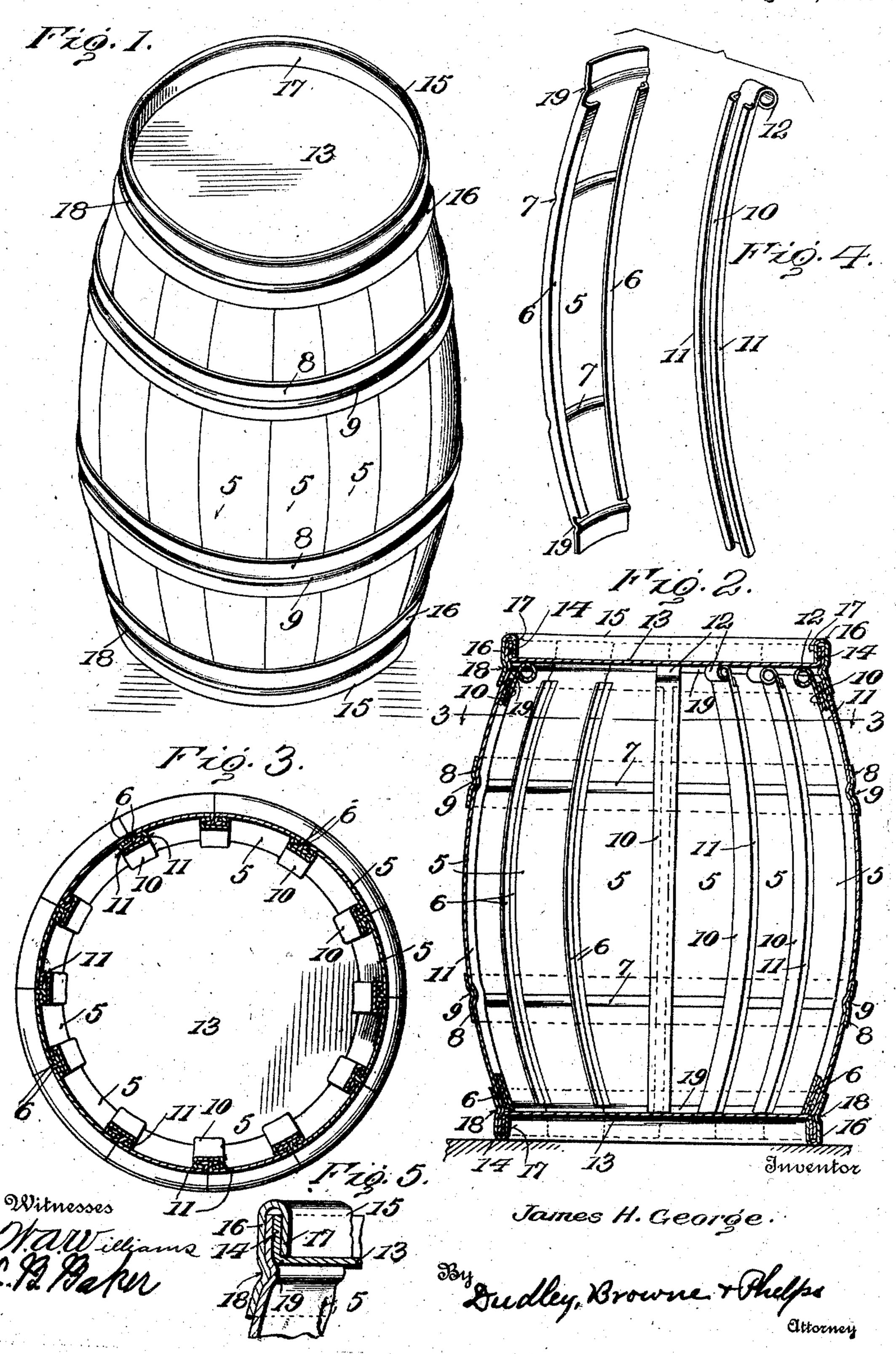
J. H. GEORGE.

METALLIC BARREL.

APPLICATION FILED NOV. 18, 1909.

967,629.

Patented Aug. 16, 1910.



## UNITED STATES PATENT OFFICE.

JAMES H. GEORGE, OF NEW YORK, N. Y.

## METALLIC BARREL.

967,629.

Specification of Letters Patent. Application filed November 18, 1909. Serial No. 528,677 REISSUED Patented Aug. 16, 1910.

To all whom it may concern:

Be it known that I, JAMES. II. GEORGE, a citizen of the United States, residing at New York city, in the county of New York and 5 State of New York, have invented certain new and useful Improvements in Metallic Barrels, of which the following is a specification.

My invention relates to an improvement 10 in metallic barrels, and it has for its object the production of a structure of this character which shall possess great strength and rigidity to withstand strains incident to the transportation and rough handling to which 15 receptacles of this character are subjected.

A further object of my invention is to provide a metallic vessel of this character the several parts of which may be shipped in "knock-down" or separated relation.

20 A further object of my invention is to provide a device of this character which is simple and cheap in its construction, composed of few parts and one in which the parts may be readily assembled.

With these and other objects in view my invention consists in certain constructions, combinations and arrangement of parts the preferred form of which will be first described in connection with the accompany-30 ing drawings and then the invention particularly pointed out in the appended claims.

Referring to the drawings wherein the same part is designated by the same reference numeral wherever it occurs: Figure 35 1 is a perspective view of a barrel constructed in accordance with my invention; Fig. 2 is a central longitudinal section of the same with some parts removed to more clearly show the construction; Fig. 3 40 is a section taken on line 3—3 of Fig. 2; Fig. 4 is a detached perspective view of a stave and the device for securing the adjacent edges of the staves together, and Fig. 5 is a fragmentary sectional view of one end 45 of the barrel.

The staves 5 are provided with the inturned side edges 6 forming flanges which however do not extend the full length of the stave, but said flanges stop short of each <sup>50</sup> end of the stave as best shown in Fig. 4. These flanges as will be seen are L shaped in cross section and extend over the side portions of the body of the staves. The staves in my form of barrel are preferably curved 55 to about the same curvature as wooden staves us I in the construction of the ordi-

nary wooden barrels. This curvature may however be increased or diminished as desired.

I form in the staves on each side of 60 the central portion thereof depressions or grooves 7 over which the hoops 8 extend, said hoops being provided with an inwardly extending rib 9 adapted to engage in the depressions 7, so as to lock the hoops on the 65 barrel and also to more firmly unite the parts of the barrel together.

10 designates the locking strip which is formed with a central portion of a width to extend over the projecting flanges of two 70 adjacent staves when said staves are in position to form the barrel, the strip being provided with the inwardly extending L shaped flanges 11 on each side thereof, which engage around the flanges 7 of the staves, as 75 most clearly shown in Fig. 3.

Preferably, and as shown, at one end the strip is provided with a curled-up portion 12, in order that convenient means may be furnished to remove the locking strip and 80 replace the same when desired. The locking strip is of a length substantially equal to the length of the flanges 6 on the staves.

In the assembling of the barrel a pair of staves are brought with their edges in contact 85 and a locking strip is slipped over the flanges thereof. Other staves are then placed along side of these and similarly locked in position by means of the locking strips until the barrel is completed. The 90 hoops 8 may now be forced on until their interiorly projecting ribs engage the grooves in the staves whereby they are firmly held in position and the staves locked against longitudinal movement.

13 are the heads or ends of the barrel which may be of any suitable and convenient form, and in the construction shown, these heads are formed with their edges bent up to provide annular flanges 14 which, when 100 the heads are in position, rest against the ends of the staves. As the flanges on the edges of the staves do not extend to the ends of the staves, the end portions of these flanges form interior supports or shoulders 105 for the head, as most clearly shown in Fig. 2.

15 is a securing means for holding the heads in position. This means shown comprises a ring 16 of a size to closely fit over 110 the end of the barrel and having the inturned flange 17 which will pass within and

engage the upturned flange 15 of the head.
Preferably and as shown the ring 16 is provided with an interiorly projecting rib 18 engaging a groove 19 formed in the staves just beyond the ends of the inturned flanges, whereby, when the ring is placed in position on the barrel, said rib will engage the groove and lock the ring on the head.

From the foregoing description of my construction it will be seen that I have devised a barrel in which the meeting edges of the adjacent staves are locked together in such a way as to strengthen the staves and thus increase the strength of the barrel, that the ends of the barrel are further strengthened by the use of my fastening means for the head, and also by the manner in which the head is placed in the barrel. Further, all parts of the barrel are securely held together without the use of any rivets, cotter pins or other form of extraneous fastening device.

I realize that considerable variation is possible in the details of construction and arrangement of parts without departing from the spirit of my invention, and I therefore do not intend to limit myself to the specific form shown and described.

Having thus described my invention what 30 I claim as new and desire to secure by Let-

1. A metallic barrel comprising a plurality of staves, each stave being provided on its edges with inturned flanges, of a securing strip having inturned flanges adapted to extend around the flanges of adjacent staves to secure said staves together, the flanges on the staves and the locking strips being of a length less than the length of

the staves, whereby shoulders are formed at 40 the ends of the barrel, heads adapted to extend within the staves with their inner side in contact with the ends of the stave flanges, means for securing said heads in position, said staves being provided intermediate of 45 their ends with annular grooves, and hoops for said barrel provided with inwardly projecting annular ribs adapted to engage the grooves to lock the hoops on the barrel.

2. A metallic barrel comprising a plural- 50 ity of staves secured together at their adjacent edges, each stave being provided on its edges with inturned flanges, of a securits edges. ing strip having inturned flanges adapted to extend around the flanges of adjacent 55 staves to secure said staves together, the flanges on the staves and the locking strips being of a length less than the length of the staves whereby shoulders are formed at the ends of the barrel, heads having inturned 60 flanges on their edges, said heads being adapted to extend within the staves with their inner side in contact with the ends of the stave flanges, and locking strips and rings provided with inturned flanges adapt- 65 ed to be placed over the ends of the barrel to secure the heads in position, said rings being provided with a projecting annular rib and said staves with a registering amnular groove to lock said rings in position 70 on the barrel.

In testimony whereof I affix my signature

in presence of two witnesses..

JAMES H. GEORGE.

Witnesses:
CHARLES H. GEORGE,
JOHN L. FEENY.