No. 896,668. PATENTED AUG. 18, 1908.

J. SCHMID.

REMOVABLE CLOSURE FOR THE OPENINGS OF BARREL HEADS, &c.

APPLICATION FILED MAR. 7, 1907.

Fig. 1.

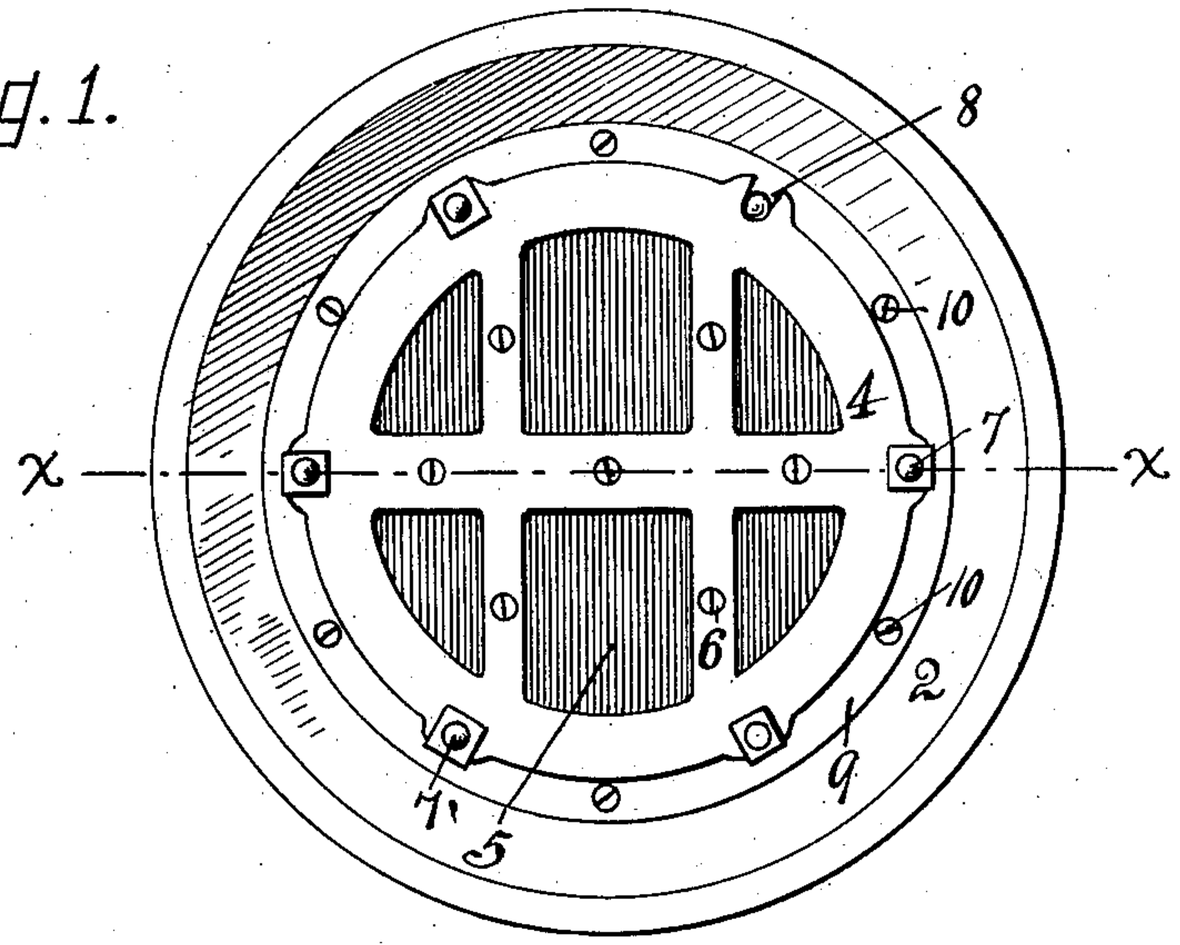


Fig. 2.

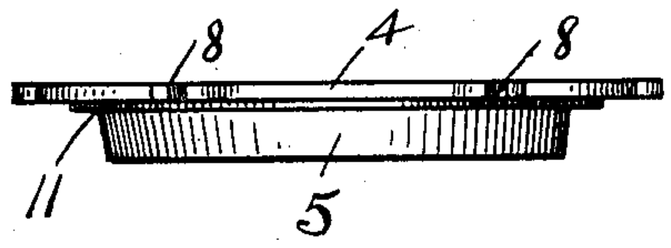
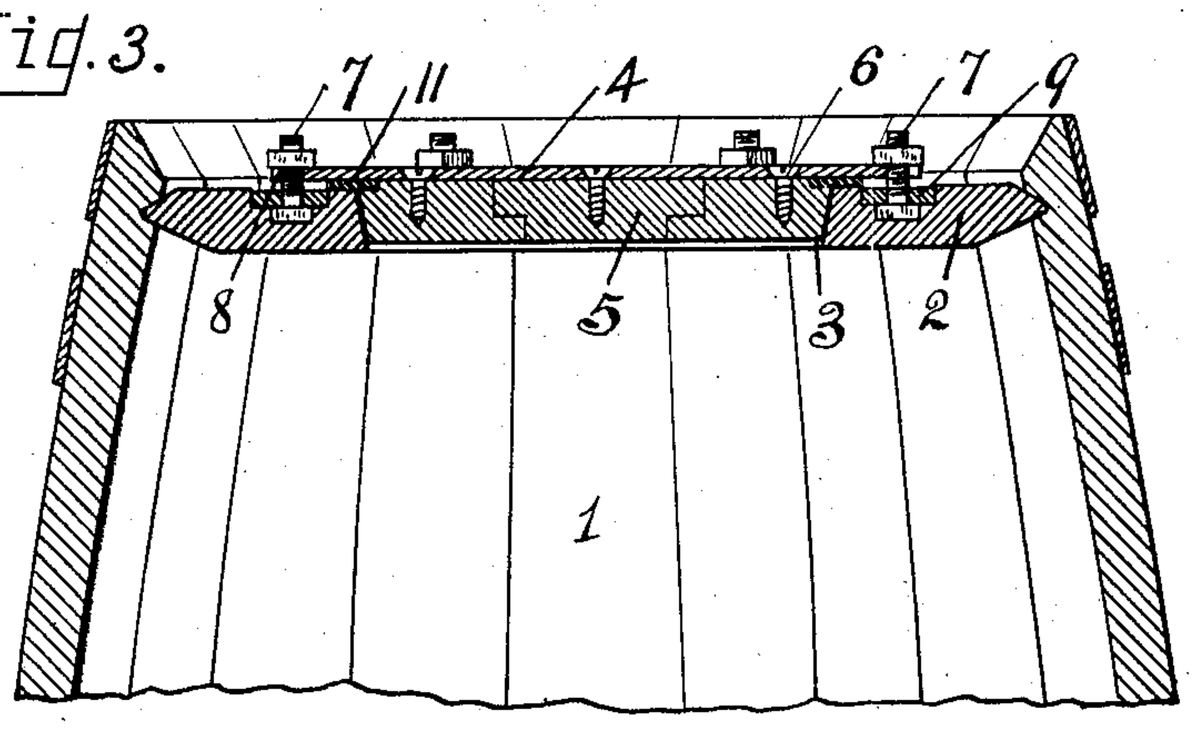


Fig. 3.



WITNESSES:
L. C. Walter
Hazel B. Hiett

INVENTOR.
John Schmid
By Owen & Owen
his attys.

UNITED STATES PATENT OFFICE.

JOHN SCHMID, OF TOLEDO, OHIO.

REMOVABLE CLOSURE FOR THE OPENINGS OF BARREL-HEADS, &c.

No. 896,668. Specification of Letters Patent. Patented Aug. 18, 1908.

Application filed March 7, 1907. Serial No. 361,180.

To all whom it may concern:

Be it known that I, JOHN SCHMID, a citizen of the United States, and a resident of Toledo, in the county of Lucas and State of Ohio, have invented a certain new and useful Removable Closure for the Openings of Barrel-Heads or the Like; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to wooden receptacles, such as barrels, kegs or other closed vessels, and more particularly to a head for such receptacles having an opening therein and a removable closure for the opening.

The object of my invention is the provision, in a receptacle of the class described having a head opening, of a wooden closure for the opening having metal securing parts which are so associated with the head and closure that no portion thereof is exposed to the interior of the receptacle, thus providing a receptacle which is especially adapted for the packing of meats during the curing process, and which is also intended for the packing of pickles or other articles, the liquid of which might be injuriously affected by contact with metal, and one which may be repeatedly used for the same and other purposes.

While the invention may be adapted to different forms and conditions by change in the structure and minor details without departing from the spirit or essential features thereof, the preferred embodiment is shown in the accompanying drawing, in which,—

Figure 1 is a plan view of a barrel head embodying the features of my invention. Fig. 2 is a side view of the cover or closure for the head opening, and Fig. 3 is a central longitudinal section of a portion of a barrel on the dotted line *x x* in Fig. 1.

Referring to the drawing, 1 designates a barrel, the head 2 of which is provided with a centrally-disposed opening 3, which, while preferably round, may be of any desired shape or size. The stopper member or closure for the opening 3, consists of a metal outer portion 4 and the inner or plug portion 5, which latter is preferably the part cut from the head to form the opening therein. The metal portion 4 of this member is secured to the part 5 by screws 6 and is intended to form a radially projecting marginal flange about said part to coöperate with bolts 7 carried by the head to retain the member to its seat in the opening 3, said bolts engaging slots 8 in such flange. The bolts 7, instead of passing entirely through the head 2 so that their inner ends are exposed to the interior of the receptacle, have their heads or inner ends countersunk in the outer surface of the barrel-head and are rigidly secured thereto by a retaining ring or member 9 through which their shanks project. This ring is also countersunk in the head surface, as shown in Fig. 3, and is secured thereto by short screws 10.

The countersinking of the ring within the outer surface of the head is a very important feature of construction, as otherwise when the head is forced within the barrel end it will assume an oval shape due to the quantity of material taken from the center thereof to provide the opening. It is therefore necessary to countersink the ring as the screws alone are not sufficient to resist the compressing force. The countersinking of the ring also provides a shoulder between the ring and head opening, which prevents the exposure of the metal ring to the contents of the barrel. The ring 9 in addition to retaining the bolts 7 to the barrel-head also serves to prevent a dishing or warping of the head, as does also the metal part 4 relative to the closure member, thus insuring at all times a perfect fitting of the closure member in the head opening. A gasket 11 is secured between the metal part 4 and the contiguous marginal edge of the part 5, the latter being grooved or gained for that purpose, and projects beyond the edge of the part 5 to enable it to coact with the outer margin of the opening 3 to hermetically seal the joint when the stopper is secured in position.

It is thus apparent with this construction of closure and its manner of securance to the head that the interior surfaces of the same are entirely free from metal parts with which the liquid contents could have contact, and also that the head is materially strengthened and prevented from warping by the metal parts.

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

1. In combination, a receptacle having its head provided with an opening and with a countersink in its outer face, which countersink surrounds said opening and is spaced therefrom, a metallic reinforcing member secured in said countersink, said member serving to prevent a dishing of the head, a closure for the opening having a nonmetallic inner surface and a surrounding external flange, a gasket fitted between said flange and the marginal edge of the opening, and means for removably retaining the closure to its seat in the opening.

2. In combination, a receptacle having its head provided with an opening, a metallic reinforcing member countersunk in the head flush with its outer surface, said member surrounding said opening and being spaced therefrom by the portion of the head forming the outer margin of the opening, a closure for the opening having a nonmetallic inner surface and a surrounding external flange of metal, a gasket fitted between said flange and the outer marginal edge of the opening, and securing means held to the head by said member and coöperating with said flange to retain the closure to its seat in the opening.

In testimony whereof I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

JOHN SCHMID.

Witnesses:
C. W. Owen,
Hazel B. Hiett.