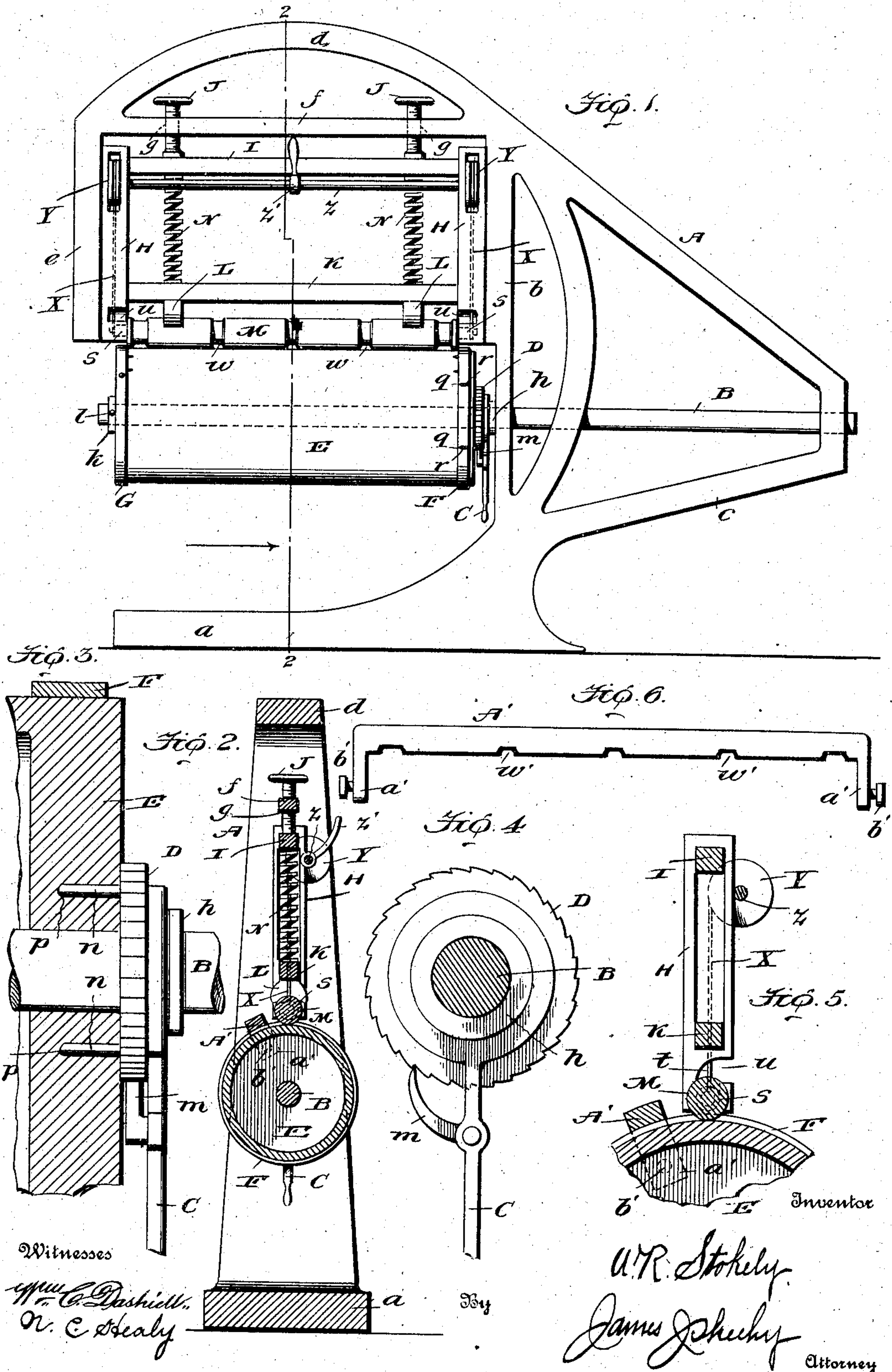


No. 833,983.

PATENTED OCT. 23, 1906.

W. R. STOKELY.  
MACHINE FOR MAKING VENEER BARRELS.

APPLICATION FILED JAN. 2, 1906.





# UNITED STATES PATENT OFFICE.

WELLS R. STOKELY, OF ST. AUGUSTINE, FLORIDA.

## MACHINE FOR MAKING VENEER BARRELS.

No. 833,983.

Specification of Letters Patent.

Patented Oct. 23, 1906.

Application filed January 2, 1906. Serial No. 294,216.

*To all whom it may concern:*

Be it known that I, WELLS R. STOKELY, a citizen of the United States, residing at St. Augustine, in the county of St. John and State of Florida, have invented new and useful Improvements in Machines for Making Veneer Barrels or Boxes, of which the following is a specification.

My invention pertains to machines for making veneer barrels or cylindrical boxes, and it contemplates the provision of a machine for the purpose which is simple and inexpensive in construction and yet is efficient in operation and is adapted to be expeditiously operated with but a minimum amount of effort on the part of the box-maker.

The invention will be fully understood from the following description and claims when the same are considered in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation of the machine constituting the present and preferred embodiment of my invention. Fig. 2 is a transverse section taken in the plane indicated by the line 2 2 of Fig. 1 looking in the direction indicated by arrow. Fig. 3 is an enlarged detail section illustrative of the manner in which I prefer to detachably connect the cylindrical work-support and the ratchet through the medium of which the said support is rotated. Fig. 4 is a detail section, on an enlarged scale, illustrating the ratchet and the hand-lever and pawl employed in connection therewith. Fig. 5 is a detail view, on an enlarged scale, illustrating the construction for raising the presser-roller and for permitting of the removal of said roller when necessary; and Fig. 6 is an enlarged side elevation of the bar designed to be removably secured on the cylindrical work-support and having for its function to hold the forward ends of the hoops of the cylindrical box to be formed.

Similar letters designate corresponding parts in all of the views of the drawings.

Referring to the drawings, A is the main frame of my novel machine. The said main frame may be of any material and construction compatible with my invention without involving a departure from the scope thereof, though I prefer to make it of cast metal and in the manner best shown in Fig. 1—that is to say, with a base *a*, an upright portion *b*, provided with a lateral extension *c*, and an overhanging arm *d*, extending from the upper

end of the upright portion *b* and provided at its end remote from said portion *b* with a depending portion *e*, and also provided with a cross-bar *f*, in which are screw-tapped apertures *g* for a purpose presently set forth.

B is a rod of circular form in cross-section supported in the upright portion *b* and the lateral extension *c* of the main frame A and extending from the said frame portion *b*, so as to rest between the base *a* and the overhanging arm *d*, as illustrated. The said rod B is provided at the inner side of the frame-upright *b* with a fixed collar *h*, and it is also provided at a point adjacent to its inner end with a removable collar *k*, which is preferably fixed upon it through the medium of a set-screw *l*.

C is a lever mounted to turn on the rod B at the inner side of the collar *h* and provided with a suitable pawl *m*.

D is a ratchet loosely mounted on the rod B in position to be engaged by the pawl *m*, and E is the cylindrical work-support, mounted on the rod B and interposed between the collar *k* and the ratchet D. The said cylindrical work-support is made of cast or other suitable metal, with a view of turning or clenching the nails driven through the hoops and veneer strips of the box being made, and it is provided in its end adjacent to the ratchet D with sockets *n*, designed to receive dowels *p* on the said ratchet. In virtue of this construction it will be apparent that when the cylindrical work-support and the ratchet are relatively arranged as shown in Fig. 1 the cylindrical work-support will be caused to turn with the ratchet, and it will also be apparent that subsequent to the removal of the collar *k* from the rod B the cylindrical support may be moved endwise off the rod B and out of engagement with the ratchet D to give place to a larger or smaller cylindrical work-support, according to the diameter of the boxes to be made.

At its end adjacent to the frame-upright *b* the cylindrical work-support E is provided with a gage-band F, adjustable thereon to a slight extent in the direction of the length thereof, and at its opposite end the said work-support is provided with a removable band G. The gage-band F is preferably slotted, as indicated by *q*, and connected to the work-support E by screws *r* extending through said slots and into threaded sockets in the perimeter of the support. The band G at the opposite end of the work-support



with reference to the band F is removably fixed on the work-support through the medium of a set-screw or any other device suitable to the purpose. Both bands F and G are provided on their inner edges with inwardly-directed barbs, which have for their function to hold the first strip of veneer incorporated in a box to the perimeter of the work-support until the said strip is secured against the support by the surrounding hoops of the box.

H H are bearing-pieces movable vertically in the main frame A and guided on the inner sides of the frame portions *d* and *e*. I is a cross-head connecting the said pieces H, and J J are screws for adjusting the bearing-pieces and their appurtenances vertically and adjustably fixing the same with respect to the main frame, so as to accommodate the presser-roller, presently described, to the diameter of the boxes to be made. The said screws J are connected in a swiveled manner to the cross-head I and are arranged to bear in the threaded apertures *g*, provided in the bar *f* of frame A.

K is a cross-bar movable vertically in the bearing-pieces H and having shoes L at its under side.

M is the presser-roller, having trunnions *s* at its ends let into bearing-grooves *t*, formed in the bearing-pieces H, and open at their upper ends, as indicated by *u*, and N N are coiled springs interposed between and connected to the cross-head I and the bar K, as illustrated.

In virtue of the construction just described it will be observed that the spring-pressed bar K will hold the roller M under yielding pressure against the work-support E, or rather against the veneer strips and the hoops interposed between the two, and in that way contribute to the production of the cylindrical box or barrel.

The roller M is shown as provided with five circumferential hoop receiving and guiding grooves *w*, and when it is desired to provide the box to be made with a greater or less number of hoops the said roller M is designed to be removed and be replaced with a roller having a greater or less number of circumferential grooves, as desired. To this end the trunnions of the roller M are connected, through the medium of cables X, with wheels Y, mounted in the bearing-pieces H and carried by a shaft Z, which is journaled in the bearing-pieces and is provided at or adjacent to its middle with a lever Z'. By simply moving the said lever Z' downwardly the machine operator is enabled to raise the roller M against the action of the springs N until the trunnions of the said roller are opposite the open ends *u* of the grooves *t* and may then disconnect the said trunnions from the cables X and remove the roller M from the bearing-pieces.

A', Figs. 2 and 6, is the bar for securing the ends of the hoops to the perimeter of the work-support E at the commencement of the manufacture of a box. The said bar is provided with hoop-receiving grooves *w'*, corresponding in number and arrangement to the grooves *w* of the roller M, and it is also provided with arms *a'*, designed to rest adjacent to the opposite ends of the work-support E and be fixed to said work-support through the medium of set-screws *b'*.

In the practical use of my novel machine the first veneer strip to be embodied in a box is first arranged on the work-support E and secured between the bands F and G in the manner before described. Hoops are then fed over the veneer strip and through the grooves in the roller M and are connected to the perimeter of the cylindrical work-support E through the medium of the bar A' in such manner that their ends extend in advance of the bar A'. With this done, the cylindrical work-support E is rotated step by step through the medium of the lever C, and the veneer strips and hoops are fed to or positioned on the work-support until the mentioned ends of the hoops reach a position below the presser-roller M. At this time the bar A' is removed from the work-support E and the hoops and veneer strips are nailed together, when, as will be readily appreciated, the metallic support E will clench or turn the inner ends of the nails and in that way preclude casual displacement of the nails. Subsequent to the described connection of the veneer strips and the hoops the band G and the cylindrical box or barrel are removed from the cylindrical support, after which the band G is replaced, and the machine is ready for the making of another cylindrical box or barrel.

It will be gathered from the foregoing that my novel machine is so simple and inexpensive that it may be used to advantage in the smallest packing plants, also that the machine is adapted to be operated by hand with but a minimum amount of effort on the part of the operator, and that it embodies no delicate parts such as are likely to get out of order after a short period of use.

The side walls of the grooves *w* in roller M and the side walls of the grooves *w'* in the bar A' are preferably beveled, as illustrated in Figs. 1 and 6, in order that the hoops will mash in said grooves, providing said hoops should happen to be a little too wide.

I claim—

1. In a veneer barrel or box machine, the combination of a main frame, a cylindrical work-support mounted therein and arranged to rotate, bearings carried by the main frame and adjustable toward and from the cylindrical work-support, means intermediate the frame and the said bearings for adjusting the latter and adjustably fixing the same with



respect to the frame, a presser-roller carried by the bearings, means also carried by the bearings for pressing the said roller yieldingly toward the perimeter of the work-support, a shaft journaled in the bearings and having a handle, and connections between said shaft and the presser-roller for raising the latter when the shaft is turned in one direction.

10 2. In a veneer barrel or box machine, the combination of a main frame, a revoluble work-support of cylindrical form mounted therein, vertically-movable bearings arranged in the main frame and connected by a cross-  
15 head, screws connecting the said cross-head of the bearings and the main frame, a presser-roller arranged in the bearings, a cross-bar movable in the bearings and having shoes bearing on the presser-roller, springs inter-  
20 posed between the cross-heads of the bearings and the said cross-bar, a shaft journaled in the bearings and having a handle, and connections between said shaft and the presser-roller for raising the latter when the shaft is  
25 turned in one direction.

3. In a veneer barrel or box machine, the combination of a main frame, a revoluble work-support of cylindrical form mounted therein, vertically-movable bearings or bearing-pieces arranged in the main frame and  
30 connected by a cross-head and having

grooves in their inner sides open at their upper ends, screws connecting the said cross-head of the bearings and the main frame, a presser-roller having trunnions arranged in  
35 the grooves of the bearings, a cross-bar movable in the bearings and having shoes bearing on the presser-roller, a shaft journaled in the bearings and having wheels and also having a lever, and cables connecting the trunnions  
40 of the presser-roller and the said wheels.

4. In a veneer barrel or box machine, the combination of a main frame, a revoluble work-support of cylindrical form mounted therein, bearings carried by the main frame  
45 and having grooves in their inner sides open at their upper ends, a presser-roller having trunnions disposed in said grooves of the bearings, means for yieldingly pressing the roller toward the cylindrical work-support, a  
50 shaft journaled in the bearings and provided with wheels and a lever, and cables connecting the trunnions on the presser-roller and the said wheels.

In testimony whereof I have hereunto set  
55 my hand in presence of two subscribing witnesses.

WELLS R. STOKELY.

Witnesses:

EMMET C. DIBBLE,  
PAUL F. VOSE.