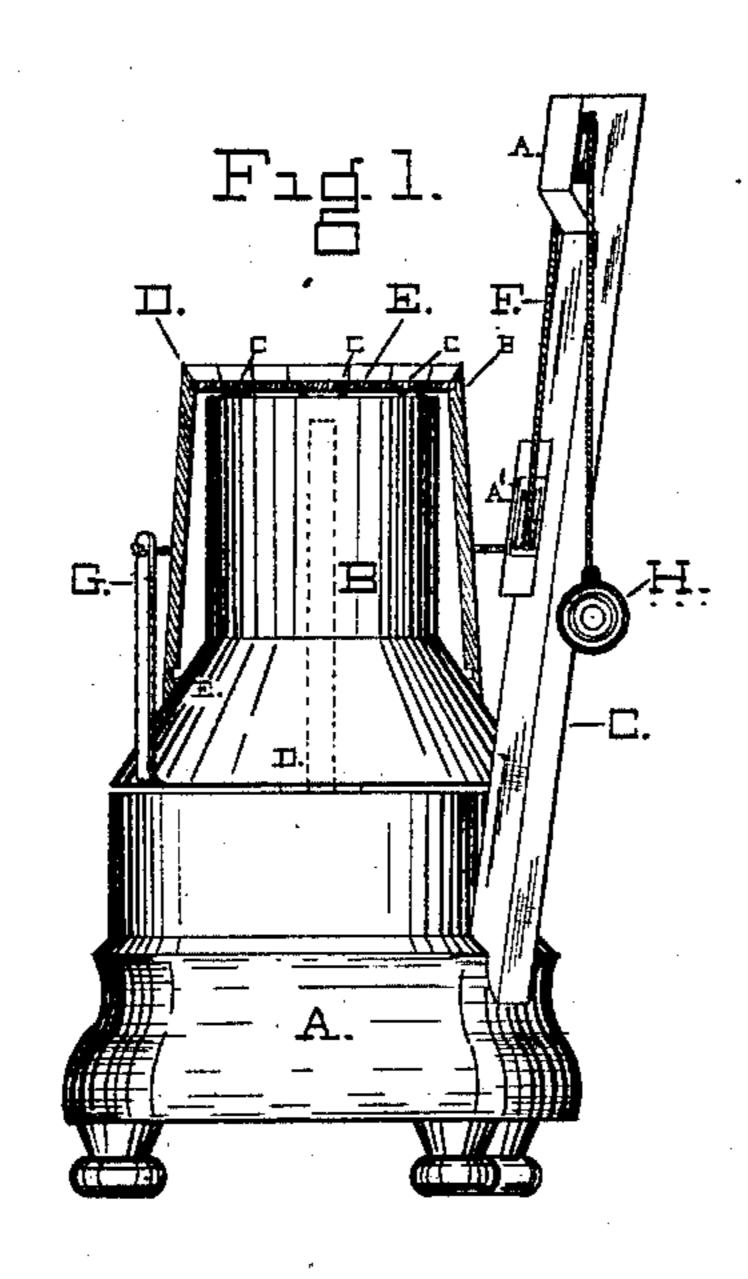
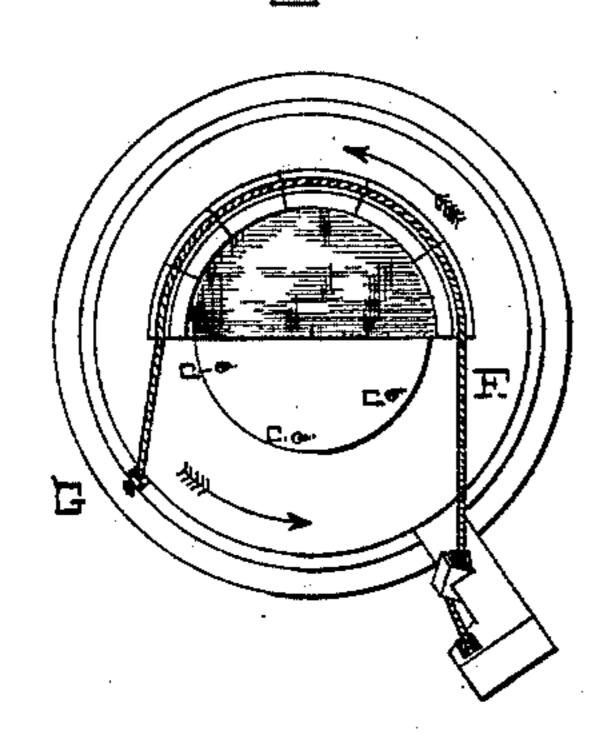
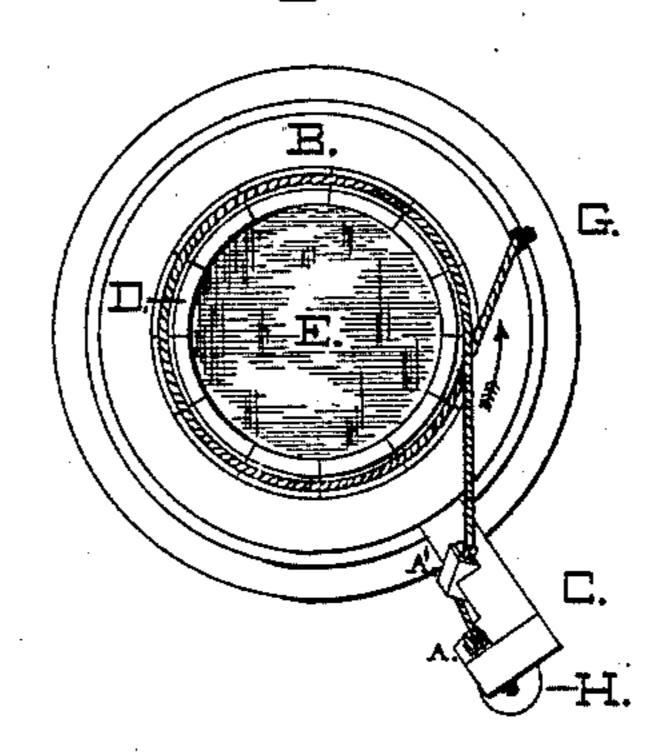
## J. W. JONES. Machine for Setting up Barrels.

No. 232,134.

Patented Sept. 14, 1880.







B, Bloomfield per Howard Brossoo, ATTORNEYS:

## United States Patent Office.

JOEL W. JONES, OF BELLAIRE, OHIO.

## MACHINE FOR SETTING UP BARRELS.

SPECIFICATION forming part of Letters Patent No. 232,134, dated September 14, 1880.

Application filed January 9, 1880.

To all whom it may concern:

Be it known that I, Joel W. Jones, of Bellaire, in the county of Belmont and State of Ohio, have invented certain new and useful Improvements in Machines for Setting up Barrels; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 of reference marked thereon, which form a part of this specification.

My invention relates to a class of machines for setting up and trussing barrel-staves into a cylindrical form, commonly known as an "upsetter;" and it consists, first, in the peculiar form of the cylindrical former, for the purpose hereinafter described; also, in the device for securing the head to the former while the staves are being built up around it; and, finally, in the combination of the various operative parts, all as fully hereinafter explained.

In the drawings, Figure 1 is a side view of my invention; Fig. 2, a top view, showing one-half of a stave-cylinder around the upright former; Fig. 3, a top view, showing the completed cylinder of staves ready for the trusshoops.

In Fig. 1, the letter A represents a stationary circular pedestal or platform, in the center of which is secured a vertical spindle, d. (Shown by dotted lines.)

B is an upright cylindrical former, having parallel straight sides at the upper portion of its length, and outwardly inclined or conical shaped at the lower portion or base, E. This former is provided with a tubular bore at its vertical axis, and rests upon the spindle d on the base A, around which it revolves.

G is an upright standard permanently attached to the cone-shaped base of the former, and revolves with it. C is a stationary upright standard attached to the pedestal A, having two pulley-blocks, A A', secured to its side. F is a band or strap attached to a weight, H, and, passing through the pulleys A A', is secured to the standard G. D is a stave-cylinder; E, the heading. ccc represent a series of sharppointed pins or studs permanently attached on the upper end of the revolving former and projecting a short distance above it.

The mode of operation is as follows: The heading E is first placed upon the end of the former B and driven down upon the studs c c 55 c with a hammer or other suitable means until the head is held firmly in position. The barrel-staves are then placed one by one around the heading, with their disengaged ends resting on the inclined base, until the cylinder is 60 complete. The staves are held in a vertical position up to the heading by means of the band F, which winds around the staves as they are placed in position by simply rotating the drum in the direction indicated by the arrows on 65 the drawings as each stave is set up, the weight H serving to draw the band or strap taut around the outside of the staves, and thus holding them firmly during the operation of setting up the stave-cylinder.

When the stave-cylinder is completed, as shown in Fig. 3, the truss-hoops are applied by hand in the usual manner and the drum permitted to unwind until the cylinder is released from the band, and the package thus formed, 75 with one head in it, is ready for firing, and the final operation of putting in the remaining head and applying the finishing-hoops, which is done in the usual manner known to the trade, and has no connection with this invention, which relates specially to setting up the stave-cylinder with one head in it.

The object of the outwardly-flaring base E on the drum B is to force the staves out to a smooth cylindrical surface on the exterior 85 when the truss-hoop is applied, by reason of the inclined surface of the base acting like a conical plug to open the staves evenly until the outer surface of the staves conforms to the inner surface of the truss-hoop, thus making a 90 smooth compact package not otherwise readily obtained.

A drum or former having parallel straight sides capable of being revolved upon its vertical axis for the purpose of setting up barrel- 95 staves is not new to the art; but a revolving drum having an outwardly-flaring base for the purpose herein set forth is new and useful.

The advantages of being able to set up the stave-cylinder with one head in and truss- 100 hooped, preparatory to firing, at one operation, and the convenience in obtaining the width of the closing-stave necessary to filling out the cylinder, besides the simple and effective man-

ner of constructing and handling the package so formed, are obvious to those versed in the art, and need not specially be referred to.

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

In a machine for trussing barrels in which the staves are set up around a permanent heading, the combination, with the revolving former, of a band secured at one end to a stand-10 ard attached directly to such former, and

adapted to wind around the staves at or near the middle thereof, and provided with a weight, as set forth.

In testimony that I claim the foregoing as my own I hereunto affix my signature in pres- 15 ence of two witnesses.

Witnesses:
E. F. HAY,
WM. V. TIPPETT.