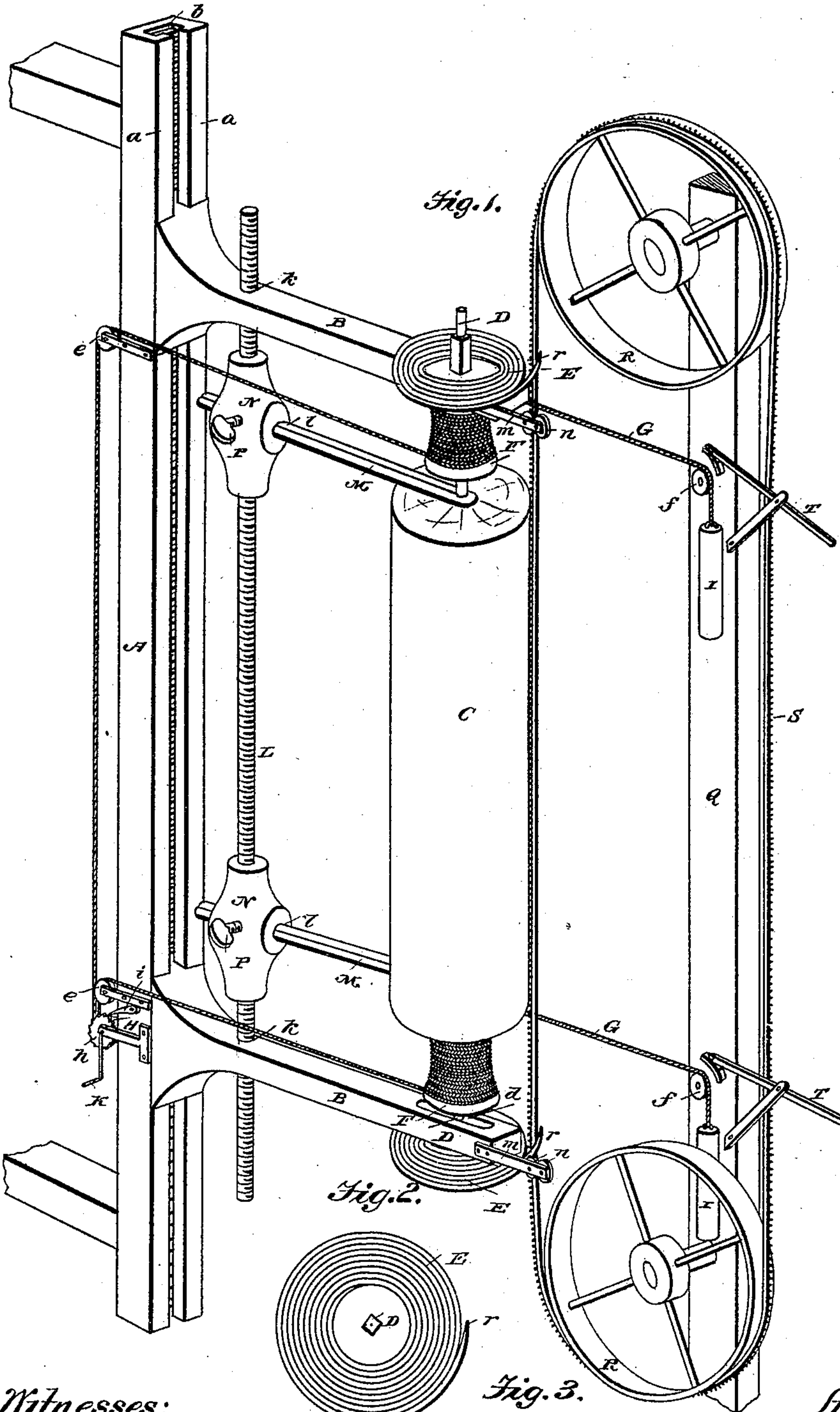


(No Model.)

M. DALLAS.
MACHINE FOR MAKING BARREL STAVES.

No. 405,148.

Patented June 11, 1889.



Witnesses:

James J. Schuyler

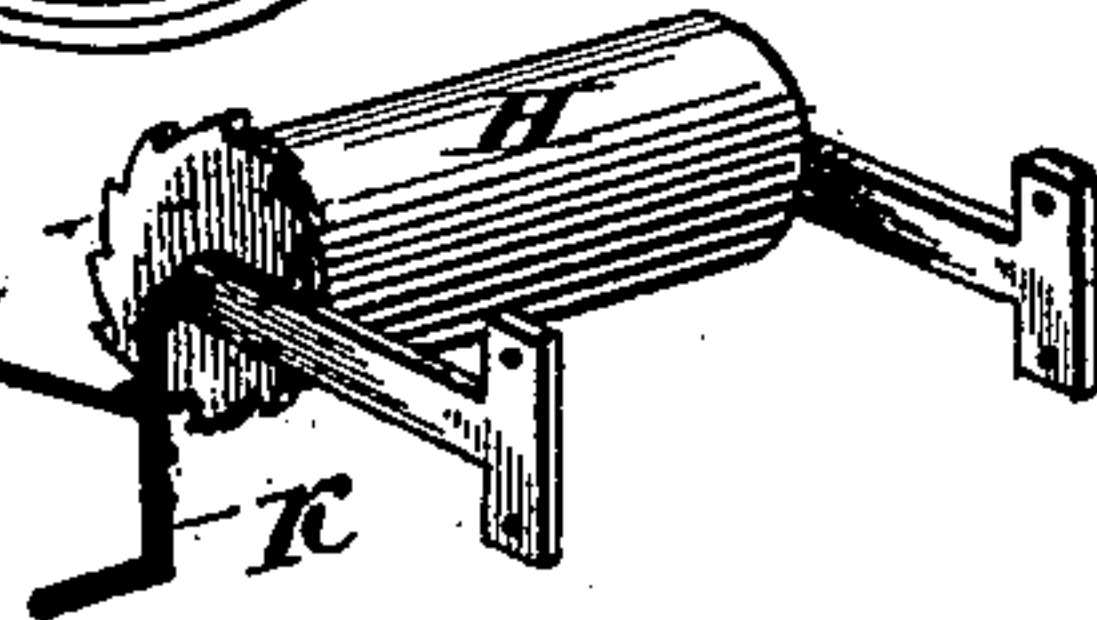


Fig. 3.

Inventor:
Madison Dallas.

By, *W. R. Stringfellow*
Attorney.

UNITED STATES PATENT OFFICE.

MADISON DALLAS, OF NEW ORLEANS, LOUISIANA.

MACHINE FOR MAKING BARREL-STAVES.

SPECIFICATION forming part of Letters Patent No. 405,148, dated June 11, 1889.

Application filed September 6, 1888. Serial No. 284,718. (No model.)

To all whom it may concern:

Be it known that I, MADISON DALLAS, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Machines for Making Barrel-Staves; and I do 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.

This invention has relation to improvements in log-sawing machines, designed for the purpose of sawing a log into one continuous strip of uniform thickness, to be used in the manufacture of barrels, buckets, tubs, and the like, to form the body portion thereof, and the novelty will be fully understood from the following description and claims, when taken in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of a machine constructed according to my invention; and Fig. 2 is a view of one of the spiral gages which I employ to regulate the saw for the thickness of cut desired. Fig. 3 is a view of the drum H, removed from the frame, with the ratchets and crank-arm applied and the bearing-arms for applying it to the main frame.

Referring by letter to the said drawings, A indicates an upright slotted frame, the slot of which is of a rectangular form having face-flanges *a*, to retain brackets therein, as will be presently explained, and the rear wall of this slot is preferably provided with a rack or teeth, as shown, to engage and hold the inner ends of the brackets.

B indicates the brackets, there being two employed—one above and one below the log C—to be operated on. These brackets have their inner ends adapted to enter and move in the slot *b* of the upright A, and so formed as to be prevented from drawing out, but allowed a vertical movement. The brackets are provided at their outer end with vertical apertures *d*, to receive vertical shafts or spindles D. These spindles D have fixed to them near their outer ends a spiral gage E, and these gages are adapted to be removably fixed to the said spindles, which bear at their inner ends in suitable apertures at the opposite ends

of the log, made therein prior to placing the log in the machine. By having these gages removable it will be seen that they may be removed and replaced at will, so as to employ different sizes to cut strips of various thicknesses.

As before described, the spindles D are designed to be moved in the slots of the arms or brackets B, and to prevent a wobbling or uneven movement of these spindles they may have a collar at each side of the eye in arms M, or the eyes may be expanded so as to present a larger engaging-contact of the two.

F indicates spools, there being one secured on each spindle D and at opposite ends of the log, and are designed to receive weighted cords G, one end of which is secured to and adapted to wind upon a drum at H, suitably journaled in the upright A, and the opposite ends of the said cords carry weights I. After these ropes or cords G leave the drum H they pass over suitable guide-pulleys *e*, journaled in the frame A, and are thence wound from one end of the spools, after which they are carried off from the opposite ends of the said spool and over guide-pulleys *f* to the weights I.

The drum at H is provided with a fixed ratchet-wheel *h*, adapted to be engaged by a pawl *i*, pivoted to the upright or frame A. This drum and ratchet may be furthermore provided with a crank-handle K, so that the weighted rope leading from the spools may be wound thereon, and consequently wound upon the spools in one direction.

From this construction it will be seen that as the spindles are removably fixed in the log, and the spools and gages fixed to the spindles, when the pawl has been disengaged from the ratchet the weights will draw the cords at one end from the spools, thereby rotating the same and consequently the gages and the log to be cut.

The brackets B are provided at their points where the spindles pass through them with elongated slots or apertures *d*, whereby the log and gages may be moved in and out with respect to the saw, and the said arms are provided at a suitable point in their length with apertures *k*, to receive a threaded rod L, which carries bearings N. These bearings N are provided with internally-threaded apertures to

engage the threads of the rod L, so that they may be adjusted vertically thereon, and these bearings or nuts are provided with transverse apertures *l* to receive horizontal arms M, the
 5 said arms being adapted to be adjusted horizontally and secured in any desired position by means of set-screws P, seated in a screw-tapped bearing in the said nuts or bearings N. It will thus be seen that as the outer ends
 10 of these arms M receive the inner ends of the spindles D the log may be moved in the apertures of the brackets, and by having the said arms vertically adjustable through the medium of the bearings or nuts N they may
 15 be adjusted for logs of various lengths as well as for logs of greater or less diameter.

It should be here observed that while the set-screws P are employed for adjustably securing the arms M to the bearings N, yet
 20 when the gages are in use these screws should be loosened, so that as the gages act on the saw the arms M may be allowed to move and the log thereby fed to the saw.

Q indicates an upright frame or standard,
 25 in which at a suitable distance apart are journaled drive-wheels or belt-wheels R, which may receive motion from any suitable source.

S indicates a band-saw, which may be of the form usually employed, and is arranged
 30 vertically, passing around the wheels R, so that it may be brought parallel with the longitudinal face of the log to be sawed.

T indicates a brake, and I have illustrated two of them—one to serve in connection with
 35 each of the leading-ropes leading from the spools. These brakes may consist simply of a pivoted hand-lever arranged on an arm secured to the upright Q, so that one end may be grasped by the hand of an attendant and
 40 the opposite end brought to impinge upon the weighted ropes G, where they pass over the pulleys *f*, as it will be seen that by stopping these ropes or weights from descending at this point the log and gages may be prevented
 45 from turning, when the saw will be practically thrown out of operation.

The outer ends of the brackets B are provided with an arm *m*, carrying at their outer

ends two rollers *n*, one being placed in rear of the other, and designed to hold the saw in
 50 proper position with relation to the log, so as to steady the movement.

It will be observed that the spirals have their free ends *r* normally arranged so as to receive the saw as it begins its work upon
 55 the log.

Having described my invention, what I claim is—

1. In a machine for sawing logs into a continuous sheet or strip, the combination, with
 60 a band-saw, of a rotative log-holder carrying a spool and a spiral gage for the said saw, substantially as specified.

2. In a machine for the purpose described, the combination, with a band-saw, of a rota-
 65 tive log-holder carrying a spiral gage for the said saw, substantially as specified.

3. In a machine for the purpose described, the combination, with a slotted upright, of
 70 brackets adjustably supported therein, a threaded rod bearing in the said brackets, threaded nuts or blocks on the said rod, arms adjustably supported in the nuts or bearings,
 75 rotative spindles adapted to engage the opposite ends of a log and passing through the brackets and also the adjustable arms, spools fixed to the spindles, weighted cords wound upon the said spools, and a spiral gage also secured to the spindles, substantially as specified.
 80

4. In a machine substantially as described, the combination, with an upright slotted
 85 frame, of brackets adjustably supported therein, spindles arranged in the outer ends of the brackets and adapted to engage the opposite ends of a log, spools fixed to the said
 90 spindles, and cords or ropes leading from a drum, passing around the said spools, and having weights secured at their opposite ends, substantially as specified.

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

MADISON DALLAS.

Witnesses:

HENRY J. RHODES,
 PERCY D. PARKS.