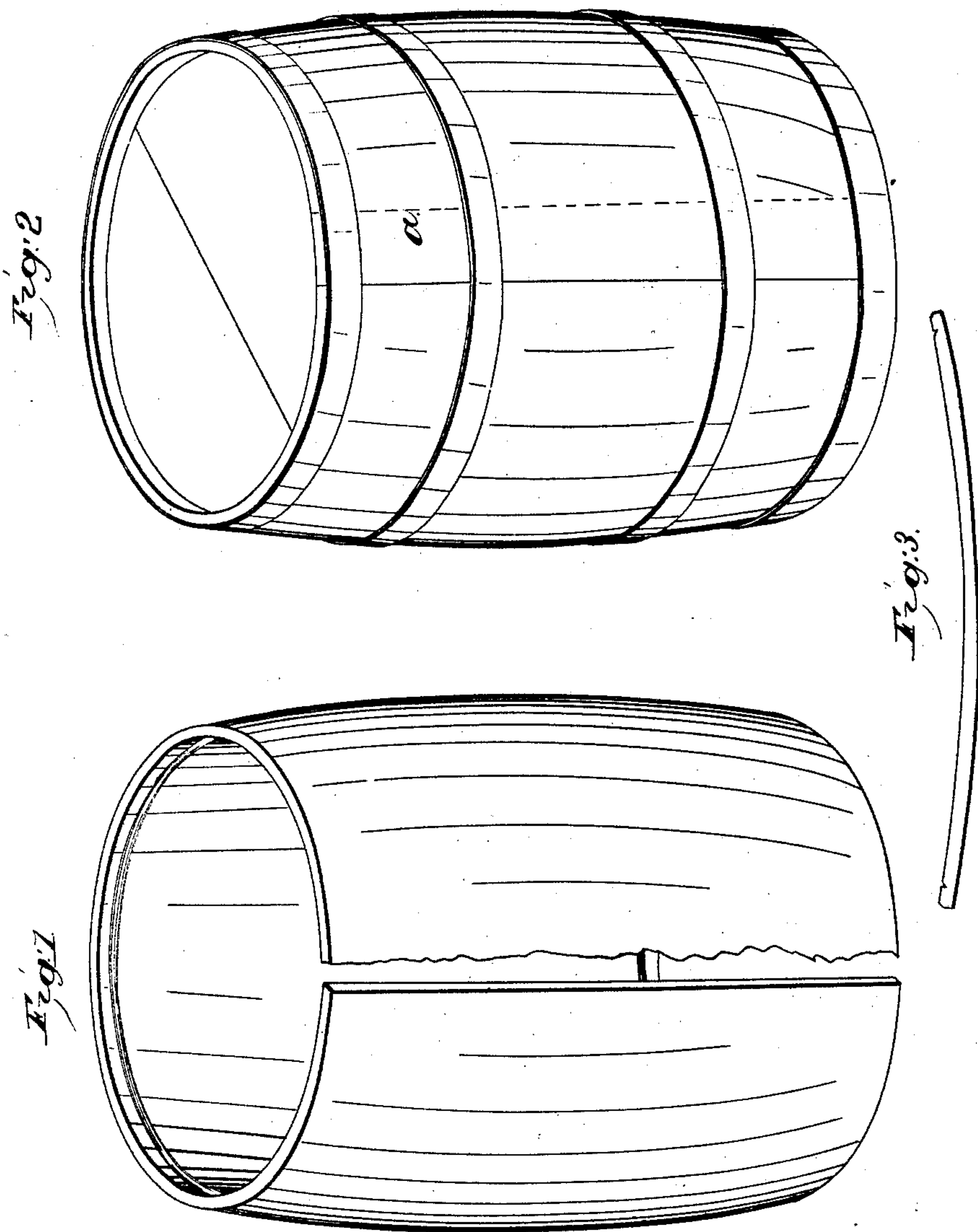


S. Roberts,
Bent Barrel.

N^o 30,425.

Patented Oct. 16, 1860.



Witnesses:
W. H. Burdick,
Alfred Adams.

Inventor:
Samuel Roberts

UNITED STATES PATENT OFFICE.

SHERIDAN ROBERTS, OF CLEVELAND, OHIO.

IMPROVED METHOD OF MAKING BARRELS.

Specification forming part of Letters Patent No. **30,425**, dated October 16, 1860.

To all whom it may concern:

Be it known that I, SHERIDAN ROBERTS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Barrels; and I do hereby declare that the following is a full and complete description of the construction of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a barrel-stave made after my improved method. Fig. 2 is a barrel completed, and Fig. 3 is the section of the stave lengthwise.

My invention relates to the formation or manufacture of barrels from hollow cylinders of proper length and form—that is, having the proper bulge of the barrel—and cut successively from the surface of solid cylinders in a lathe or otherwise, the cylinders thus formed, which have too great a diameter for a barrel of the usual and proper size, being reduced to the required dimensions by cutting out a piece, thus forming a barrel with one joint, and enlarging those cylinders that have a diameter too small for a barrel by slitting open the cylinder and introducing a piece or pieces, cut from another cylinder of like form and structure, sufficient to bring it to the required dimensions, the barrels thus formed having one or more joints or seams, as the case may be, and furnished with hoops and heads in the usual manner.

In the formation of the above-named hollow cylinders I take a log, say two or three feet in diameter. I prefer those that are much larger than a barrel. This log being cut to the length of a barrel is put into a suitable lathe, and the surface of this solid cylinder turned into the form and shape of a barrel—that is, the cylinder must be bulged like a barrel, so that the hoops will become tight by driving from each end toward the center. The external surface being thus formed by means of a suitable tool working in at the ends of the

cylinder, a shell or hollow cylinder of, say, half an inch in thickness is cut from the inside solid cylinder. This being removed, another of like character can be cut, but having, of course, a less diameter than the former, and this process can be continued as far as practicable, or until the cylinders thus removed are much less in diameter than a barrel. A number of cylinders can thus be obtained from one log, some of which will be of greater and some of less diameter than a barrel.

Fig. 3 represents a longitudinal section of such a cylinder after the chine and groove for the heads have been cut. Those cylinders that are too large for a barrel are slit open, as in Fig. 1, and a piece of sufficient width removed to bring the cylinder to its proper size. The heads are then introduced and the hoops driven on in the usual manner. The groove for the head can be cut before or after the cylinder is reduced in size. In forming these hollow cylinders there is usually one obtained from a log that is of proper size without cutting out or adding thereto. Those cylinders that are of less diameter than a barrel have to be slit open and a piece of suitable width from another cylinder introduced. In all cases the stuff should be properly seasoned before the heads are put in.

Fig. 2 represents a barrel finished, the dotted line *a* indicating the piece that has been added, as above stated.

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

Making the cylinder part or body of barrels from hollow cylinders turned off or removed from solid cylinders, and then slitted and a piece taken from or added to, as may be required, to bring the body to the proper dimensions, and completed as herein set forth.

SHERIDAN ROBERTS.

Witnesses:

W. H. BURRIDGE,
ALFRED ADAMS.