UNITED STATES PATENT OFFICE.

JAMES W. TAYLOR, OF ASHLAND, VIRGINIA, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO DUNCAN B. COX, OF SAME PLACE.

IMPROVEMENT IN BARREL-HEADS.

Specification forming part of Letters Patent No. 130,600, dated August 20, 1872.

To all whom it may concern:

Be it known that I, James W. Taylor, of Ashland, Hanover county and State of Virginia, have invented a new Improvement in Barrel-Heads; and I do hereby declare the following to be afull, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a top plan, and Fig. 2 a vertical section.

Similar letters of reference in the accompanying drawing indicate the same parts.

The object of this invention is to provide for public use an improved barrel-head, which can be easily and readily inserted into and secured in the barrel, or removed therefrom without loosening the hoops. To this end the invention consists in combining with the main portion of the barrel-head a circumferential ring, adapted to fit the croze, and capable of being expanded or contracted by the insertion or removal of a wedge between the segments constituting the ring, substantially as I will now proceed to describe.

In the drawing, C is a circular piece of wood or metal, constituting the main portion of the head, and fitting loosely into the barrel B; while A is a ring of wood or metal or other springy material, divided at a by a wedgeshaped opening, and attached to the upper side of the head, so as to project over it and fit into the croze when sprung or pressed outward. The ring A may be made in segments, but preferably I make it a single piece, secured to the barrel-head by a screw or nut at d, opposite to the opening at a, as shown; and I make the opening a wide enough to permit the two ends of the ring to be sprung together, so as to liberate its outer edge from the croze, and enable the head to be removed from the barrel. In order to strengthen the ring and guide its movement when expanded or contracted I attach to the part C a crossbar, D, the ends of which are recessed underneath to permit the play of the ring, while the upper side projects over the ring to hold it securely down in place, and prevent it from being wrenched or broken in inserting or removing the head. Other guides, similar to the ends of the cross-bar, may be employed at other points around the barrel-head, if desired; but in general the cross-bar will be sufficient for all practical purposes. At the mid-

dle of the cross-bar a transverse slot is cut in it, in which slides a key, E, one end of which is made wedege-shaped, as shown at e, in order to fit into the space a, and expand the ring; while the other end is, preferably, headed or provided with some form of handle e^1 , by which it can be moved back and forth. A notch, e^2 , or slot may be provided, to which to attach a lock or seal that, when in place, will prevent the key from being slid back to liberate the barrel-head. Suitable thumb-pieces or catches, n, may be attached to or formed in the ring, for convenience in contracting it when the wedge is removed, and lifting the whole head out of the barrel.

It is obvious that the same construction may be employed in connection with the covers of fruit-cans and other jars; and that, by using a packing around the edges of the ring, the whole may be sealed oin tight

the whole may be sealed air-tight.

When constructed and used as a barrel-head, the arrangement above described is very inexpensive. Every part may be formed of wood, and yet be strong and durable. The device will be adapted for use as a barrel-head during the transportation of the cask, and may be readily locked or sealed, so that its contents cannot be tampered with.

When the cask arrives at its destination, as soon as the lock or seal is removed, the head can at once be taken out without starting the hoops, and thereafter it may be employed as a neat and convenient barrel-cover. For domestic use—for the purpose of covering the family flour-barrel, sugar-barrel, &c.—it will be very convenient and valuable, as it closes the barrel tight, so that vermin, insects, &c., cannot get in; and when not in use it can be locked securely from the depredations of servants.

The heads may be made of different sizes, and sold separately from the barrel, as a new article of manufacture, being adapted either to old or new casks.

Having thus described my invention, what I claim is—

The circular piece C, ring A, key E, and guide D, combined and operating substantial-as described.

JAMES W. TAYLOR.

Witnesses:

N. K. ELLSWORTH,

M. CHURCH.

J. A. THAYER.

Improvement in Apparatus for Melting Metals.

