

**No. 666,816.**

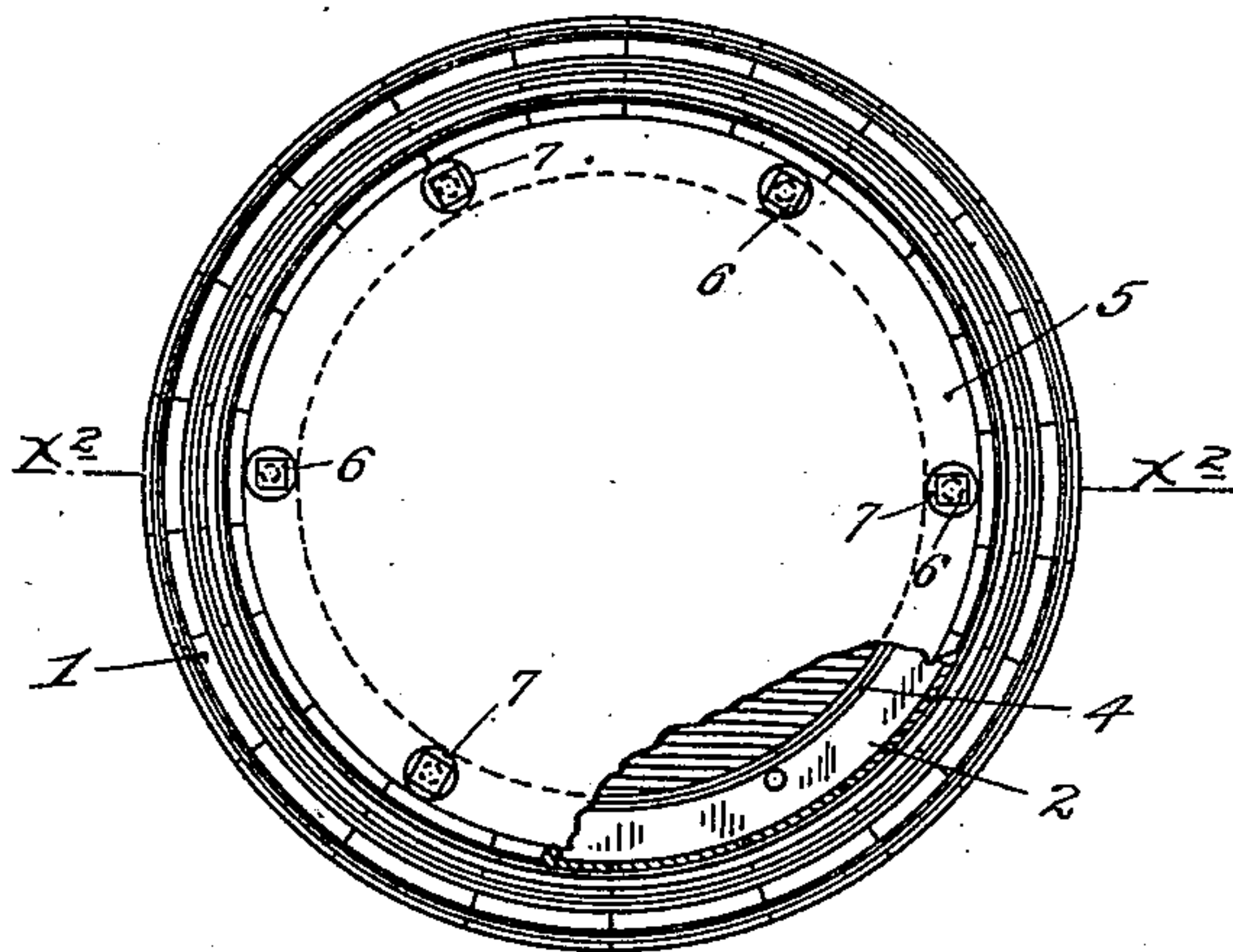
**Patented Jan. 29, 1901.**

**J. L. MCKAY.**  
**DETACHABLE HEAD BARREL.**

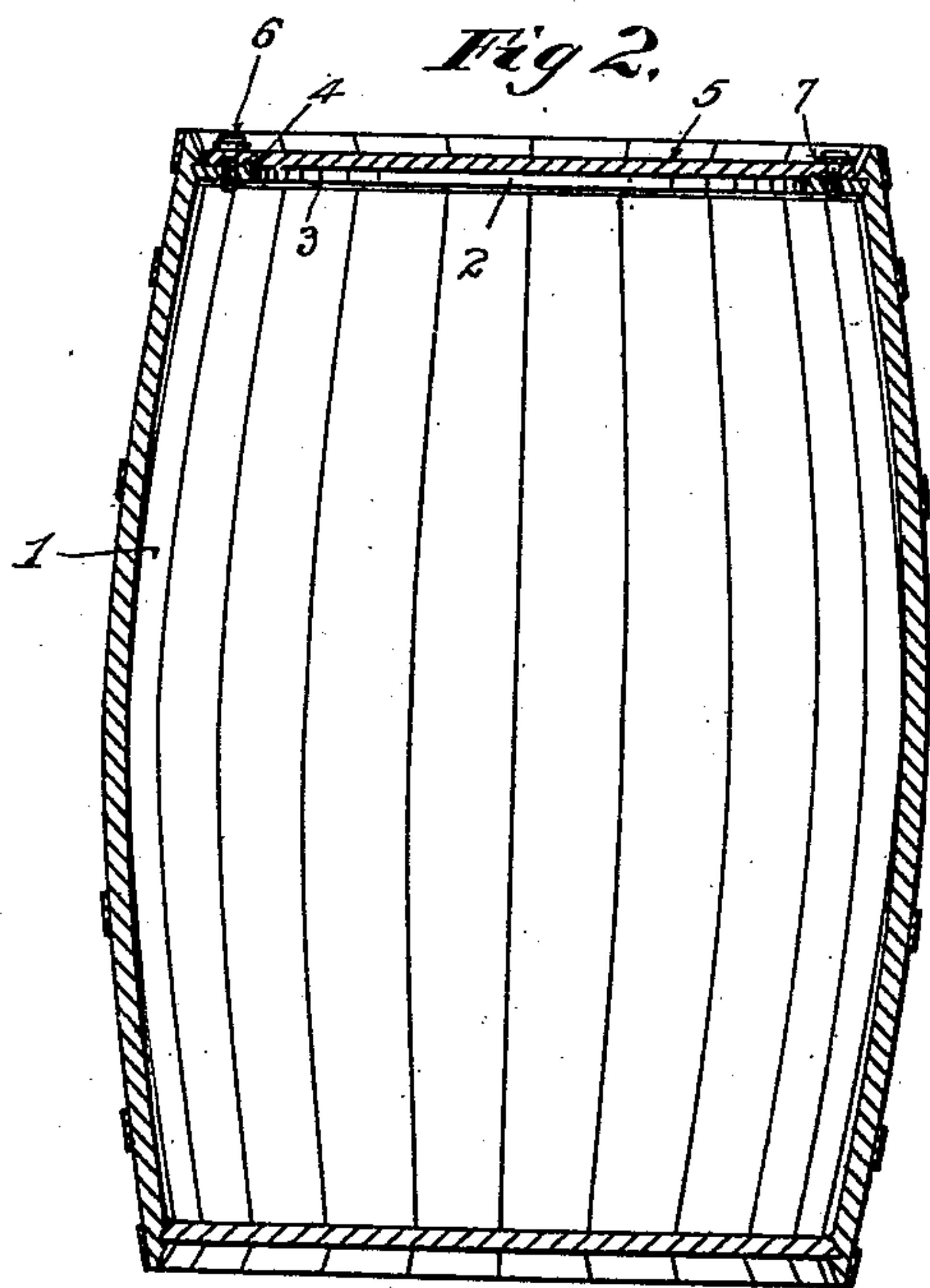
(Application filed Feb. 19, 1900.)

(No Model.)

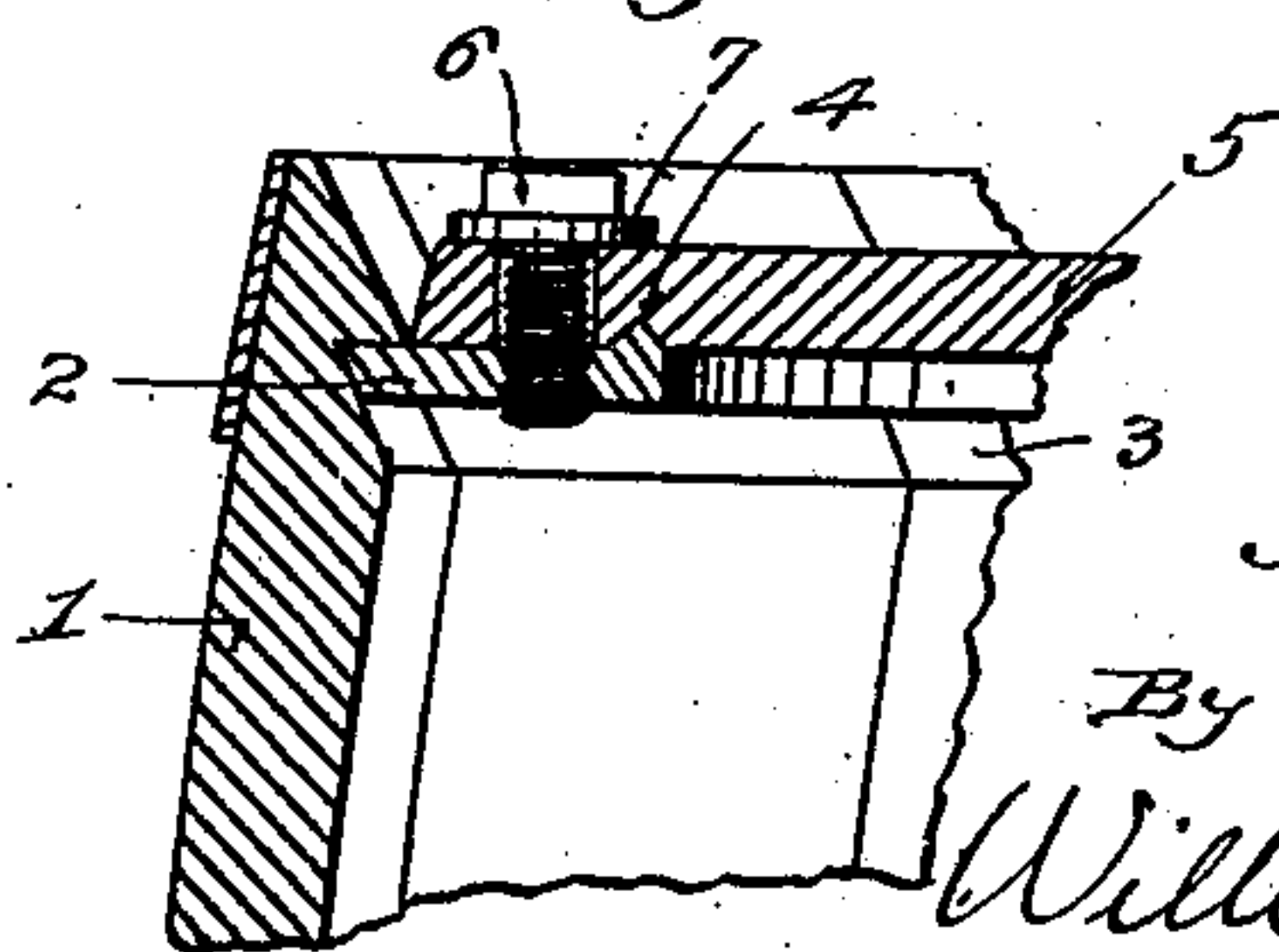
*Fig. 1.*



*Fig 2.*



*Fig 3.*



Witnesses:  
Harry Kilgore.  
Robert Otto.

*Inventor,*  
*John L. Mc Kay,*

By his Attorneys,

Williamson & Merchant

# UNITED STATES PATENT OFFICE.

JOHN L. MCKAY, OF MINNEAPOLIS, MINNESOTA.

## DETACHABLE-HEAD BARREL.

SPECIFICATION forming part of Letters Patent No. 666,816, dated January 29, 1901.

Application filed February 19, 1900. Serial No. 5,735. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN L. MCKAY, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Detachable-Head 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 barrels, and has for its object to provide a removable head for the same.

To this end my invention consists of the novel devices and combinations of devices hereinafter described, and defined in the claim.

It is a well-known fact that barrels such as are used for molasses, lard, and various other commercial articles require to be exceedingly well made and strong, and hence are quite expensive. It is the common practice to buy back from the retail purchaser such barrels; but as they have hitherto been constructed it has been necessary to break in one head of the barrel or to otherwise mutilate the barrel more or less, so that its value to the wholesaler or jobber is thereby very much decreased from what it would be worth if the complete barrel, unbroken, could be returned.

It is the object of my invention to provide a barrel having a head which may be rigidly secured and readily detached without damaging either the barrel or the head.

My invention in its preferred form is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 is a plan view of a barrel constructed in accordance with my invention, a portion thereof being broken away. Fig. 2 is a vertical section on the line  $x^2 x^2$  of Fig. 1; and Fig. 3 is an enlarged view of a portion of the barrel, taken on the same line as Fig. 2.

The numeral 1 indicates a barrel which is of ordinary construction except that it is provided at one end with an annular metal ring 2, which is secured within an internal groove 3, such as is ordinarily cut in the end of a

barrel to receive the ordinary barrel-head. This ring 2 is preferably secured in the barrel end in the process of manufacture of the barrel and it need not thereafter be removed. For an important purpose, presently to be noted, the ring 2 is provided at its inner edge with an upturned annular flange or rib 4, which is preferably V-shaped in cross-section.

The barrel-head is indicated by the numeral 5, and, as shown, it is formed of a single piece, although it will of course be understood that it may be formed of several pieces, suitably secured together. This removable head 5 fits within the outer end of the barrel and overlaps the inwardly-projecting portion of the ring 2. A plurality of machine-screws 6, passed through suitable perforations in the peripheral portion of the head 5 and screwed into the ring 2, serve to securely fasten the said head 2 to the said ring. The head 5 is preferably formed with an annular groove adapted to fit the V-shaped flange on the ring 2; but if the head is not provided with such groove the said flange may be forced into the said head by drawing tightly on the screws 6, so that in either case a liquid-tight joint is formed between the detachable head and the said ring.

As shown, washers 7 are placed around the screws 6; but, if desired, the head may be provided with a metal ring or hoop running around its upper peripheral portion and through which the screws would be passed.

The use of a barrel constructed as above described is obvious. The detachable head may be removed to empty the barrel of its contents and then may be replaced and the empty barrel in undamaged form may be sold back to the house from which it came. Thus while the barrel will originally cost slightly more than an ordinary barrel it may be used a great many times without requiring to be put in any better condition than that in which it is left except for cleaning, which is necessary in all barrels. Hence by the use of barrels of the above character money will be saved both to the wholesaler or jobber and the retailer.

It will of course be understood that the invention above described is capable of considerable modification. For instance, instead



of the screws 6 the ring 2 might be provided with upwardly - projected screw - threaded studs provided with nuts. Other alterations may also be made.

5 What I claim, and desire to secure by Letters Patent of the United States, is as follows:

The combination with the barrel 1 formed at one end with the internal groove 3, of the metallic ring 2 secured in said groove 3 in  
10 the process of construction of the barrel and

provided with the sharp-edged annular rib 4, and the head 5 securable to said ring 2 by a plurality of screws, substantially as described.

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

JOHN L. MCKAY.

Witnesses:

F. D. MERCHANT,

M. M. MCGRORY.