

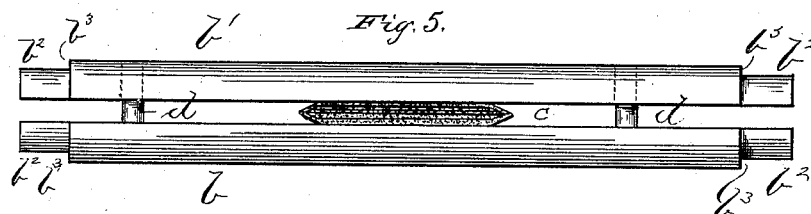
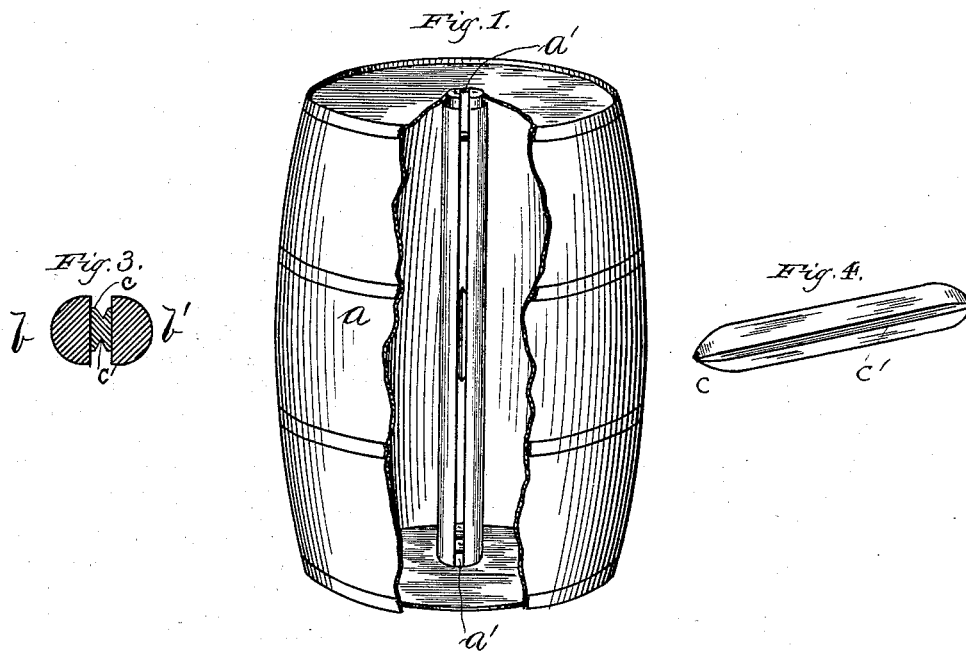
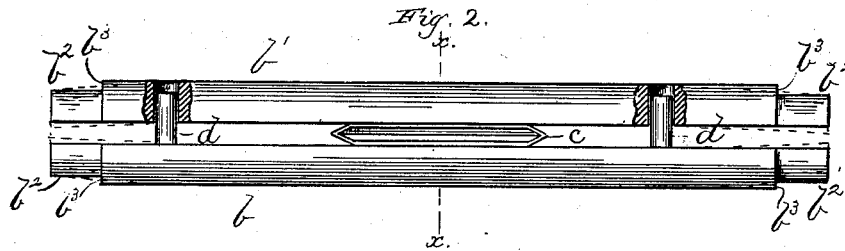
(No Model.)

W. H. SWARTOUT.

BARREL VENTILATOR.

No. 264,048.

Patented Sept. 5, 1882.



Witnesses:

J. C. Clark,
R. B. Turpin

Inventor:

William H. Swartout.
By R. B. & A. P. Lucey
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM H. SWARTOUT, OF SALINEVILLE, ASSIGNOR TO WILLIAM TWAD-
DLE, OF JEFFERSON COUNTY, OHIO.

BARREL-VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 264,048, dated September 5, 1882.

Application filed June 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. SWARTOUT, a citizen of the United States, residing at Salineville, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Barrel-Ventilators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in barrel-ventilators.

It consists essentially in two parallel bars having their ends constructed with tenons adapted to fit openings in the heads of the barrel, and provided with shoulders extending outwardly beyond the said openings and held apart by a brace-block, and in other improvements, as will be hereinafter fully described, and specifically pointed out in the claims.

In the drawings, Figure 1 is a view of a barrel having a portion of its side broken away to show the ventilator therein. Fig. 2 is a detail of the ventilator. Fig. 3 is a transverse section on line *x x*, Fig. 2. Fig. 4 is a view of the brace-block, and Fig. 5 is a view of a ventilator in which the brace-block is composed of elastic materials.

In barrels for transporting fruit, vegetables, and other articles it is often desirable to provide a thorough ventilation, and my invention is intended to accomplish this result.

a represents a barrel, through the center of the heads of which I bore round holes *a'* *a'*.

b b' represent the bars. These bars are cut away at their ends, forming the curved tenons *b²*. These tenons are cut, and when spread apart, as shown, rest in the arc of a circle corresponding to the circular openings *a'*, fitting snugly the outer ends of said openings, and leaving a space between the said bars *b b'*, as shown. The juncture of the tenons and the main portion of the bars forms a square shoulder, *b³*, which extends out under the heads of the barrel beyond the openings *a'*, and supports

the heads of the barrel, and also secures the ventilator firmly in position.

c represents the brace-block, secured between the bars *b b'* midway their ends. When this block is made the same width as the bars good results are accomplished, as the air will pass out around it; but I prefer to construct it narrower than the bars, as shown in Fig. 3, so that there is free passage for the air on both sides of it. In the sides of this block I cut longitudinal grooves *c'*, to furnish more passage-way for the air.

d d are pins. They are secured to one of the bars *b b'*, near the ends of same, and extend across the space between the same and work in openings through the opposite bar, as shown in dotted lines, Figs. 2 and 5. These pins serve as guides and braces to hold the bars *b b'* in proper relative position.

In operation one end of the ventilator is placed in the circular opening in end of barrel, the shoulder *b³* resting against the head of the barrel, as shown. I then pack the fruit in around the ventilator till the barrel is full, and then place the head in position, as shown in Fig. 2. The air thus has free circulation from end to end of the barrel, and there is no danger of its being clogged or stopped by the fruit or vegetables. Where tubular ventilators provided with perforations are employed the articles within the barrel frequently get into and cover up the perforations, and the circulation of air within the barrel does not take place. In my device the bars *b b'* are not held far enough apart to permit an apple or potato to slip between them, and it would be impossible for them to so cover the channel of the ventilator as to prevent the air from passing therefrom into the barrel.

I have heretofore described my invention as consisting of two bars separated by a brace-block and arranged to be held within the heads of a barrel, and such construction gives good results, as I have described. I prefer, however, to make the bars *b b'* elastic, so they may be pressed toward each other, as indicated in dotted lines, Fig. 1. This permits the bars to be sprung in place in the circular openings in heads of barrel, and secures them more firmly

to their position. Instead of making the bars *b b'* flexible and the brace-block solid, it will be understood that I could make the bars inflexible and the brace-block elastic, as shown in Fig. 5.

This ventilator, it will be understood, will give as good results when used with a box as with a barrel, though the need of them in connection with barrels is more universal.

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

1. In a barrel, the combination of two parallel bars provided at their ends with semicircular tenons *b²*, fitting snugly the openings in the heads of the barrel, and with shoulders *b³*, projecting outward under the heads of the bar-

rel, and the brace-block *c*, placed between and midway the ends of the bars *b b'*, substantially as and for the purposes set forth.

2. A barrel-ventilator composed of the bars *b b'*, constructed to be held between the heads of a barrel, the intermediate brace-block, *c*, and the pins *d*, the said pins being secured to one of the bars near its end, and extended across the space between the bars, and working in openings through the opposite bar, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. SWARTOUT.

Witnesses:

THOMAS A. COLLINS,

W. B. SALTSMAN.