

No. 621,530.

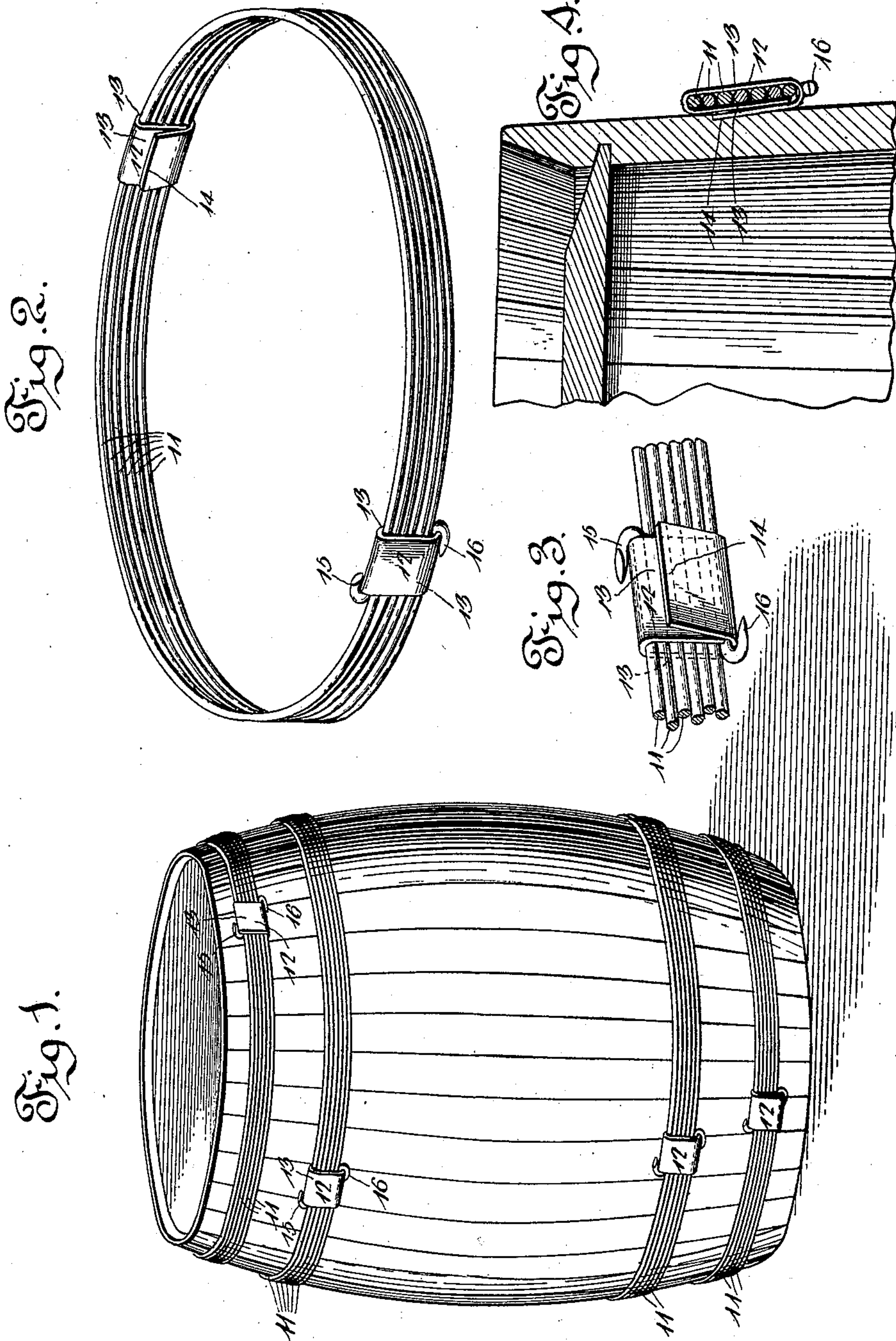
Patented Mar. 21, 1899.

W. D. MARSHALL.

BARREL HOOP.

(Application filed Dec. 30, 1898.)

(No Model.)



Witnesses

J. Frank Culverwell - By his Attorneys,

H. J. Beruhoff

William D. Marshall, Inventor.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

WILLIAM D. MARSHALL, OF FRANKLIN SQUARE, OHIO.

BARREL-HOOP.

SPECIFICATION forming part of Letters Patent No. 621,530, dated March 21, 1899.

Application filed December 30, 1898. Serial No. 700,727. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. MARSHALL, a citizen of the United States, residing at Franklin Square, in the county of Columbiana and State of Ohio, have invented a new and useful Barrel-Hoop, of which the following is a specification.

My invention relates to improvements in metallic hoops for barrels, casks, and other packages of the general type disclosed in United States Letters Patent No. 601,079, issued to me on March 22, 1898.

The object in view is to provide an improved construction of the hoop by which the clasp or band that confines the hoop strands or members in place is also made to serve as the means for confining the hoop against displacement on the cask, and this clasp or band is constructed in a manner to permit the hoop to be readily fitted to and driven on the cask, barrel, or the like practically without obstruction or hindrance from the means that retains the hoop in place.

The invention consists of a barrel or package hoop as an article of manufacture comprising a series of strands or members laid in parallel relation to each other and a clasp or band having parallel sides and fitted to the strands or members to embrace and closely confine them in parallel relation one to the other, said band or clasp having one edge thereof bent outwardly to form a lip adapted to engage with the package or barrel stave in a manner to retain the hoop against displacement when applied to the cask, but which lip permits the hoop to be readily placed in position, because the retaining-lip is arranged in a direction or position that admits of the hoop being driven into place.

The invention further consists of a metallic hoop bent from a single continuous length of wire to form a plurality of strands or members which are laid parallel to each other and in close lateral relation and a clasp or band embracing said strands or members to confine them in place and provided with a longitudinal retaining-lip, the respective ends of the hoop-strand being bent into interlocking engagement with opposite ends of the band or clasp, so as to be confined thereby against longitudinal displacement within said clasp.

To enable others to understand the invention, I have illustrated the same in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective view of a barrel or cask with my improved hoop applied thereto. Fig. 2 is a detail perspective view of the hoop removed from the cask. Fig. 3 is an enlarged detail view of the clasp and a portion of the hoop. Fig. 4 is a sectional view of part of the barrel-stave and the hoop, showing the method of applying the hoop in place.

Like numerals of reference denote like and corresponding parts in each of the several figures of the drawings.

The barrel-hoop of my invention is made entirely of metal, and the hoop proper is constructed from a single piece of wire bent or coiled to form the strands or members 11, which are confined or held together by a metallic clasp or band 12, that forms a part of the metallic hoop and serves to prevent the ends of the wire strand from longitudinal movement or displacement under the strain or pressure exerted on the hoop when the latter is driven into place on the cask or barrel in the usual way.

The clasp or bearing 12 is made, preferably, from a single piece of stout sheet metal, which is doubled or bent upon itself to have the side edges 13 thereof straight and in parallel relation one to the other, and the free edge of this doubled sheet-metal clasp is bent or inclined slightly in order that it may stand off or incline from the inner face of said band or clasp, thereby providing the longitudinal retaining lip or edge 14. This free inclined lip or edge 14 of the band is between and parallel to the straight side edges 13 of said band, and said lip or edge 14 is inclined in a direction which permits it to move freely over the cask when the hoop is driven in place thereon; but the lip or edge will engage with the stave of a barrel, cask, or other package, so as to effectually prevent displacement of the hoop on the package.

The strands or members of the metallic hoop are laid in parallel relation and in contact laterally one with the other, and as the side strands are parallel the clasp or band 12 when properly fitted to the strands or members will engage at its straight edges with the

parallel side strands, whereby the clasp closely embraces the strands to hold them firmly in proper relation one to the other and to the clasp.

5 The hoop consists of the number of strands proper to secure the desired width, and in the drawings I have shown the hoop as consisting of six strands, although the number is not material and will be varied according to
10 the diameter of the individual strands and the desired width of the hoop. The strands may be made separate one from the other and the individual strands assembled in close lateral relation to lie parallel one to the other; but
15 for economy in manufacture I prefer to make the hoop of a single continuous piece of wire which is coiled or wrapped around a suitable former to bring the strands or members
20 of the strand are extended in opposite directions through the clasp or band 12, and these ends of the strand are bent outwardly from the hoop to provide the hooks 15 16, which engage with opposite ends of the band or clasp
25 12. This band or clasp has transverse straight edges and is devoid of lugs, lips, or other projections, to the end that the hook-shaped or bent ends of the coiled strand may engage directly with the end edges of the clasp at the
30 sides thereof, thereby simplifying the construction and securing a firm union or joint between the ends of the band and the respective bent ends of the coiled strand forming the hoop. The ends of the coiled strand may
35 be beveled and pointed to provide penetrating points; but this is optional.

My improved hoop is complete and an entity to enable the same to be placed on the market as a new article of manufacture. The
40 hoop is adapted to be applied to and driven firmly on a barrel, cask, or other package in a manner well understood in the art; but in applying the hoop care must be taken that the lip 14 of the clasp or band faces in a direction
45 toward the end of the package over which the hoop is first slipped, as clearly represented by Fig. 4. This is necessary in my invention, because the lip 14 when the hoop is applied in the manner described will not catch in the
50 barrel-stave nor will it interfere with the ready application of the hoop or the operation of driving the hoop firmly to its place on the cask. After the hoop is driven home the lip or flange 14 will engage with a stave of the pack-
55 age or barrel in a manner to prevent the accidental displacement of the hoop in the direction toward the small end of the barrel over which the hoop was introduced; but the hoop may be driven off the barrel when considerable force is applied to the hoop to drive
60 it in a direction toward the small end of the package.

My improved hoop is simple and durable in construction and easily applied to and driven
65 home on a barrel or cask. Its clasp serves the twofold purpose of holding the coiled strand in compact firm relation and of preventing

the hoop from accidental displacement when properly applied in position, and it is cheap of manufacture.

It will be understood that two or more of the clasps may be employed at intervals in the length of the hoop in order to hold the strands of the coiled wire in proper relation.

One of the important advantages attending
75 the use of my improved hoop resides in its adaptability to barrels or casks of different sizes. In manufacturing hoops to be kept in stock and sold as articles of manufacture
80 without regard to the size of the barrel or cask on which the hoop may be used it will be found that a hoop of certain size will be adjustable to a certain extent when it is applied to a barrel; but it may be found that a
85 certain-sized hoop is too large for the barrel on which it is desired to use the hoop. In this last event the hoop may be contracted in diameter in order to make it fit the barrel by drawing on one end of the wire until the hoop
90 is contracted sufficiently to approximately fit the cask or barrel. Then the end of the wire is bent to form the hook or shoulder which engages with one end of the clasp, and the surplus wire may then be cut off. The hoop
95 is thus adapted to be adjusted to fit the particular size of the cask on which it is to be used, and said hoop may then be forced or wedged home to its proper place on the barrel in the ordinary way familiar to those skilled
100 in the art.

The bend or sleeve of my hoop is designed to be made of spring-steel in a separate piece from the hoop, and it is to be bent up to the
105 desired form to confine the strands and to provide the elastic or spring lip, which may engage with the cask when the hoop is forced home to its seat on said cask. The manufacture of the clasp from spring-steel provides
110 a substantial and durable article and gives permanent elasticity to the inclined offstanding lip, so that it will always act to properly engage the surface of the barrel or cask and thereby prevent accidental displacement of the hoop or the clasp.

Having thus described the invention, what
115 I claim is—

1. As a new article of manufacture, a metallic barrel-hoop consisting of a series of strands or members laid in parallel relation to each other, and a clasp or band which
120 embraces and closely confines said members in proper relation one to the other, said band or clasp having one edge thereof bent or inclined and forming a lip adapted to engage with a stave of a package or cask, for the purpose
125 described, substantially as set forth.

2. As a new article of manufacture, a metallic hoop bent from a single continuous length of wire forming a plurality of strands which are laid parallel to, and in close lateral
130 relation with, one another, and a clasp or band embracing said strands or members to confine them firmly in place and provided with a longitudinal retaining-lip, the respec-

tive ends of the coiled hoop-strand being bent into interlocking engagement with opposite ends of the clasp or band to be confined thereby against longitudinal displacement
5 within said clasp, substantially as and for the purpose described.

3. In a barrel-hoop, a band made from a single piece of elastic metal, doubled upon itself to form a clasp and provided with an off-
10 standing inherently-elastic lip, whereby the

lip is adapted to be compressed into intimate engagement with a barrel or cask, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 15 the presence of two witnesses.

WM. D. MARSHALL.

Witnesses:

J. S. GREENAMYER,
C. E. GREENAMYER.