

(No Model.)

H. S. REYNOLDS.
EAR FOR SHEET METAL VESSELS.

No. 503,680.

Patented Aug. 22, 1893.

Fig. 1.

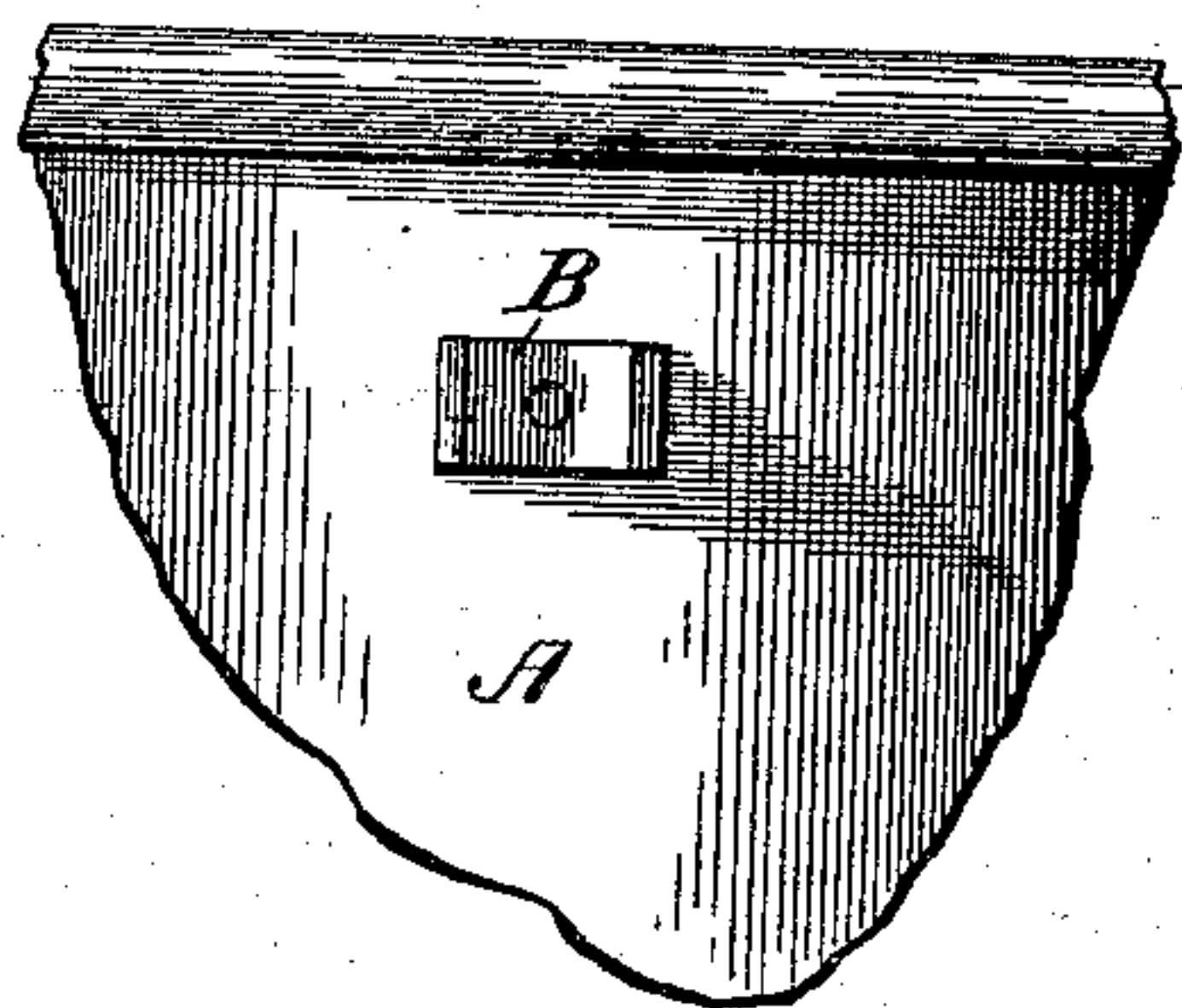


Fig. 2.

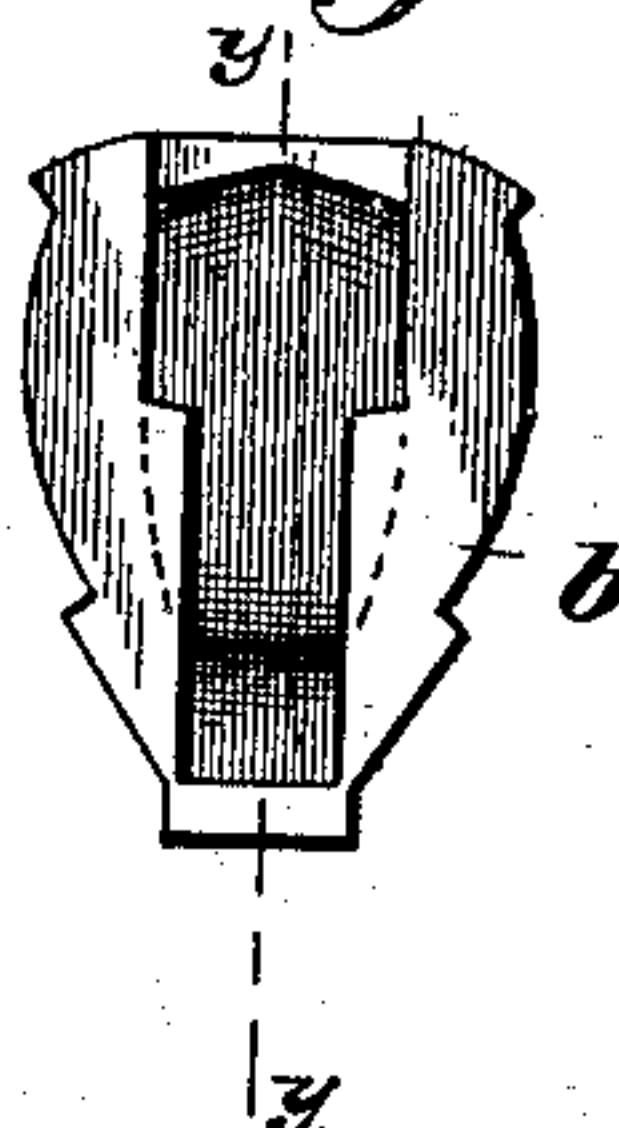


Fig. 5.

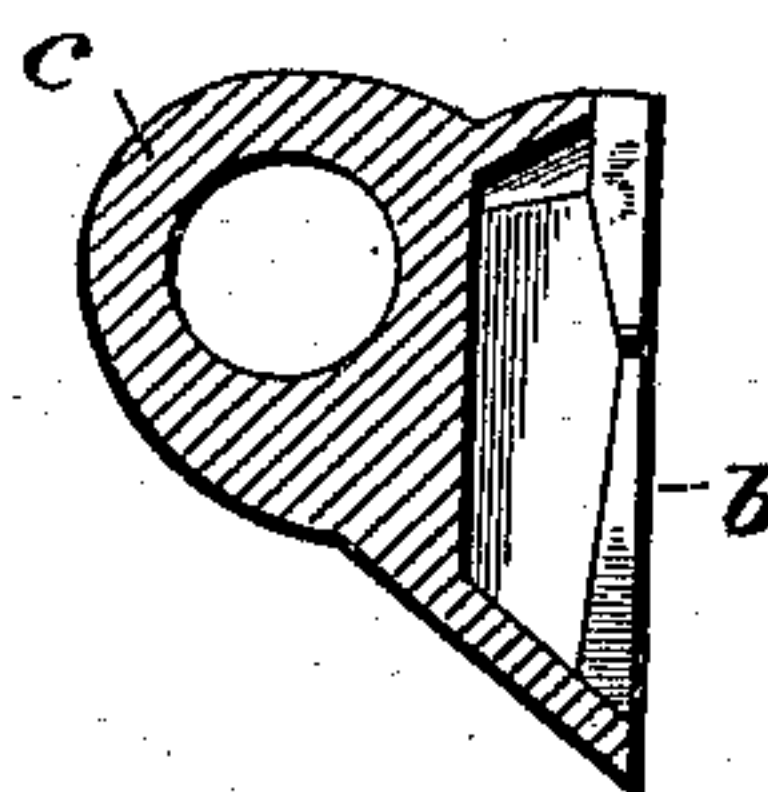


Fig. 3.

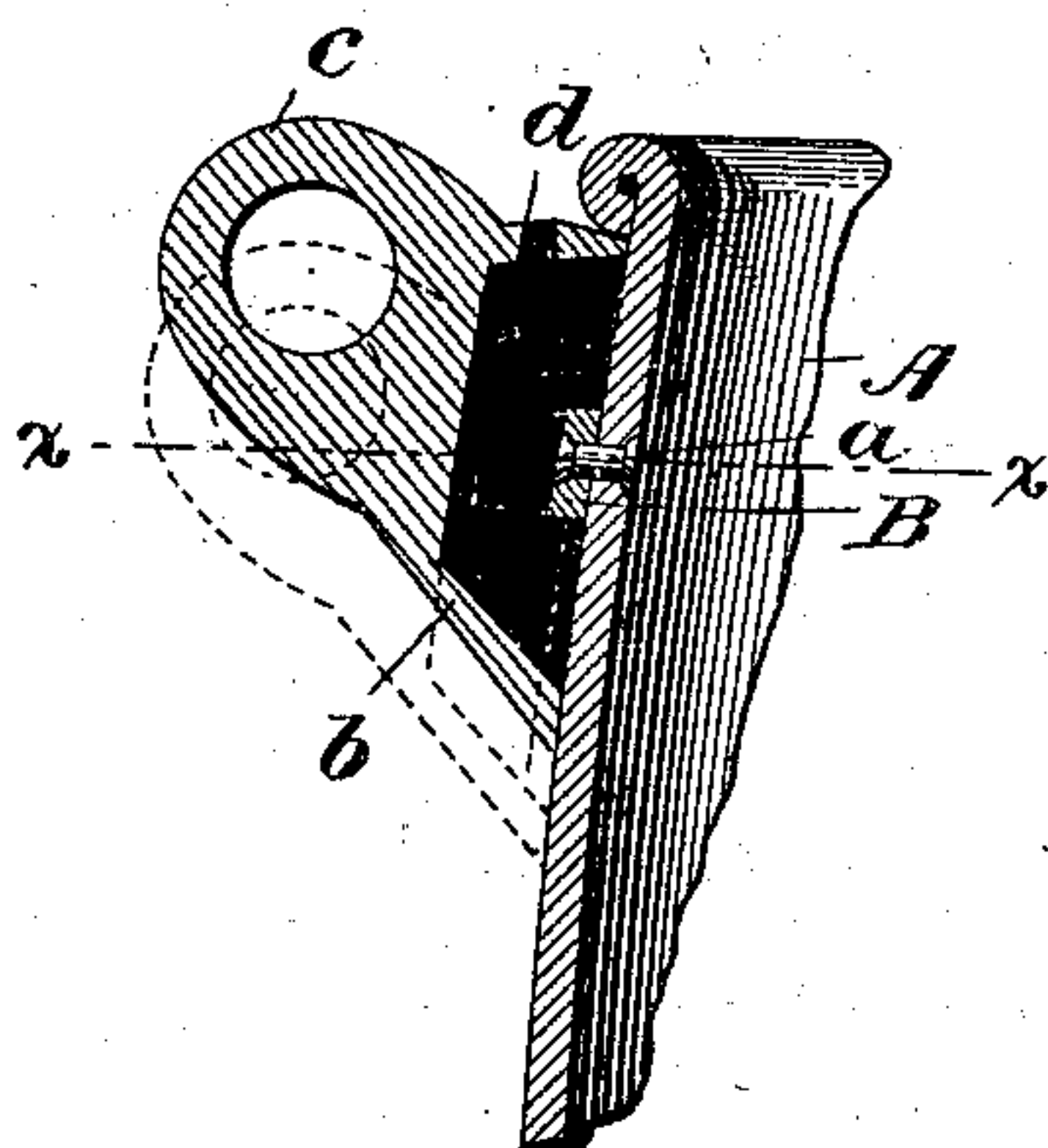


Fig. 4.

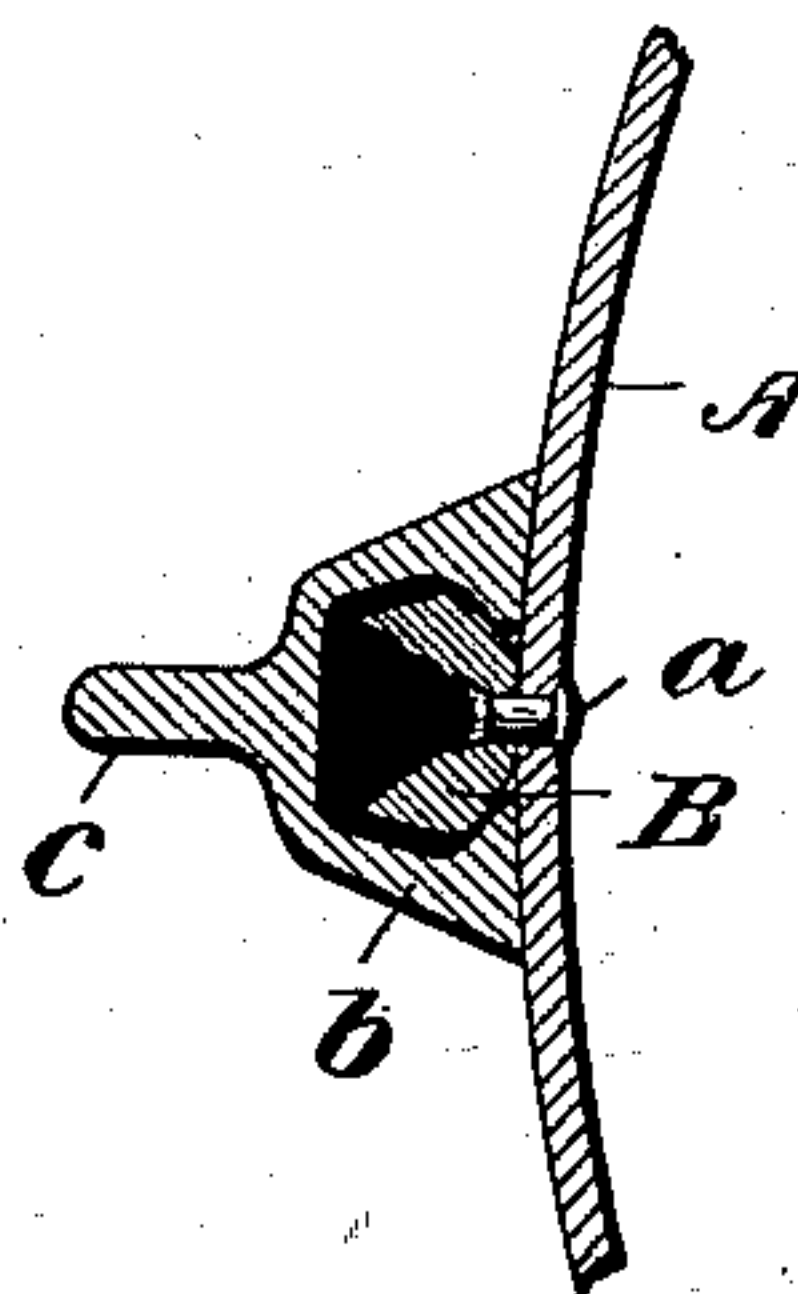
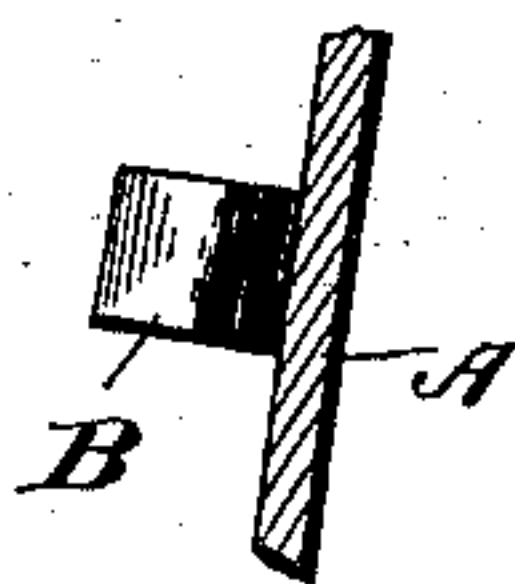


Fig. 6.



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UNITED STATES PATENT OFFICE.

HENRY S. REYNOLDS, OF BROOKLYN, NEW YORK.

EAR FOR SHEET-METAL VESSELS.

SPECIFICATION forming part of Letters Patent No. 503,680, dated August 22, 1893.

Application filed February 10, 1891. Renewed January 23, 1893. Serial No. 459,445. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. REYNOLDS, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Ears for Sheet-Metal Vessels, of which the following is a specification.

This invention relates to certain improvements in ears for sheet metal vessels, and is especially designed for that class of goods known as enameled ware.

Heretofore in the construction of these goods it has been necessary to rivet the plate carrying the ear to the vessel body prior to the enameling process, since its attachment subsequent thereto would break and injure the enamel, and destroy the appearance of the vessel. These ear attachments have usually been composed of malleable castings and consequently of heavier metal than that of the sheet metal body of the vessel. Hence in enameling operations the difference in the character and thickness of the metal of the ear attachment as compared with the vessel body has been a disadvantage, resulting usually in a failure to obtain a good finish to the article at the point of the ear attachment; this has been due to the thickening of the coating at the edges of the plate carrying the ear, and also because it is not possible to coat the malleable casting as evenly and smoothly as the sheet metal body.

It is the object of my invention to obviate these disadvantages and produce an ear which will be neat and attractive in appearance, and which may be readily attached to the vessel subsequent to the enameling operation, and without injury to the enamel coating.

To this end my invention consists of a projection on the vessel body, and an ear provided with a shouldered slot within which the said projection is wedged, as hereinafter more fully described and claimed.

In the accompanying drawings, in the several figures of which like parts are similarly designated, Figure 1, is a fragmentary view of a vessel showing the projection I prefer to employ. Fig. 2, is a rear elevation of the ear, showing the recesses. Fig. 3, is a vertical section of ear attached to the vessel. Fig. 4,

is a horizontal section on the line $x-x$, Fig. 3. Fig. 5, is a section on the line $y-y$, Fig. 2; and Fig. 6, is a side elevation of the projection on the vessel body.

A represents the body of the vessel, to which the V-shaped projection B is secured, as by a rivet a , prior to the enameling process. This projection may be of malleable iron or other suitable material, and is of the form illustrated. The ear may also be of malleable iron or other suitable material, and consists of the recessed base b , and ring-shaped extension c , for the reception of the swinging handle of the vessel. The base is formed with a shouldered slot b , in this instance a slot of the T or keyhole kind, the shoulders of the slot being beveled longitudinally on that face which is engaged by the projection B, so as to be thinnest at the point where the projection first enters, and thence gradually increasing in thickness, as indicated in Fig. 5, at b' . The faces of the projection B which meet these longitudinally beveled shoulders, are correspondingly inclined, as seen in Fig. 6, at b^2 . The result of this construction is that when the base is pushed up into engagement with the projection, it will also be drawn tightly against the vessel body, so as to make a close accurately fitting joint therewith; this operation however, taking place gradually and in such manner as not to injure the glazed surface of the vessel. This feature is applicable not only to the particular form of base under consideration, but to any base or handle plate which is to be attached to a sheet metal vessel. The recess within the base may also be longitudinally tapered, as indicated by dotted lines in Fig. 2.

The operation is as follows: After the attachment of the projection to the vessel, and subsequent to the enameling process, the upper and larger part of the T-slot is placed over the projection on the vessel, as shown by dotted lines, Fig. 3, and the ear is then moved upwardly to the position shown by full lines in Fig. 3, said ear being guided by the vertical portion of the T-slot over the V-shaped projection, which, as the ear is pushed upwardly is confined within the tapering recess and firmly wedged therein, and at the same time acts to draw and hold the ear most

tightly and closely against the body of the vessel, forming a secure and strong jointure; and to render the same more stable, I introduce molten metal through a suitable aperture, such as *d*, in the base of the ear, filling the cavity in the ear surrounding the projection on the vessel body and thus holding the ear firmly in its wedged position on the projection. It will be seen that an ear of this construction is neat and attractive in appearance, and will add to, rather than detract from the general appearance of the vessel. It can also be cheaply made and readily applied, and, if desired, may be nickel-plated, or otherwise ornamented.

What I claim as new, and desire to secure by Letters Patent, is—

1. An ear for sheet metal vessels, comprising a base having a T-slot therein, the shoulders of the slot being beveled longitudinally, and gradually increasing in thickness from

the enlarged opening toward the bottom of the slot, substantially as shown and described.

2. A base having a shouldered slot to engage a head or flanged projection on the vessel body, the shoulders of the slot being beveled longitudinally on that face which is engaged by the projection so as to be thinnest at the point where the projection first enters and thence gradually increasing in thickness, in combination with the vessel body and a flanged projection thereon beveled correspondingly to the beveled shoulders of the slot, substantially as described.

Signed at New York, in the county of New York and State of New York, this 2d day of February, A. D. 1891.

HENRY S. REYNOLDS.

Witnesses:

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FREDERIC CARRAGAN.