Oct. 19, 1926. 1,603,360

S. SICARD

METALLIC BAND FOR HOOPING BOXES, PACKAGES, AND THE LIKE

Filed Nov. 9, 1925

Fig. 1

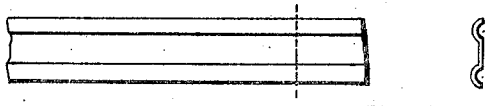


Fig. 2.

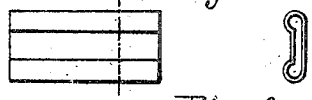


Fig. 3.

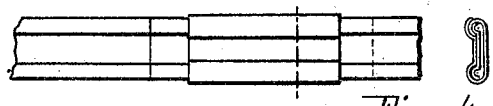


Fig. 4.

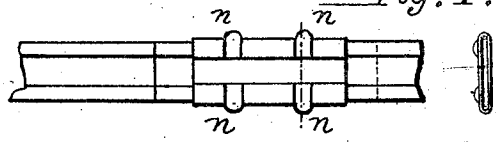


Fig. 5.

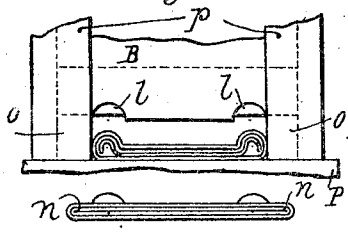


Fig. 6.

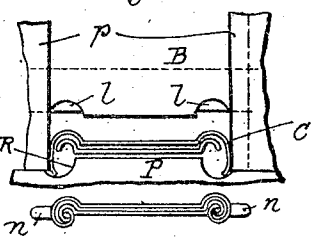
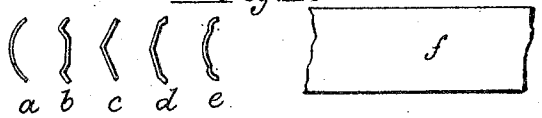


Fig. 7.



INVENTOR
S. SICARD
BY Jno. Thim
ATTY.

Patented Oct. 19, 1926. 1,603,360

UNITED STATES PATENT OFFICE.

SÉRAPHIN SICARD, OF PARIS, FRANCE, ASSIGNOR OF FIFTY PER CENT TO M. ANDRÉ REBICHON, OF PARIS, FRANCE.

METALLIC BAND FOR HOOPING BOXES, PACKAGES, AND THE LIKE.

Application filed November 9, 1925, Serial No. 68,035, and in France November 22, 1924.

This invention relates to a metallic band for hooping boxes, packages and the like.

According to the present invention I provide a metallic band for hooping boxes, packages and the like, constituted by a knurled hoop-iron whose ends are adapted to be fitted together after the band has been stretched around the box or the like and are held firmly in that position by a knurled metallic fastener fitted over said ends and conforming to the contour of the band.

The knurling of the band reduces the initial width thereof and allows a lateral enlargement of the metal to be made at various points, as for example, at the junction of the two fitted ends of the band, the enlarged parts lodging in corresponding deformations in the fastener.

As the contour of the top part of the fastener conforms to that of the bands, lateral enlargement and vertical deformation of the band and of the fastener can be carried out by simply flattening the band and fastener, thus ensuring a very rigid and strong fastening at the junction of the ends of the band, and moreover the fastening can be made absolutely inviolable by using a completely closed fastener or one which is soldered at its bottom part. The knurled band will be very rigid and can easily be sunk, without deformation, when the band is being tensioned, deeply into the square edges of the hooped boxes, thus preventing slipping the band.

The annexed drawings illustrates, by way of example, various constructional forms of the band and forms of apparatus for fastening the ends of the band.

On the drawings:—

Fig. 1 is a plan and sectional view of one form of band;

Fig. 2 is a plan and sectional view of a fastener;

Fig. 3 is a plan and sectional view of the band before fastening;

Fig. 4 is a plan and sectional view of the band after being fastened;

Fig. 5 is a fragmentary view illustrating the fastening operation by means of an apparatus for use with a closed fastener;

Fig. 6 is a fragmentary view illustrating the fastening operation by means of an apparatus for use with an open fastener; and

Fig. 7 illustrates various forms of hoop-iron, whose characteristic essential is the reduction of their initial size and their formation in such a manner that, while forming strong bands capable of being easily fitted into the angles of the boxes, their ends can be easily and rigidly fastened by simply flattening said ends at various points, within the fastener so as to form lateral projections which ensure proper fixing of the band.

Referring to Fig. 5:—

The fastening of the ends of the band after the band has been stretched round a box is carried out in the following manner:

The ends of the band to be united with the fastener arranged thereover are arranged on the plate P of a fastening device comprising a block B slidable between two side cheeks, which limit the opening-out of the fastener and bend except at two openings O formed in said cheeks and wherein two blades *l* fixed to the block B are slidably engaged. The blades are of the same size as the desired flattened-out parts *n* of the fastener and band, as indicated on Fig. 4. The block B is made to descend by any suitable pressure means, the blades *l* crushing the fastener and band so as to flatten out the bosses thereon. The flattened-out material is forced into the openings O formed in the side cheeks of the fastening device and the band resumes its initial width at the parts *n*, Fig. 4. The contour of the fastener and of the band, however, remain the same everywhere also owing to the forms of the block B which is shaped at its bottom part to fit the contour of the fastener and band, while the material is unable to spread out laterally since it is maintained by said side cheeks. A similar fastening device, see Fig. 6, is adapted to be used with an open fastener C. The block B is unchanged but the plate P is formed with two grooves R which set over the edges of the fastener around the edges of the band when the block descends, the blades *l* carrying out their crushing operation as before.

The invention is not limited to this method of fastening and the tool shown can be varied, the only function of the fastening device being to obtain an enlarging of the fastener and band, at various points.

I claim:—

1. A metallic hoop having edge deformations to reduce its initial width and a fastener having an edge formation corresponding with and adapted to receive the edge

deformations of the band hoop when the ends thereof are inserted within the fastener, and means to flatten the fastener and contained hoop ends to cause the flattened out metal of the band to lodge in the edge formations of the fastener to secure a rigid fastening of the band.

2. A metallic band having deformations to reduce its normal width, a fastener of similar shape transversely to receive the lapped end of the band, said fastener and band ends being flattened at determinate areas to restore the normal width of the fastener and band ends without affecting the deformations in the remaining parts of the fastener and band ends.

3. A metallic band having its end portions deformed to reduce the normal width thereof, a similarly deformed fastener to receive the deformed band end in lapped relation, spaced transverse portions of the fastener and band ends being flattened to normal width to interlock the fastener and band ends.

Signed at Paris in the county of Seine, France this twenty-eighth day of October 1925 A. D.

SÉRAPHIN SICARD.