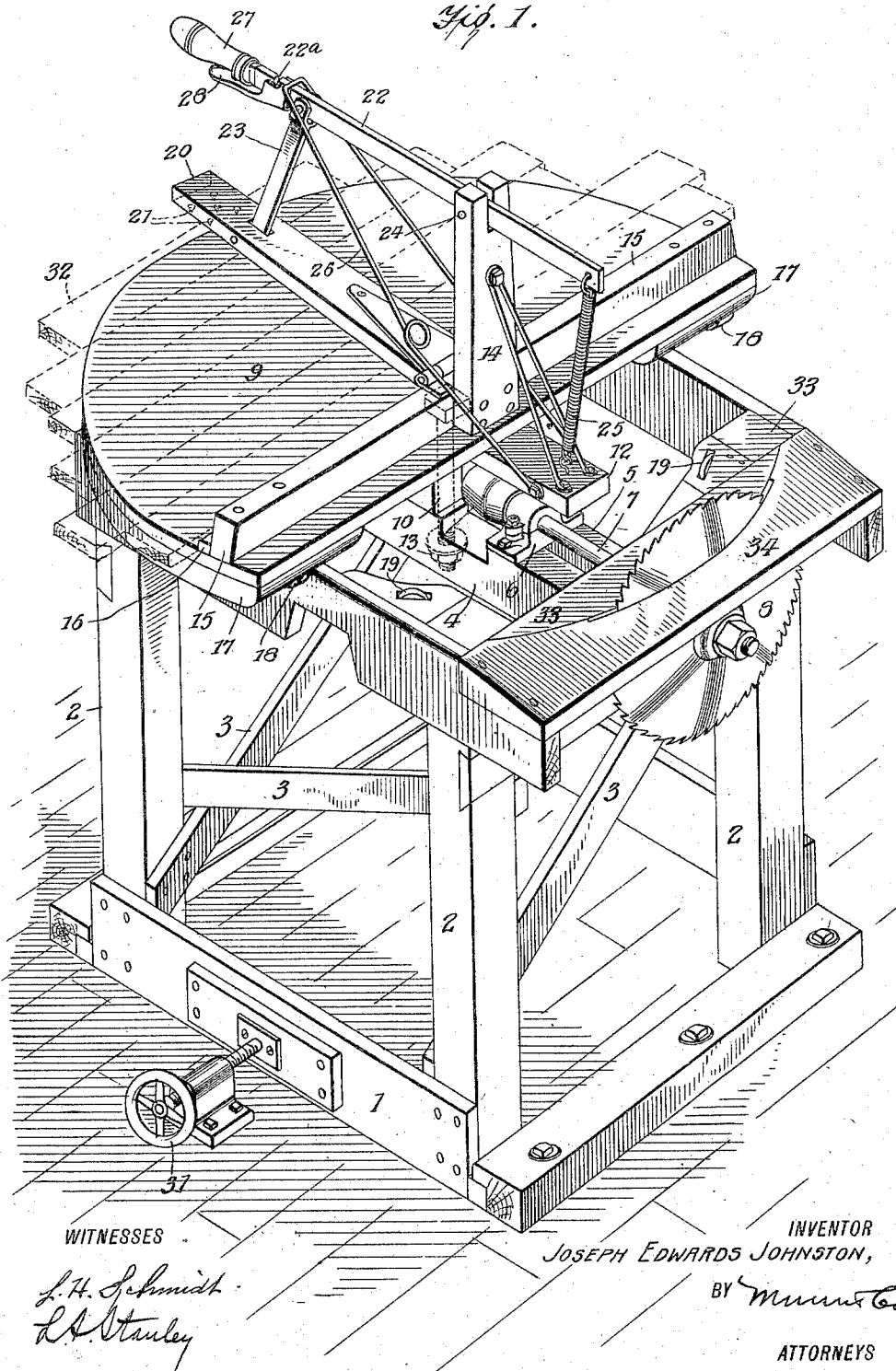


J. E. JOHNSTON.
 HEADING MACHINE.
 APPLICATION FILED OCT. 14, 1909.

967,129.

Patented Aug. 9, 1910.

2 SHEETS—SHEET 1.



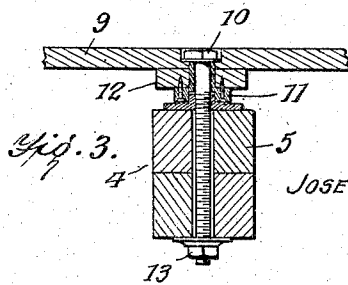
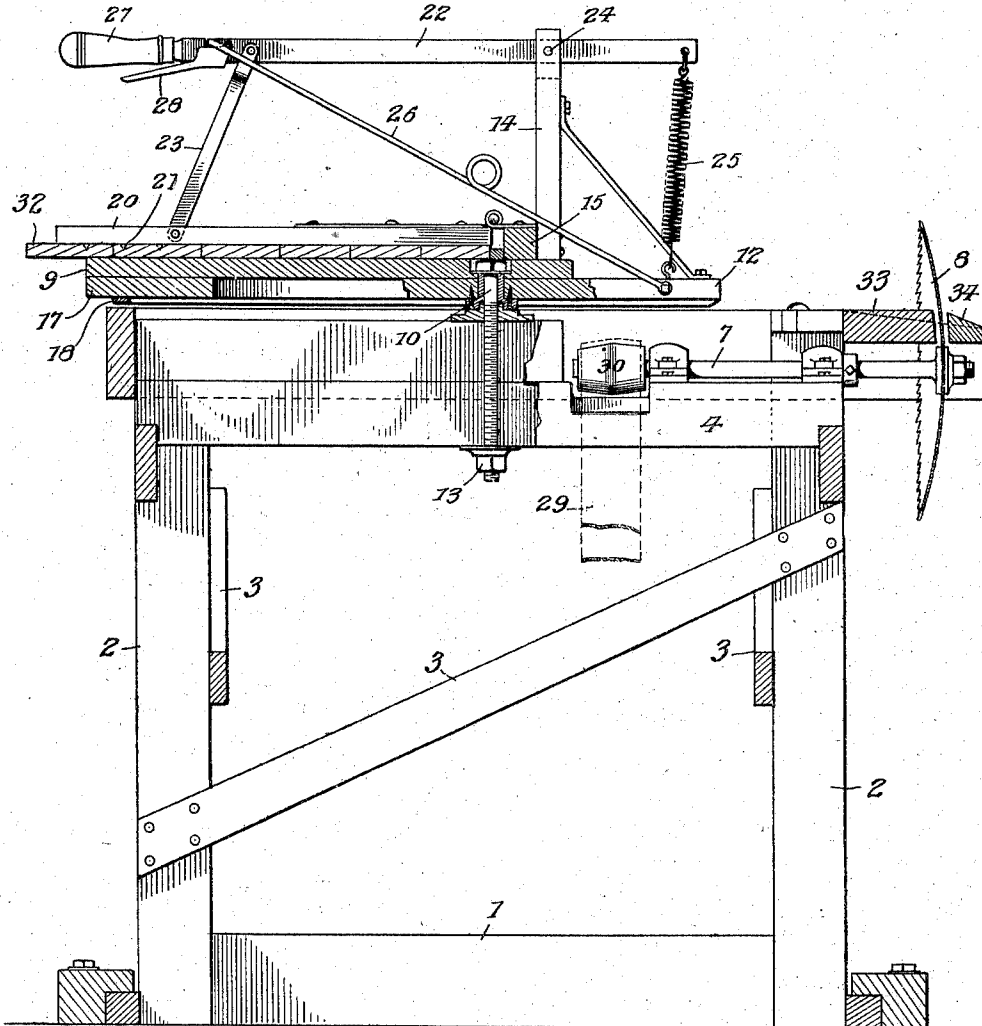
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2 SHEETS—SHEET 2.

Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH EDWARDS JOHNSTON, OF FARMVILLE, VIRGINIA.

HEADING-MACHINE.

967,129.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed October 14, 1909. Serial No. 522,570.

To all whom it may concern:

Be it known that I, JOSEPH EDWARDS JOHNSTON, a citizen of the United States, and resident of Farmville, in the county of Prince Edward and State of Virginia, have invented certain new and useful Improvements in Heading-Machines, of which the following is a specification.

My invention relates to devices for making heads of barrels, casks and hogsheds, and it consists in the constructions, combinations, and arrangements of parts herein described and claimed.

An object of my invention is to provide a device by which certain of the pieces which form the heads may be cut while assembled in the relation which they are to occupy when in the completed head, thereby insuring the cutting of said pieces in the proper curves.

A further object of my invention is to provide a device in which, as stated above, a number of pieces forming the head may be cut at one operation, thereby increasing the output of the device.

A further object of my invention is to provide an improved means for securely holding the pieces to be cut, while they are being subjected to the saw.

Further objects and advantages will appear in the following specification, and the novel features of the device will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings forming part of the application in which similar reference characters indicate like parts in the several views and in which:

Figure 1 is a perspective view showing one embodiment of my invention, Fig. 2 is a central section from front to rear and Fig. 3 is a detail section of the center bolt.

In carrying out my invention, I provide a main frame consisting of the base 1, the uprights 2, and the cross pieces 3. This frame supports two beams 4 and 5 running from front to rear upon which is a bearing 6, for the arbor 7 of a stationary concave saw 8.

The frame bears a semicircular rotatable table 9 (see Fig. 2). This table is secured on a bolt 10 which projects downwardly between the supporting beams 4 and 5, as shown in Fig. 3. A sleeve 11 extends up into the under side of the table 9, being secured to a forward projecting member 12,

which is securely attached to the table, and the purpose of which will be hereinafter explained. The bolt 10 is held in position by means of a nut 13 on its lower end, and by unloosening this nut, the table may be moved toward or away from the saw 8, the bolt passing between the members 4 and 5. When the nut is again tightened, the table is free to turn in its new position. The table top 9 carries a vertical post 14, which is centrally disposed of the device and is provided with a rail 15 and an abutment 16 against which the pieces to be cut may be held. The table is also provided on its underside with a semicircular shoe 17. Underneath the shoe is a semicircular steel track 18, which, during the rotation of the top 9, runs over rolls 19 which are secured to the main frame of the machine, and which prevents the table from vibrating. These rolls, it will be observed, are mounted near the cutting side of the saw and counteract the thrust of the saw.

Hinged to the rail 15 is a clamp arm which carries several short, sharp pins on its under side at the outer end. The clamp arm 20 is pivotally connected with a lever 22 by means of a link 23. The lever 22 is pivotally mounted at 24 in the upper end of the vertical post 14, and is connected with the extension 12 by means of the spiral spring 25. The latter is for the purpose of counterbalancing the lever. The steel spring 26 is connected at one end to the extension 12 and the other end is bent over the lever 22 and extends downwardly, connecting with the other side of the extension 12.

The upper end of the lever 22 is provided with a notch 22^a, near the handle 27 into which the upper end of the spring 26 falls when lever 22 is depressed. The lever 22 is provided with a release lever 28 which is arranged to eject the spring 26 out of the notch 22. A belt 29 passes over the pulley 30 and the mandrel 7, and thence to a power wheel (not shown). The frame may be adjusted toward or from the power wheel so as to tighten or loosen the belt by means of the adjusting wheel 31, shown at the lower right hand corner of Fig. 1.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood.

The operator stands at the side of the table opposite to that on which the saw is mounted and places pieces of heading ma-

terial 32 of the necessary length flat upon the table 9, the pieces nearest the center bearing against the stop 16 and sufficient pieces being placed to cover the table top. The handle 27 on the end of the lever 22 is then grasped with one hand, and is depressed. This forces the clamp arm 20 down upon the pieces to be cut and the pins 21 grip the outside pieces, the pressure and edge friction of the others being sufficient to hold them in place. The spring 26 is then slipped forward into the slot 22^a in the lever 22, thereby holding the pieces in the clamped position. The table 9 is now given a complete turn about its axis 10. During the turn, the heading pieces are cut to a semicircle by the saw 8. When the top is again in its initial position, the spring 16 is forced from the slot by means of the lever 28. This releases the clamp arm 20 and the half head, as cut, may be removed from the top 9. It will be observed that the front part of the saw table is horizontal at 33, but is inclined outside of the saw, as shown at 34. Thus, when the pieces are cut from the heading, they are thrown from the saw by their own weight.

I claim:

1. In a heading device, a frame, a table
30 mounted on said frame, a hinged clamping

arm secured to said table and provided with sharpened points for clamping a plurality of strips to be cut, a lever for manipulating said clamping arm, said lever being provided with a notch, a spring arm carried by said table and adapted to engage said notch for locking the lever in position, and means carried by said lever for disengaging said spring arm from said notch.

2. In a heading device, a frame, a table
40 mounted on said frame, an upright secured to said table, a notched lever pivotally mounted on said upright, a rail carried by said table, a clamping arm hinged to said rail and provided with sharp points at its
45 outer end, a link connecting one end of said lever with said clamping arm, an extension secured to said table, a counterbalancing spring secured to one end of said lever, the other end of said spring being secured to
50 said extension, a second spring secured to said extension and arranged to engage in the notch in said lever for locking the said clamping arm, and a release lever carried by the first-named lever for disengaging said
55 locking spring.

JOSEPH EDWARDS JOHNSTON,

Witnesses:

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