

No. 639,126.

Patented Dec. 12, 1899.

J. S. WRIGHT, JR.  
VENTILATED BARREL.

(Application filed Sept. 2, 1899.)

(No Model.)

Fig. 4.

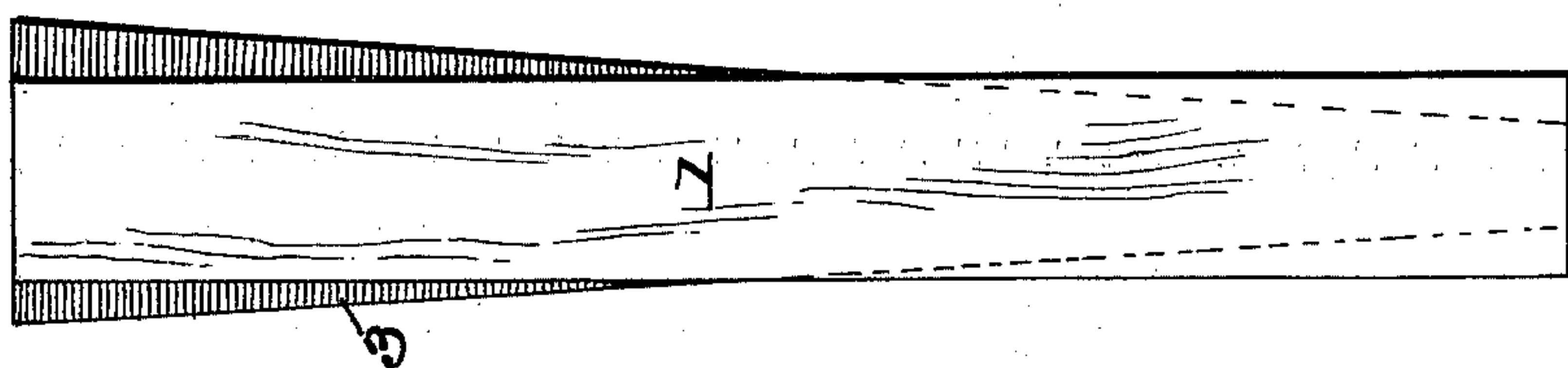


Fig. 2.

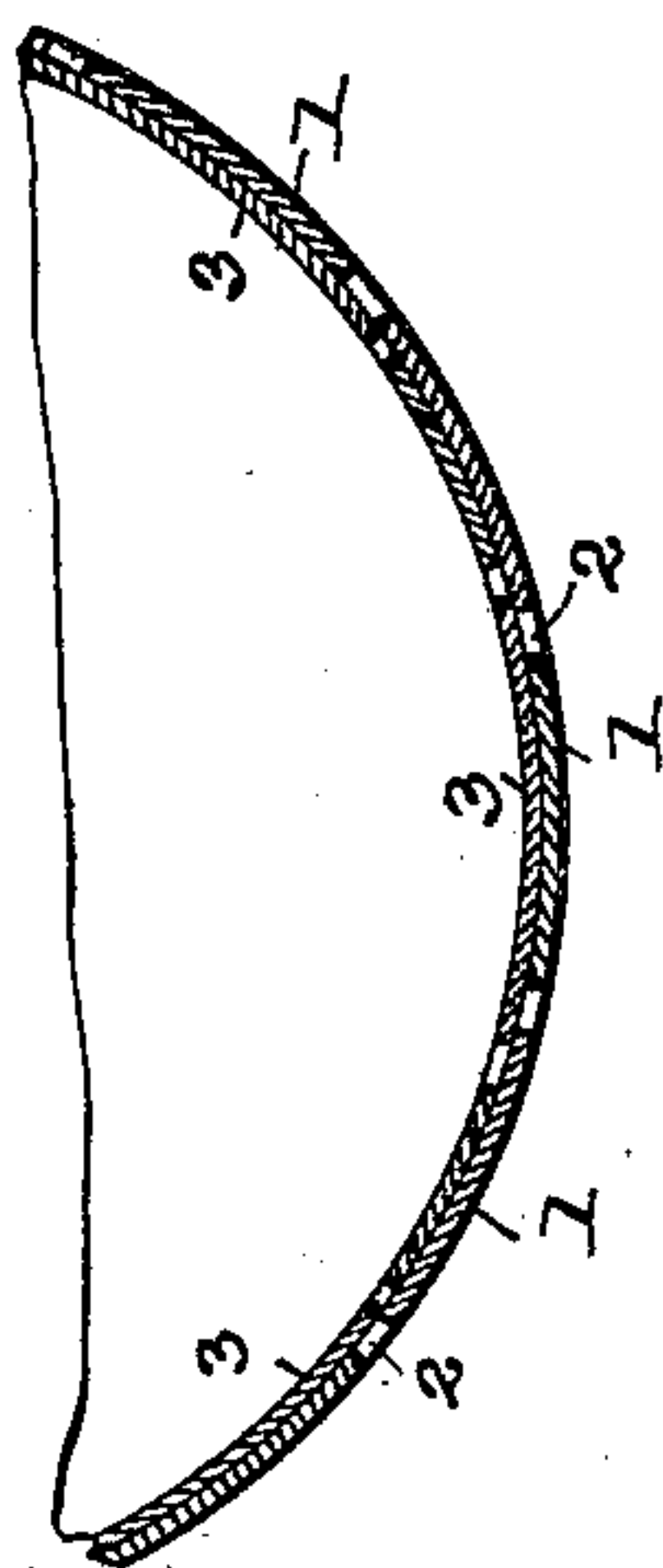


Fig. 3.

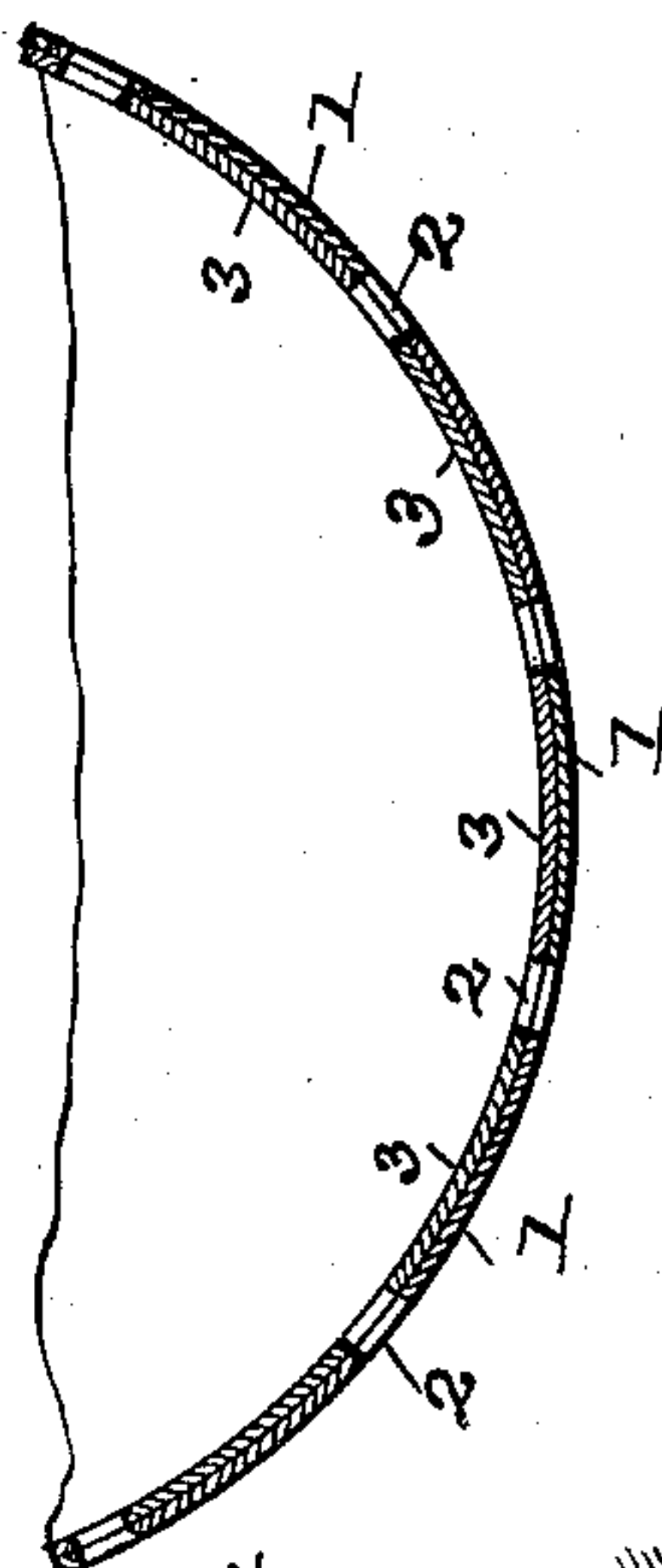
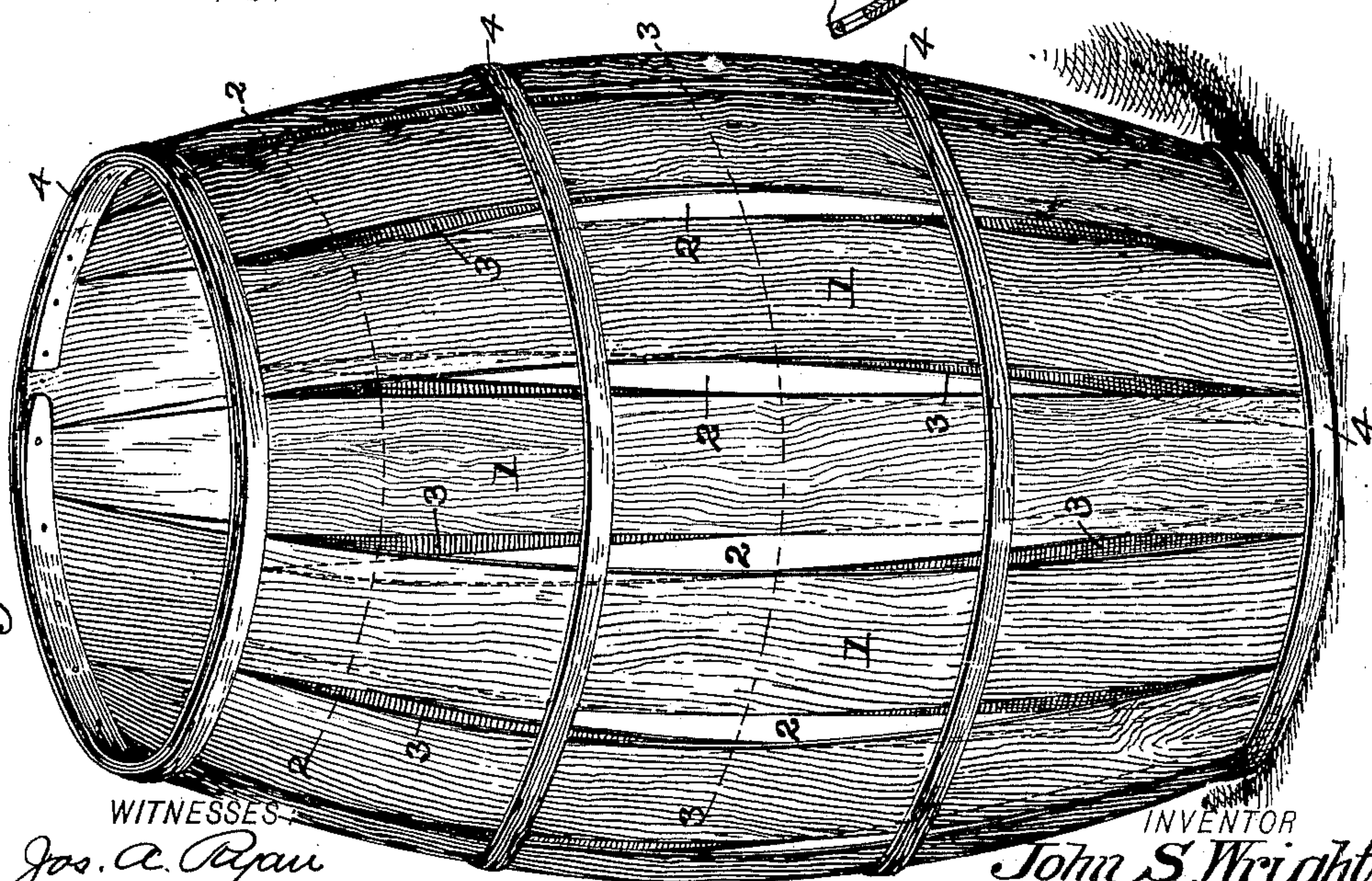


Fig. 1.



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JOHN STREETER WRIGHT, JR., OF CHURCHLAND, VIRGINIA.

## VENTILATED BARREL.

SPECIFICATION forming part of Letters Patent No. 639,126, dated December 12, 1899.

Application filed September 2, 1899. Serial No. 729,331. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN STREETER WRIGHT, Jr., residing at Churchland, in the county of Norfolk and State of Virginia, have invented  
5 a new and Improved Ventilated Barrel, of which the following is a specification.

Barrels of this class have been formed of an inner and outer set of staves having straight parallel edges, the same having been arranged  
10 in pairs, so that one stave lay upon another and the sides of both coincided throughout. Such barrels lacked requisite strength and rigidity, owing, chiefly, to the fact that the inner or outer staves did not overlap the adjacent ones at their ends, and the openings between the pairs of staves also extended to the ends of the staves in consequence of the bulge or convexity of the barrels. Such barrels  
15 soon become weakened and distorted. Barrels have also been constructed of an inner and outer set of staves which were wedge-shaped, each one in the outer set being placed upon an inner one and their respective broad and narrow ends reversed. In constructing  
20 such barrels a loss is incurred in cutting up sheets of veneers to form the staves—that is to say, a strip is wasted at each end of a veneer sheet—the loss amounting to half a stave for every fifteen staves cut. Further,  
25 owing to the care, attention, and difficulty of placing and alternating the wedge-shaped staves inside and outside the time required to assemble them is considerably greater than in the case of staves having parallel sides, and, finally, the openings between the adjacent pairs of staves extend but a short distance beyond the lengthwise middle.

In constructing my barrel I combine features of both above types and attain advantages possessed by neither.  
40

The details of construction and combination of parts are as follows:

In accompanying drawings, Figure 1 is a perspective view of my improved barrel. Fig.  
45 2 is a central horizontal section on line 2 2, Fig. 1. Fig. 3 is a cross-section on line 3 3, Fig. 1. Fig. 4 is a face view of two staves placed together.

The body of the barrel is composed of two  
50 sets of veneer staves, one set being arranged within the other. The outer staves 1 have

straight sides and are of the same width throughout their length.

The barrel has a central bilge or convexity by which elliptical openings 2 are formed between the edges of adjacent staves 1, except at their ends, which remain in contact, as shown. The diameter of the barrel being about seventeen inches at the ends, it is impracticable to make the said staves more than  
55 three inches wide or thereabout, since they must be bent or curved transversely corresponding to the diameter of the barrel. These ends are in lateral contact.

The inner staves 3 have straight sides, but  
65 are wedge-shaped. They are made of such proportions that at the middle of their length they have the same width as the outer staves 1. When arranged in the barrel, these staves 3 are alternately reversed, so that the narrow  
70 end of one is adjacent to the wide ends of the two adjacent ones and in contact therewith. The outer parallel-sided staves 1 and inner wedge-shaped staves 3 are placed flat together in pairs, so that their middle portions, which  
75 are of equal width, as before described, coincide, as shown in Figs. 1 and 4. The inner staves 3 are bent so as to have the same bilge as the outer ones 1, and therefore separated from each other by an elliptical opening 2 in  
80 the same manner. This opening extends nearly half the length of the barrel. By this combination and arrangement of parallel-sided and wedge-shaped staves the openings 2 for ventilation are longer and larger than  
85 would be practicable if wedge-shaped staves alone were used both inside and out and the barrel is stronger and stiffer than if parallel-sided staves were used on the inside.

A still more important advantage is attained in respect to economy of construction,  
90 since it requires considerably less time to assemble the staves 1 3 than to assemble two sets of wedge-shaped ones—that is to say, no care is necessary and no delay encountered  
95 in selecting and placing the outer staves 1 in position on the inner ones, since it matters not which end of the outer ones is placed up or down. A further economy is attained by reason of the saving of material in cutting up  
100 veneer sheets, as before stated. The saving in time and labor thus effected enables my

barrel to be sold at a lower price than others of its special class.

Four hoops 4 are employed, one at each end and two intermediately.

5 Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

10 The improved ventilated barrel composed of an outer set of straight, parallel-sided staves whose ends are in contact, and an inner set of wedge-shaped staves, arranged with their narrow and wider ends alternating, the

wider ones overlapping the narrow outer staves, the width of the respective inner and outer staves, at the middle, being practically 15 the same, and the staves of one set being placed flat against the others so that their middle portions coincide, and bent to form a bilge or convexity and produce the elongated coincident openings, as shown and described. 20

JOHN STREETER WRIGHT, JR.

Witnesses:

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