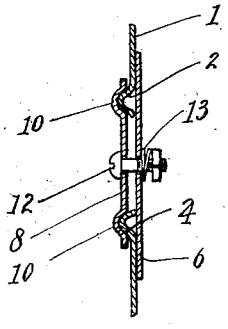


Fig. 3

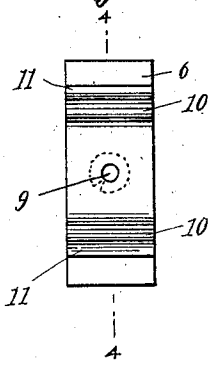


Fig. 2

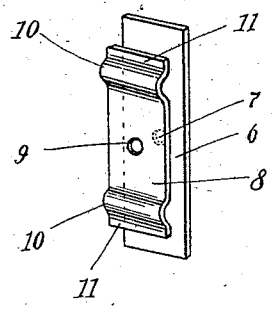
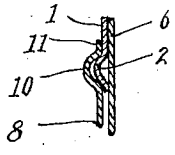


Fig. 5.



Inventor,
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UNITED STATES PATENT OFFICE.

THEODOR R. WILLWERSCHEID, OF ST. PAUL, MINNESOTA.

PLATE-SECURING DEVICE.

Application filed March 16, 1922. Serial No. 544,246.

To all whom it may concern:

Be it known that I, THEODOR R. WILLWERSCHEID, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Plate-Securing Devices, of which the following is a specification.

My invention relates to devices for use in attaching one sign to another in edge-to-edge relation, and more particularly to that type of device, designed for use in connection with automobile license tags.

An object of my invention is to provide adjustable means for rigidly connecting signs in the relative position stated, which will permit the signs to be readily adjusted laterally relative to each other, so that the signs may be secured to one another, at any desired position along their respective edges.

The invention consists in the construction, combination and arrangement of parts hereinafter described and claimed.

Figure 1, is a front elevation of an automobile tag, and a sign plate connected together by my improved clips.

Fig. 2, is a perspective view of my improved clip.

Fig. 3, is a plan view of the front of the clip.

Fig. 4, is a vertical sectional view on line 4—4 of Fig. 3, and

Fig. 5, is a fragmentary sectional view similar to Figure 4, showing a bead of smaller size than Figure 4.

In the accompanying drawings, 1 designates an ordinary rectangular elongated automobile tag, the surrounding edge thereof being formed with a raised bead 2.

Constructed substantially similar to the tag, is the sign plate 3, the plate shown being somewhat smaller in size and arranged with its upper long edge or bead 4, parallel with the lower edge 5 of the tag.

As shown in Figure 4, the beads 2 and 4 are equal in size, though they may vary if desired, and are usually struck or embossed out of the body of the plate constituting the sign.

My improved clamp comprises an oblong preferably rectangular back plate 6 perforated by a central bolt hole 7. Co-operating with the plate 6 is the oblong preferably rectangular front plate 8, perforated centrally by the bolt hole 9. The front plate is preferably somewhat shorter than the back plate, and is formed at its respective ends with a transverse hollow bead 10, the beads being parallel and preferably symmetrically arranged around the bolt hole 9. The beads are bodily slightly spaced from the ends of the plate to form a lip 11, whereby, when the beads of the sign plates should vary slightly in size, the lips 10 will engage the plate of the sign as shown in Figure 5, and hold the signs in flat alinement.

In the process of stamping, especially when automatic numbering dies are employed, the beads at times become distorted at points above and below the numbers because of the inaccuracy of the dies occurring when the numbers are automatically slipped into position.

Further, when the tags are painted in painting machines, the beads are at times flattened in spots as they pass between the feed rollers.

In use, the signs are positioned as shown, the back plate 6 overlapping the underside of adjacent edges thereof, while the top plate is placed to bring its bolt hole into register with that of the back plate, and to fit over the beads of the adjacent edges. A clamping bolt 12, is now projected through the registering bolt holes, and a suitable spring washer 13 inserted. The nut of the bolt is now screwed up to effect a firm connection of the two signs. Obviously, the clamp may be slid along the bead edges to any desired position.

By using a spring washer, (which is merely a split washer as indicated in dotted lines, Fig. 3) a certain resiliency is imparted to the sign connection in that, when an automobile vibrates violently, the washer will yield slightly responsive to the jar, thereby preventing the sign plates from bending under the shock. The beads 10, constitute arcuate bottomed seats for the beads of the plates.

I claim:

The combination of plates positioned in edge-to-edge relation, adjacent edges of said plates being spaced and embossed with raised beads, a centrally perforated elongated, flat, back clamp plate extending at right angles to said adjacent edges and overlapping the underside of both plates, a centrally perforated front clamp plate positioned over said back plate, the ends thereof being formed with shallow beads partially

receiving the first beads as to space the adjacent portions of said front plate from the outer faces of said embossed plates, a bolt means extending through the perforating of the front and back plates for holding the same together, and resilient means cooperating with the bolt to hold the clamp plates against the respective opposite sides of said plates, said resilient means permitting the introduction of the embossed plates between the clamp plates without rendering the bolt means completely inoperative.

In testimony whereof I affix my signature.

THEODOR R. WILLWERSCHEID.