

No. 684,605.

Patented Oct. 15, 1901.

B. O. DORN.

BARREL.

(Application filed Feb. 26, 1901.)

(No Model.)

Fig. 1.

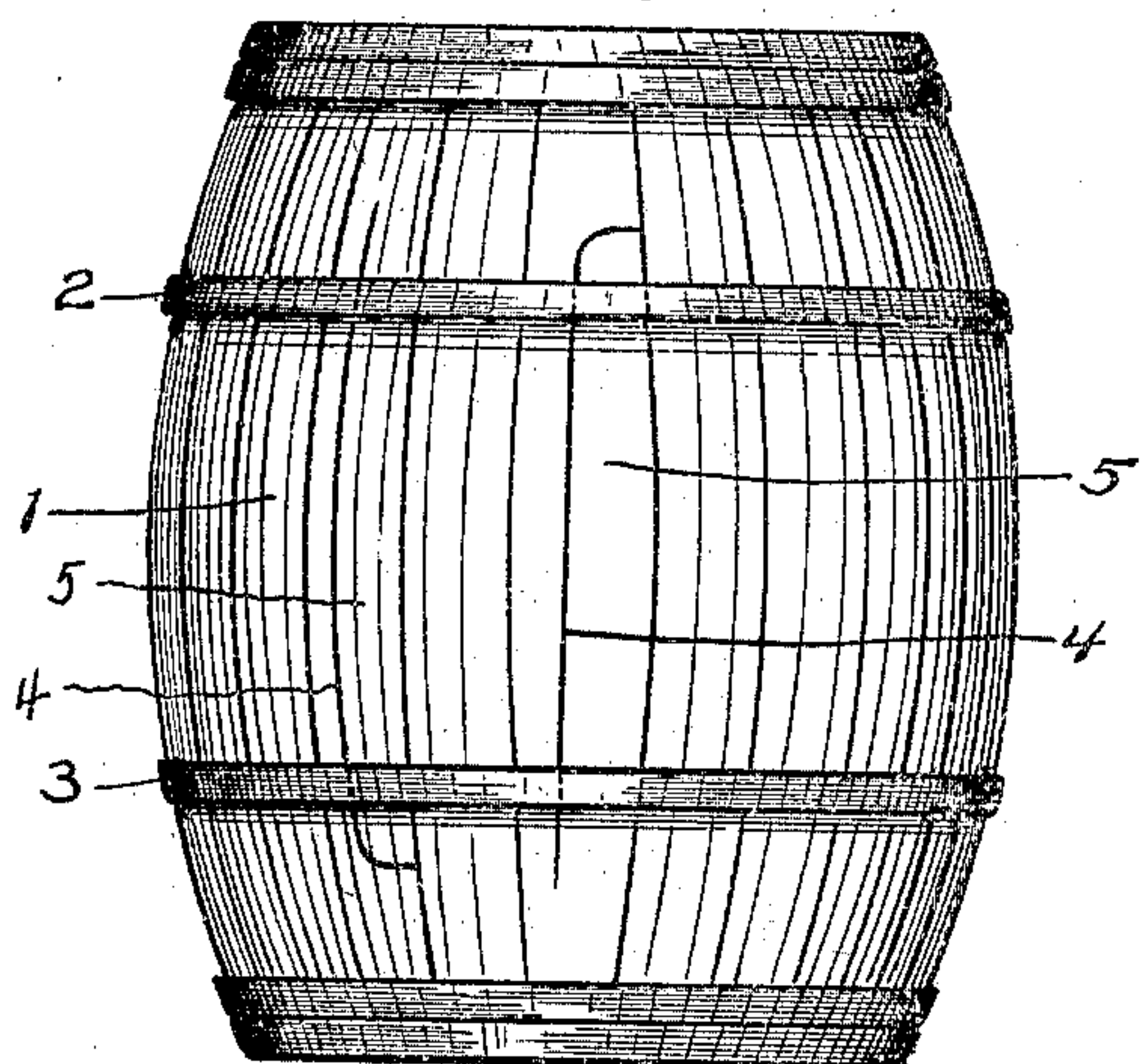


Fig. 2.

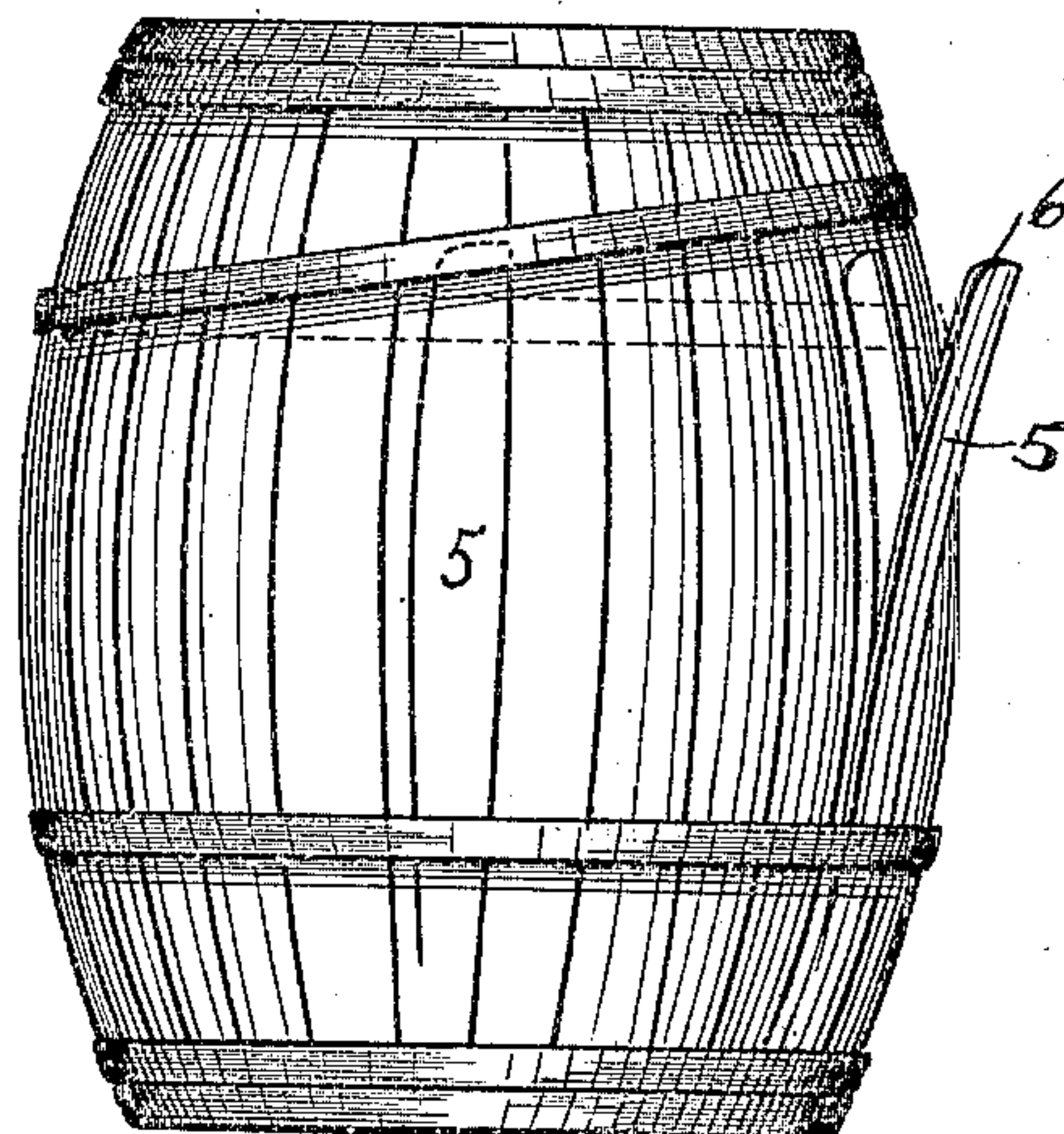


Fig. 3.

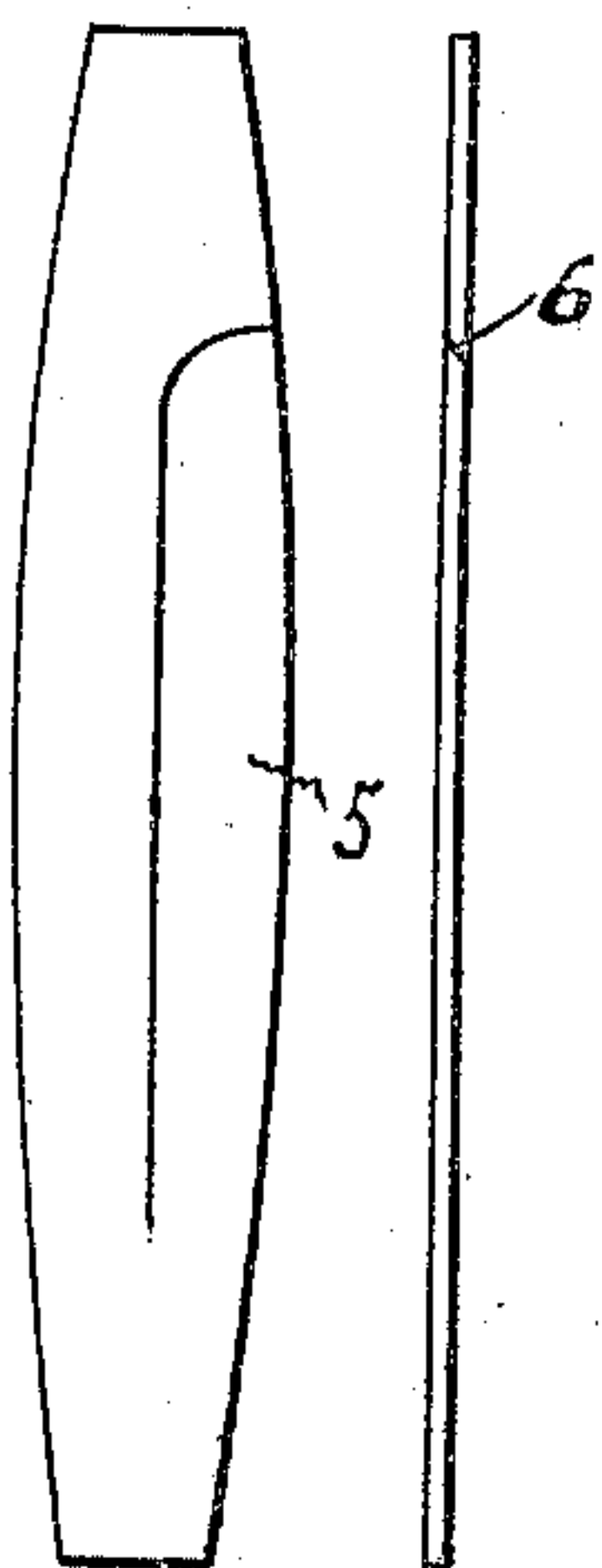


Fig. 4.

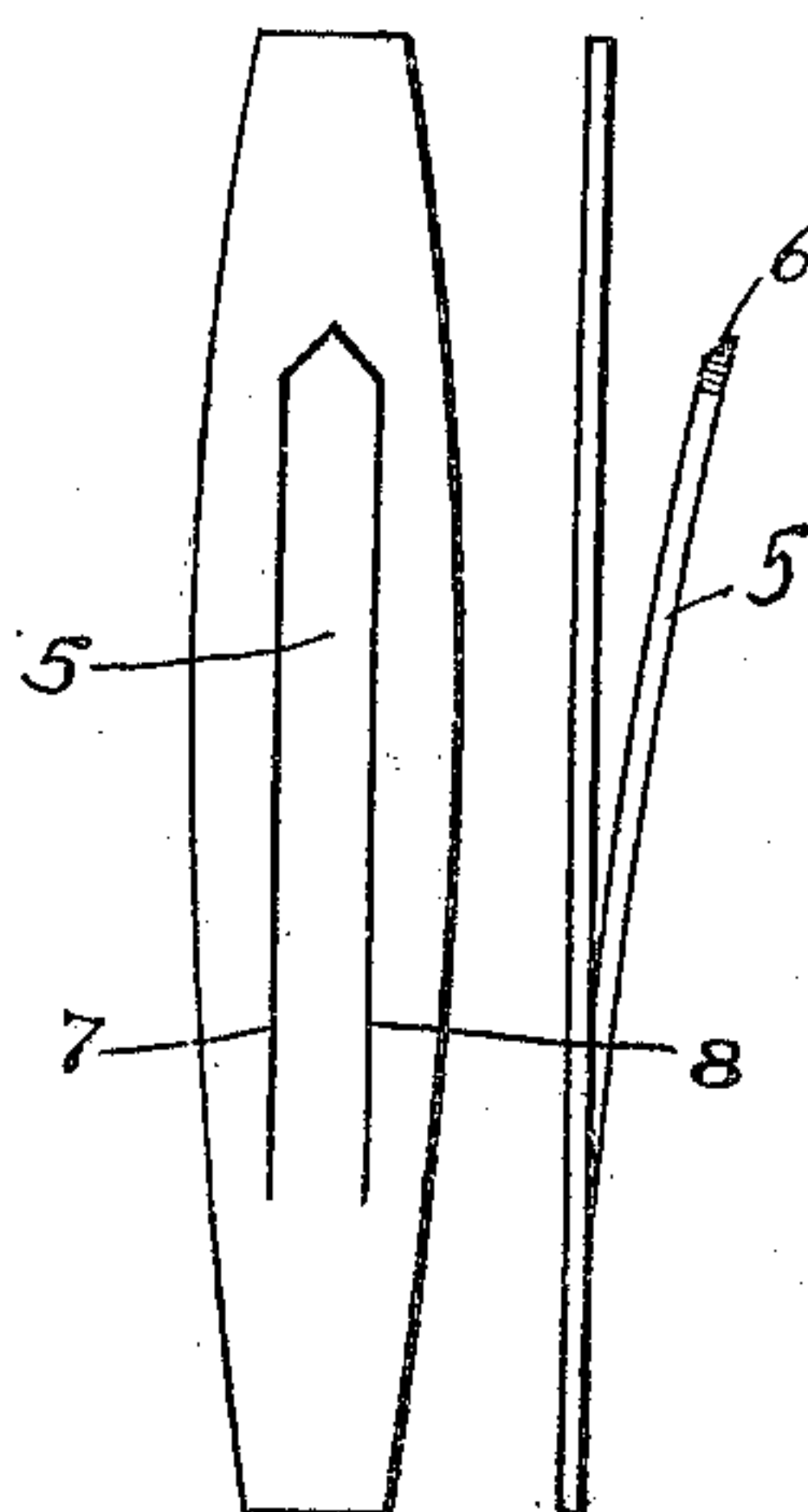
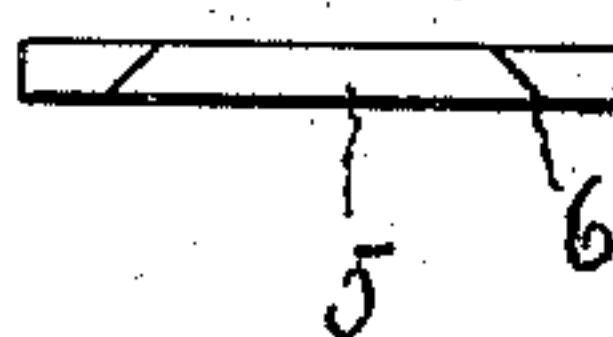


Fig. 5.



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UNITED STATES PATENT OFFICE.

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BARREL.

SPECIFICATION forming part of Letters Patent No. 684,605, dated October 15, 1901.

Application filed February 26, 1901. Serial No. 48,977. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN O. DORN, a citizen of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Barrels; 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.

My invention relates to an improvement in barrels, casks, boxes, or other packing and storing vessels; and its object is to provide means whereby the contents of the same may be inspected from any portion of the barrel and to also provide ventilation for the vessel.

My invention consists in providing the staves of a barrel with a longitudinally-split tongue, the free end of which is held secured in place by the hoop, but which may be released and opened to examine the contents by displacing the hoop.

It further consists in providing ventilation for the barrel.

Referring to the accompanying drawings, Figure 1 is a side elevation of a barrel, showing one or more of the staves split and held in place by the hoops ready for shipping. Fig. 2 is a similar view showing the hoop displaced and the free end of the split staves bent outwardly. Fig. 3 is a longitudinal section taken through one of the split staves. Fig. 4 is a view of a stave, showing a modification; and Fig. 5 is a transverse section of the stave.

In the drawings, 1 designates an ordinary barrel provided with the usual hoops 2 and 3 and having one or more of the staves split longitudinally, as at 4, forming a tongue 5, the normal tendency of which is to spring outwardly, as shown in Fig. 2, but which is held in place by the hoops. It is well known that the hoops are usually secured upon the barrel by wedging them toward the center of the same, and the staves being bent convex and held at the top by hoops the normal tendency of the staves when released by the hoops would be to spring outwardly.

In Figs. 1 and 2 the tongue is shown made from the staves by a single split, one end of which extends transversely and merges into the side of the stave, thereby separating it

from the stave. To prevent the tongue from being forced within the barrel, whereby it would be difficult to withdraw the same, the upper edge is beveled, as shown at 6 in Fig. 3, or the entire cut made in the staves may be cut obliquely, so as to still further reduce the liability of the tongue becoming dislodged or forced within the barrel.

In Fig. 4 I have shown a modified form in which the tongue 5 is made from the stave by having two parallel longitudinal splits 7 and 8 made in the same, the two splits being connected at its free end.

It will be seen that this invention is applicable to boxes as well as barrels, such as those used for packing fruit, and changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit of the invention or sacrificing the advantages thereof. Assuming that the barrel is in the position shown in Fig. 1 and it is desired to inspect the contents from several portions of the same, the upper or lower stave, or both, may be dislodged, as shown in Fig. 2, and the tongue 5 will immediately spring outwardly and allow inspection of the contents; but the tongue can be replaced again by a reverse operation. It is obvious that as many tongues may be provided as desired, and every alternate stave may have the tongues alternately arranged—i. e., the free end being at the top and the bottom, as shown in Fig. 1.

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

1. A barrel having one or more of its staves provided with an integral tongue capable of being moved outward to permit the inspection of the contents.

2. A barrel having one or more of its staves provided with an integral tongue intermediate of the ends of the staves and capable of being moved outward to permit the inspection of the contents at the central portion of the barrel.

3. A barrel having one or more of its staves split longitudinally a portion of their length, said split extending to the longitudinal edge of the stave to form an integral tongue, and means for holding the tongue within the opening formed by the split.

4. A barrel having one or more of the staves
split longitudinally a portion of their length,
whereby an integral tongue is formed in the
staves, said tongue being beveled inwardly to
5 conform to the bevel of the stationary portion
of the stave, and form a tight joint, substan-
tially as described.

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

BENJAMIN O. DORN.

Witnesses:

GEORGE OLTSCH,
HUGO OLTSCH.