

No. 720,276.

PATENTED FEB. 10, 1903.

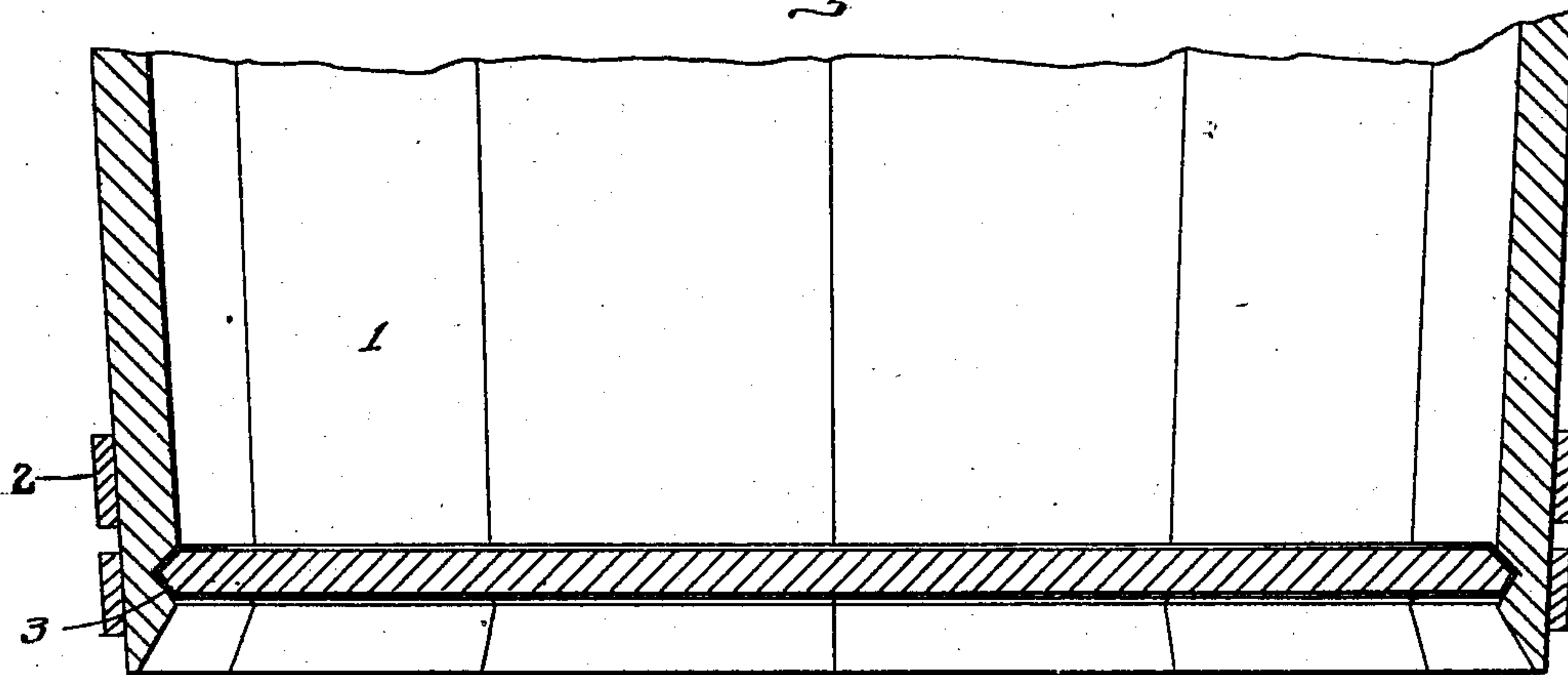
G. F. McKEEVER.

BARREL HEAD.

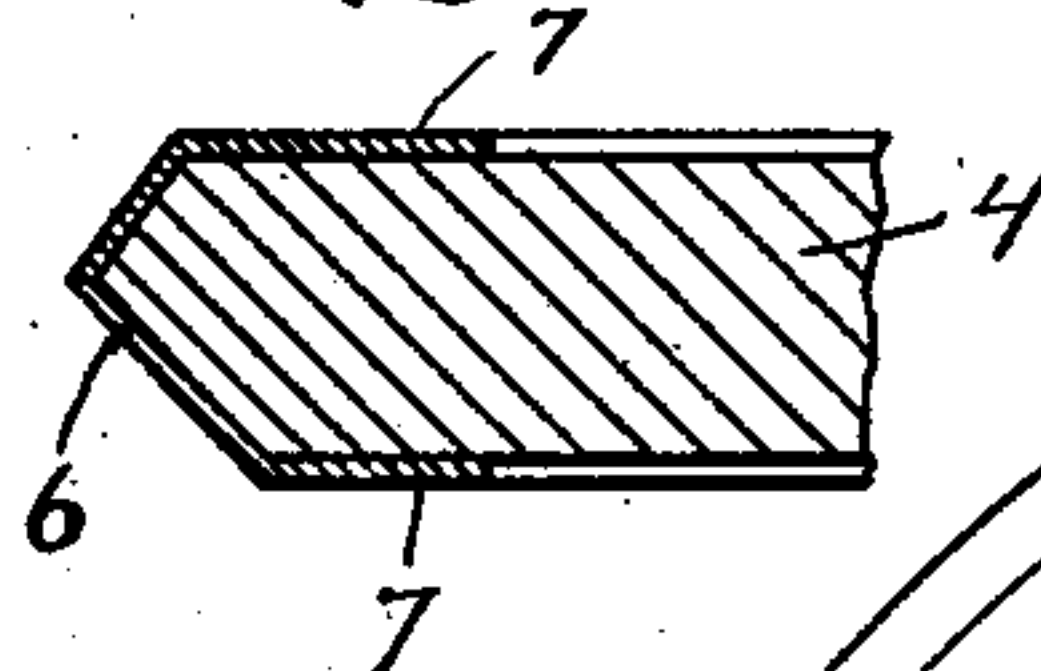
APPLICATION FILED JUNE 23, 1902.

NO MODEL.

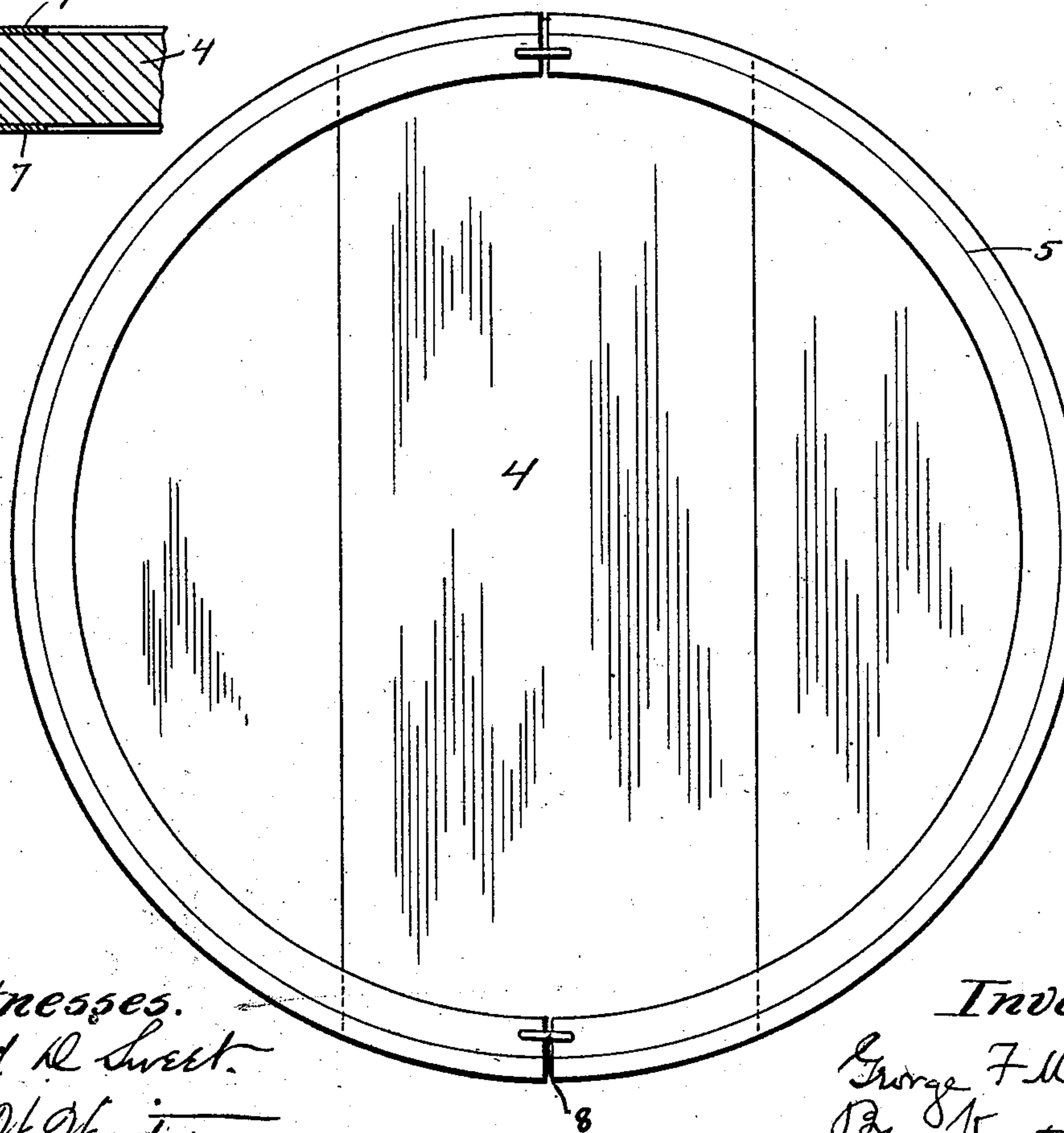
*Fig. 1*



*Fig. 3*



*Fig. 2*



*Witnesses.*

*Fred R. Sweet.*

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*Inventor.*

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# UNITED STATES PATENT OFFICE.

GEORGE F. McKEEVER, OF ALLEGHENY, PENNSYLVANIA.

## BARREL-HEAD.

SPECIFICATION forming part of Letters Patent No. 720,276, dated February 10, 1903.

Application filed June 23, 1902. Serial No. 112,825. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE F. McKEEVER, a resident of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Barrel-Heads; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to wooden barrels, kegs, tierces, tubs, and the like; and its object is to provide a metallic lining for the croze or groove which will hold the parts of the head together and prevent the same from falling out in case of shrinkage or if the ends of some of the staves should be broken off.

Wooden barrels and other articles of the kind above specified have a body made up of staves and hoops, the former being provided near each end on the inside with a groove or "croze," as it is called, in which the wooden heads are seated. The latter are usually made up of a number of pieces and are of circular form and provided with beveled edges which fit into the groove or croze in the staves, in which they are secured by various means. In ordinary packing barrels and cases usually a small piece of wood is nailed to the staves outside of the head to hold it in place. Difficulty is experienced in putting the heads in place on account of the latter being made up of a number of pieces which are liable not to go into position readily, so that some skill is required to do the work. Furthermore, in case the heads should materially shrink the pieces thereof are liable to fall out of the groove or croze in the staves. This will also happen in case the ends of a number of staves become broken off.

The object of my invention is to overcome the foregoing defects and difficulties; and to this end it consists in providing a metallic croze-lining for the barrel-head, said lining being composed of two equal semi-annular members, each being trough-shaped and embracing the edges of the head with sufficient friction to hold the parts of the head together, so that the head as a whole can be put in place with very little trouble. These croze-linings are of sufficient depth so that material shrinkage of the head can take place without danger of falling out, and also as the walls of the croze-lining are continu-

ous the head will be held in place even should the ends of a number of staves become broken off.

In the accompanying drawings, Figure 1 is a vertical section through one end of a barrel, showing my invention applied thereto. Fig. 2 is a plan view of the head; and Fig. 3 is a detailed section, on an enlarged scale, showing the lining.

The barrel shown in the drawings comprises the usual staves 1, held together by hoops 2 and provided near their ends with the V-shaped groove or croze 3. The head 4 is or may be of the usual wooden construction, composed of a number of pieces, three such pieces being shown, although the number will vary according to the character of barrel or keg. The several pieces of the head are held together by means of my improved metallic croze-lining 5, the latter comprising two equal semi-annular members, the two together forming a complete annulus surrounding the barrel-head. This lining is formed from sheet metal, such as mild steel, and is bent up into the form shown in Fig. 3, being substantially trough shape, having a V-shaped bottom 6, which fits into the groove or croze 3, and substantially parallel side walls 7, which embrace the top and bottom faces of the head with sufficient friction to hold the latter together. By making the lining in sections it can be formed to final shape at the factory and can be assembled with the head by merely slipping the same over the edges of the headboards, whereas if the lining were a single continuous ring it would have to be spun over the edges of the head, and this work cannot be done outside of a specially-equipped factory. The ring is made in two equal members, so that care of the workman in applying the same to the head need not be exercised, as he will merely pick up any two sections and place them around the boards constituting the head.

The side walls of the croze-lining preferably embrace the edges of the headboards with sufficient friction to hold them together; but, if desired, a small staple 8 may be driven through the meeting ends of the members of the ring. The head as a whole will be slipped in place and secured by any suitable means—such, for instance, as driving nails through the staves



from the outside and through the croze-lining into the head—the lining being made up of sufficiently light metal so as to permit a nail to penetrate the same. In case the head  
5 should shrink it cannot become displaced, because the metallic croze-lining is of sufficient depth to prevent the escape of the head even with a considerable amount of shrinkage. Furthermore, the breaking off of the ends of  
10 a considerable number of staves will not permit any of the sections of the head to drop out, as the metallic croze-lining would still remain in place, and being practically continuous will hold the head securely in place.  
15 The lining described can be quickly and cheaply made by ordinary bending or rolling apparatus from sheet metal, and the parts thereof can be quickly applied to the head and when so applied will facilitate the placing  
20 of the head in the barrel, as above stated, so that skilled labor for this purpose is not required, and will prevent the falling out of the head for any of the reasons above stated. The invention is of special use in connection  
25 with ordinary packing barrels and kegs, which

usually are not made very accurately; but it is also of value with any kind of barrel, keg, tierce, tub, or the like.

What I claim as my invention, and desire to secure by Letters Patent, is— 30

1. A barrel or the like comprising hoops and wooden staves having a croze near their ends, a metallic lining in said croze, the same comprising two equal semi-annular members of trough form, and a wooden head having 35 its edges seated in said metallic members.

2. A barrel or the like comprising hoops and wooden staves having a croze near their ends, a metallic lining in said croze, the same comprising two equal semi-annular members 40 of trough form, a wooden head having its edges seated in said metallic members and means for uniting the adjacent ends of said semi-annular members.

In testimony whereof I, the said GEORGE 45 F. McKEEVER, have hereunto set my hand.  
GEORGE F. McKEEVER.

Witnesses:

G. C. RAYMOND,  
ROBERT C. TOTTEN.