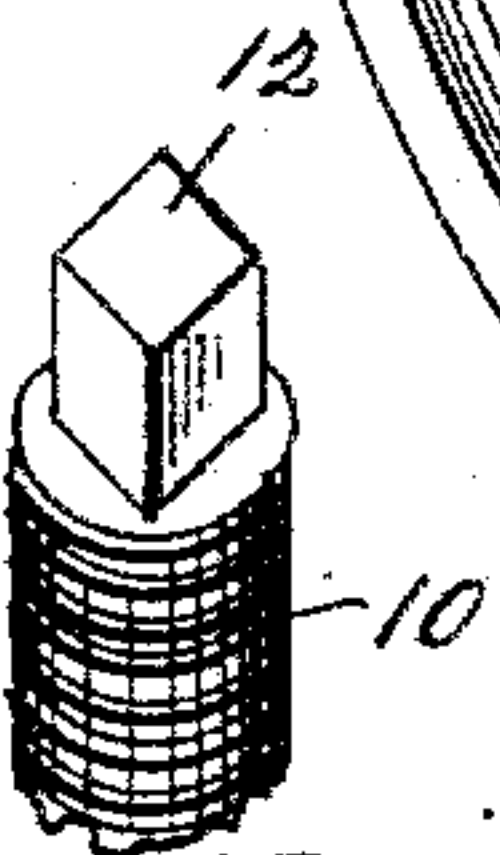
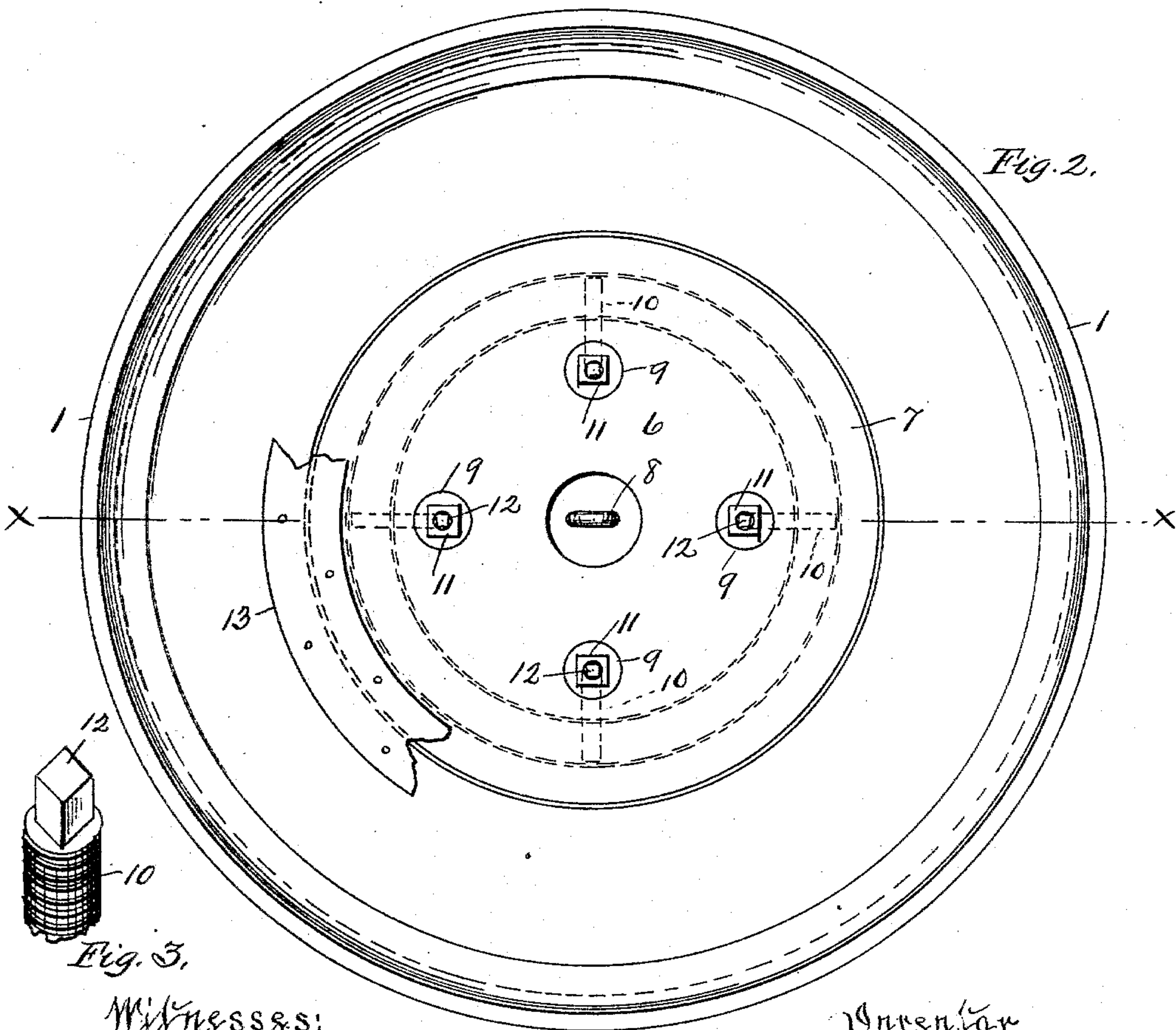
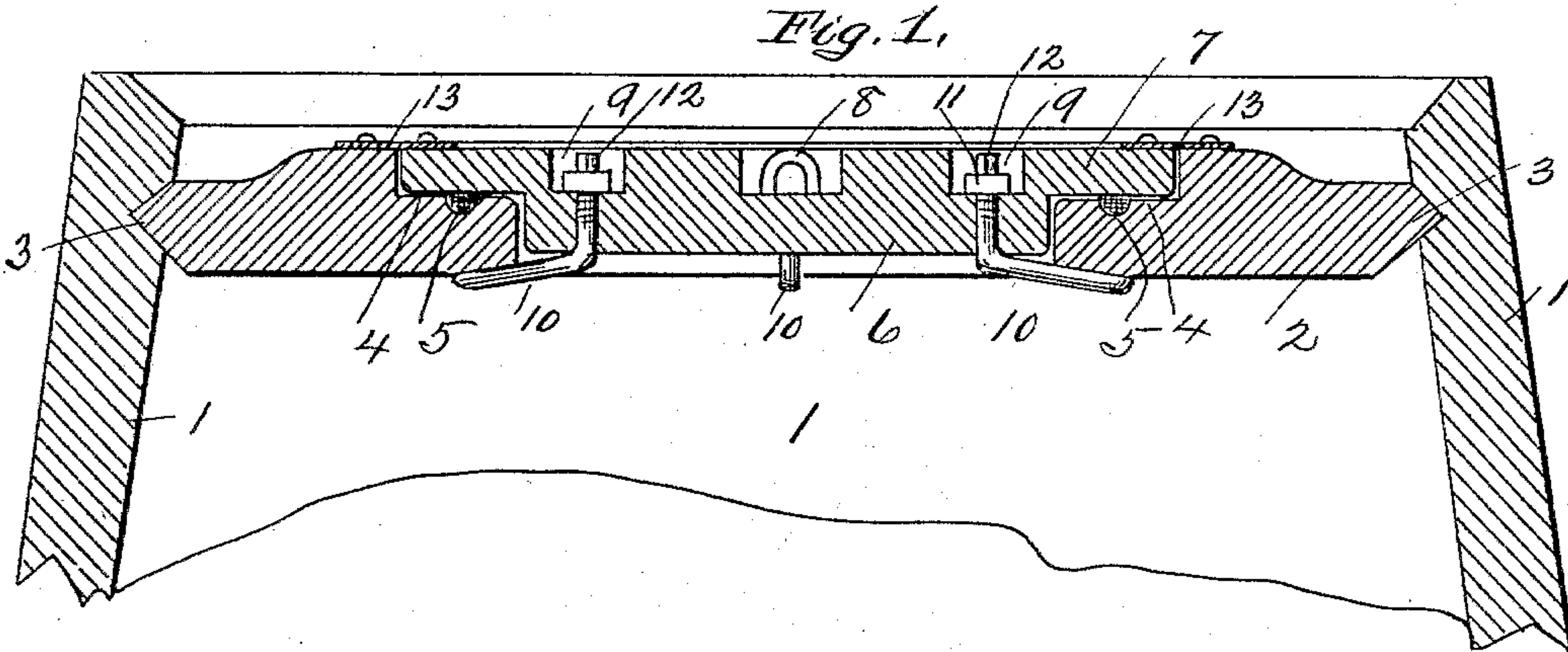


(No Model.)

T. R. HOWARD.  
BARREL HEAD.

No. 589,780.

Patented Sept. 7, 1897.



Witnesses:  
H. E. Harrison,  
Samuel Dagill.

Inventor,  
Thomas R. Howard  
Per. O. D. Lewis  
att'y



# UNITED STATES PATENT OFFICE.

THOMAS R. HOWARD, OF WILKINSBURG, PENNSYLVANIA.

## BARREL-HEAD.

SPECIFICATION forming part of Letters Patent No. 589,780, dated September 7, 1897.

Application filed December 2, 1896. Serial No. 614,233. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS R. HOWARD, a citizen of the United States, residing at Wilkinsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Barrel-Heads; and I do 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 an improved barrel-head; and it consists in certain details of construction and combination of parts, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a sectional side elevation of my improved barrel-head, which is constructed and arranged in accordance with my invention, said section taken on the line X X of Fig. 2. Fig. 2 is a plan view of the same, showing a portion of the annular covering removed from the joint of the head and chime-ring. Fig. 3 is a perspective view of a portion of one of the bolts, showing the square head of the same.

To put my invention into practice and thereby provide a head for a cask or barrel that may be easily removed or replaced in position, I form from suitable material an annular piece 2 and fit the same into the chime 3 of the barrel 1 in a manner well known in the art. This annular piece or chime-ring 2 is provided with a central opening of the desired size and a recessed portion 4, surrounding the same, in which the barrel-head proper is fitted. This head consists of a strong circular piece 6, having an annular flange 7, adapted to fit snugly within the recess 4 above described and the connection made tight by means of a gasket or packing ring 5, which may be of asbestos or any other suitable material. This head 6 is provided at regular intervals with bolt-openings 9 for the purpose of receiving several bent bolts 10 for the purpose of holding the head in position. These bolts each consist of a bar bent nearly to a right angle, having at the top a threaded portion 10 (see Fig. 3) for the reception of a nut 11 and each provided with a square portion 12, by means of which a

wrench may be applied. The head is also provided at the center with a means for lifting or handling the same, which consists of a staple 8 or any other well-known device, and when the head 6 is arranged in position an annular ring 13, of tin or other substance, is secured over the joint formed by the head 6 and the chime-ring 2.

In operation the bent ends of the bolts 10 are turned inwardly or toward the center of the head and the nuts 11 slightly released upon the thread. The head 6 is now arranged in position and by means of a suitable wrench applied to the square top 12 the bent ends of the bolts 10 turned beneath the chime-ring 2 in a position such as shown at Fig. 1 on the drawings. The nuts 11 are now tightened and the bolts 10 retained in this position to hold the head securely and the covering 13 attached, as above described.

To open the barrel for the purpose of filling or removing the contents, the annular ring 13 is first removed, the jam-nuts loosened, and the bent ends of the bolts 10 turned inwardly or toward the center of the head 6, at which time the said head may be removed, and, if desired, again replaced in the manner above described.

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

1. In combination with a barrel-head constructed as described, the bolts bent at an angle at the lower ends, a threaded portion at the top, and an integral square head 12, whereby a wrench may be applied, as and for the purpose set forth.

2. A barrel-head, consisting of the combination of the chime-ring 2 provided with a central opening having a recess 4, a packing-ring 5 arranged about the said recess, a head 6, having a flange 7, the bolts 10 constructed and arranged as described, as a means for holding the said head to the chime-ring, and a covering 13 attached in position to cover the joint of the said head and ring, all arranged and combined for service, substantially as and for the purpose described.

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

THOMAS R. HOWARD.

Witnesses:

JAS. J. McAFEE,

H. J. LEVIS.