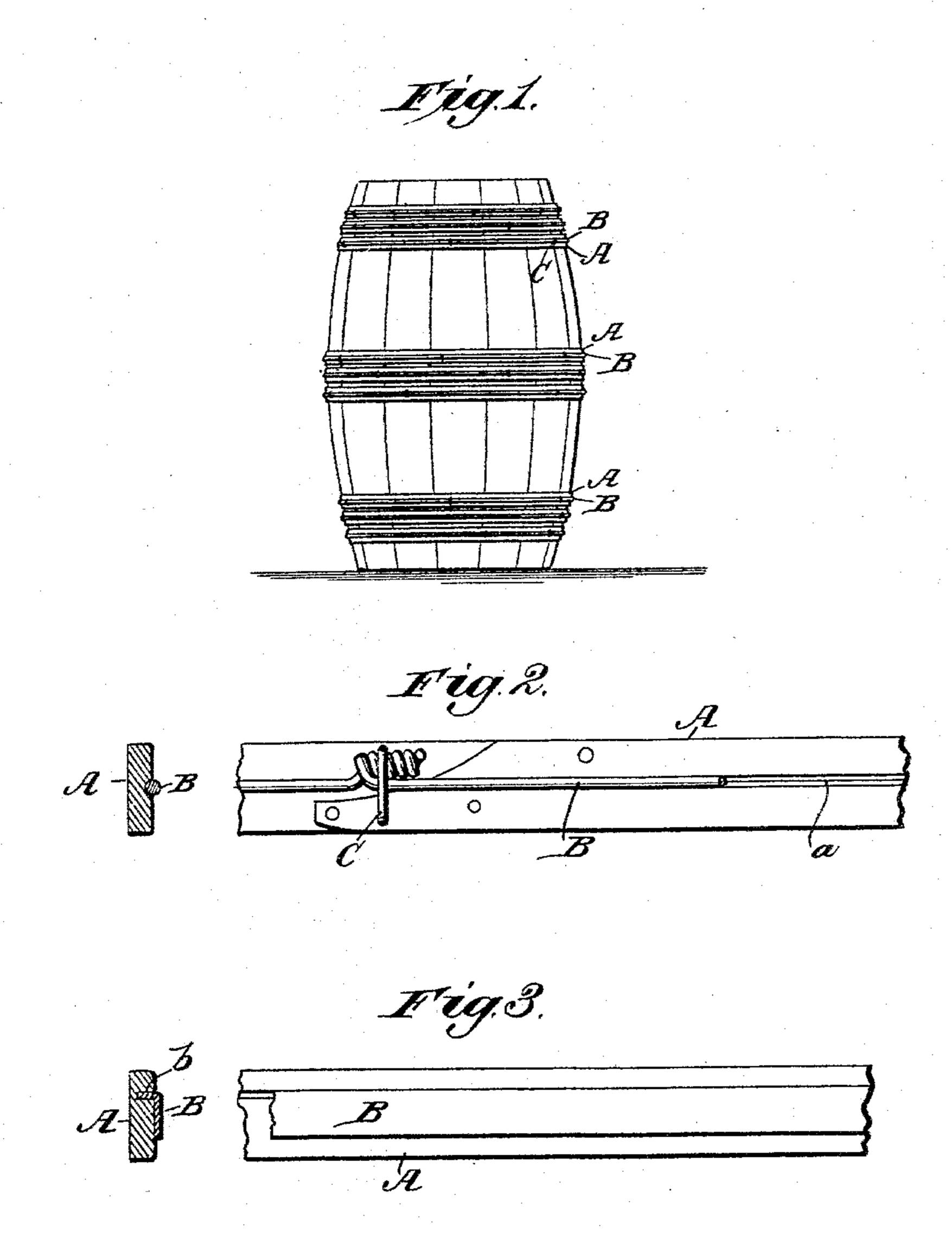
(No Model.)

## H. MATTULLATH. BARREL HOOP.

No. 490,255.

Patented Jan. 17, 1893.



Witnesses. Schet Gerrett. Inventor.
Hugo Mattullath.
By Janus L. Norris.
Atty.

## United States Patent Office.

HUGO MATTULLATH, OF DETROIT, MICHIGAN, ASSIGNOR TO WILLIAM A. NASH AND GUSTAV AMSINCK, TRUSTEES, AND META MATTULLATH.

## BARREL-HOOP.

SPECIFICATION forming part of Letters Patent No. 490,255, dated January 17, 1893.

Application filed March 13, 1886. Serial No. 195, 121. (No model.)

To all whom it may concern:

Be it known that I, Hugo Mattullath, of Detroit, county of Wayne, State of Michigan, have invented a new and useful Improvement 5 in Barrels and Barrel-Hoops; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the 10 accompanying drawings, which form a part

of this specification.

The object of my invention is to provide a barrel hoop of improved construction whereby it is adapted to be firmly secured onto a 15 barrel when driven thereon as hereinafter described; and to this end the invention consists in the combination with an ordinary wooden hoop, of a metallic ring or band, preferably of wire, located circumferentially upon 20 the exterior of the hoop, in which it is partially embedded, and affixed thereto in such a manner as to be carried by said hoop, such metal band serving to gradually relieve the wooden hoop of strain by tightening itself on 25 the hoop in a measure as the wooden hoop yields to the outward pressure of the barrel during the driving of the hoop onto the barrel, or while seated thereon.

The invention also consists in a wooden bar-30 rel hoop having an exterior longitudinal groove for receiving an encircling metallic band, and the invention further consists in the peculiarities of construction and novel combinations of parts hereinafter described

35 and claimed.

In the annexed drawings illustrating the invention, Figure 1, is an elevation of a barrel provided with my improved hoop. Fig. 2 is an enlarged partial view of the hoop and band. 40 Fig. 3 represents a modification in the construction of the hoop and its encircling band.

Referring to the drawings, the letter A designates a wooden hoop which may be of any desired construction and having its extremi-45 ties locked or otherwise engaged together

B represents an encircling metallic band which may be variously engaged upon the exterior of the hoop in such a manner that it will not become displaced or disconnected 50 therefrom. The diameter of this metallic band B is preferably somewhat in excess of

the exterior diameter of the wooden hoop A on which it is placed so that when the hoop is driven onto a barrel, as shown in Fig. 1, the said band will more closely embrace the 55 hoop and will tighten itself thereon, in a measure, and become partially embedded therein as the hoop yields to the outward pressure of the barrel, the band thus serving to relieve the wooden hoop of strain, thereby preventing in- 60 jury thereto and at the same time securing it firmly upon the barrel.

The metallic band B can be variously constructed. It may consist of an encircling rod or wire, as shown in Fig. 2, and in this case if 65 desired, it may be engaged in a groove a, formed in the exterior of the wooden hoop, though said groove is not essential as the tightening of the metallic band on the wooden hoop when the latter is driven onto a barrel 70 will be sufficient to firmly seat the band upon or in the hoop so that there will be no liabil-

ity of its displacement.

If desired the metallic ring or band B may consist of a piece of flat metal of less width 75 than the wooden hoop, and as shown in Fig. 3 this flat band encircling the hoop may be provided with a flange b to engage the wooden hoop which can have a groove, if desired, to engage said flange. The ends of the encir- 80 cling band of metal may be twisted together, or otherwise united in any suitable or well known manner, so as to cause the band to surround the wooden hoop and enable it to becometightened thereon when the hoop is driven 85 onto a barrel. If desired the connected ends of the metallic band may be further fastened by a staple C, or double pointed tack. By fastening the ends of the band upon the outer end of the wooden hoop by a staple Caddi- 90 tional firmness may be given to the entire hoop, thus diminishing any tendency to disconnection of the hoop ends. If desired other staples of double pointed tacks may also be driven into the wooden hoop at various points, 95 to more securely fasten the encircling metallie band. A hoop of this construction, provided with the longitudinal groove a, can be easily and economically manufactured in readiness for attachment of the encircling 100 metallic band and its seating in said groove.

It is evident that a wooden hoop provided

with an encircling metallic band of slightly greater diameter than the said wooden hoop so as to tighten itself thereon, in a measure, and relieve the wooden hoop of strain as it 5 yields to outward pressure during the driving of the hoop upon a barrel, or when seated thereon, will possess more than ordinary strength and durability and can be more firmly secured upon a barrel. In a hoop of this con-10 struction the metallic encircling band or ring imparts great strength and prevents the ends of the hoop from separating, while the inner wooden hoop affords the requisite frictional bearing to adapt the hoop to be driven upon 15 a barrel and effectually tightened thereon in the most secure manner.

This form of hoop is particularly adapted for use upon a bilge barrel, whether made of staves or veneers, as it can be driven onto the barrel with great force without risk of injury, and when applied to a veneer barrel a hoop of this construction reinforces the barrel in a very effectual manner.

What I claim is:—

25 1. In combination with an ordinary wooden drive hoop, a ring of metal located centrally and circumferentially upon the exterior thereof, partially embedded therein and affixed thereto and carried thereby, said metal 30 band serving to gradually relieve the wooden hoop by tightening itself thereon, in a measure, as the wooden hoop yields to outward

pressure during the driving of the hoop upon a barrel, or when seated thereon.

2. A wooden barrel hoop having an exterior longitudinal groove for receiving an encircling metallic band, substantially as described.

3. A barrel hoop consisting of a wooden hoop grooved about its periphery and provided 40 with an encircling band of metal located in said groove, substantially as described.

4. The combination with a wooden hoop constructed with an encircling groove, of a metallic band, the ends of said band being 45 secured together and fastened upon the hoop by a staple, substantially as described.

5. A hoop provided with an encircling metallic band the ends of said band being brought together opposite the joined ends of 50 the hoop and united thereto at that point by a staple, substantially as described.

6. A barrel hoop consisting of a wooden hoop grooved about its periphery and provided with an encircling band of wire located 55 in said groove, said wire brought to a tension on said hoop by twisting its ends together, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

HUGO MATTULLATH.

Witnesses:

N. S. WRIGHT, M. B. O'DOGHERTY.