J. Rushworth,

Bundling Wood.

No. 108,731. Patented Oct. 25, 1870.

Fig: 1.

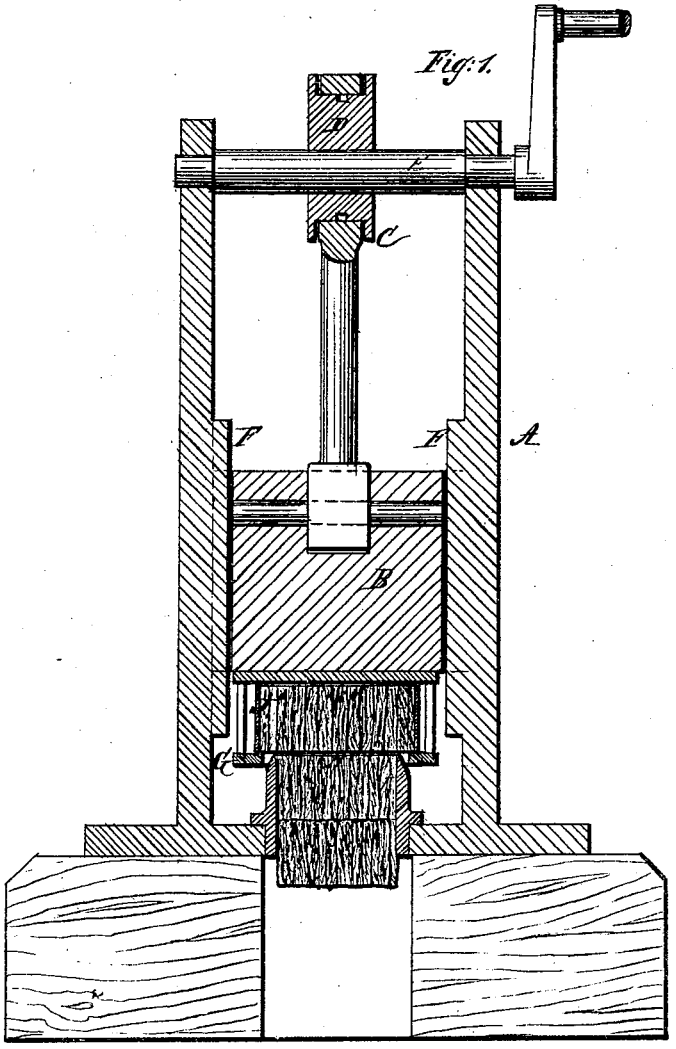
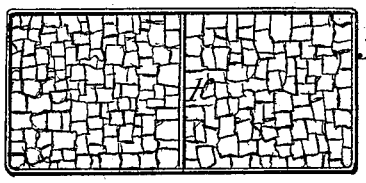


Fig: 2.



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UNITED STATES PATENT OFFICE.

JOHN RUSHWORTH, OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINES FOR BUNDLING WOOD.

Specification forming part of Letters Patent No. **108,731**, dated October 25, 1870.

To all whom it may concern:

Be it known that I, JOHN RUSHWORTH, of the city, county, and State of New York, have invented a new and Improved Machine for Bundling Wood; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which drawings—

Figure 1 is a vertical section of my invention. Fig. 2 is a plan view of the sectional box.

Similar letters indicate corresponding parts.

This invention relates to machines for bundling wood; and it consists in an open platform, which is attached to and moves with the plunger for carrying the wood to be bundled to the hollow knife.

It also consists in a sectional box for delivering the wood to the machine, each compartment of the box being appropriated to a separate bundle.

The letter A designates the frame of the machine, between whose sides is arranged a driver, B, which is connected by a connecting-rod and ring, C, to an eccentric, D, on the shaft E, which has bearings in the top of the frame.

The driver B is moved up and down by the eccentric D, and is guided in said frame by suitable guides, F F, which enter grooves in the edges of the driver.

To the bottom of the driver B is attached a platform, G, which moves up and down with it and receives the wood to be bundled. This platform has an opening, H, through its center, to allow it to descend over and around a hollow punch or knife, I, made beveled or tapering inside, upon whose edge the driver forces the wood, causing those portions which are within the circumference of the punch to be cut off and separated from the outside portions, and to be pushed into the punch, where they are compressed, ready for tying.

The hollow punch or knife is made of a circular shape in this example; but it may be oval or of any desired shape, and is supported in the bottom of the frame, through which it extends, so as to discharge the bundles below.

The inside of the punch decreases in diameter from its edge downward, for the purpose of compressing the bundle, which it cuts off from the mass, and bringing it into a compact condition ready for tying, and the length of the punch is such that when the driver forces a fresh bundle down into it a preceding bundle will be forced partly out through the bottom of the punch, where it remains protruding therefrom, so that it can be tied with twine or wire until the next succeeding operation finally discharges it.

The wood to be bundled is deposited in sectional boxes J, divided by partitions K (one or more) into compartments a little wider in every direction than the diameter of the punch.

When the driver ascends, one of the sectional boxes filled with wood is placed on the platform G, with one of the compartments over the punch; and when the driver descends the wood is driven down upon the edge of the punch or knife, so as to cut out a portion from the mass of the wood and force it into the punch, where it is compressed by its tapering sides into a compact bundle, that portion of the wood which is outside of the punch or knife remaining in the box while the platform descends and ascends, and when the platform has risen clear of the punch or knife the box is pushed along to bring the next division over the punch, and the said outside portions are carried along with the box past the punch and over the edge of the platform.

What I claim as new, and desire to secure by Letters Patent, is—

1. The platform G, with its opening H, suspended from and moving with the plunger B, carrying the box J, combined and operating with the hollow knife I, supported in the frame A, and operating together, substantially as herein shown and described.

2. The plunger B, moving in guides F F on the frame A, carrying the suspended platform G, and box J, operated by the connecting-rod C, eccentric D, and shaft E, when

combined and operating with the vertical hollow knife I, having its bearings upon the bottom of the frame A, substantially as shown and described.

3. The box J, divided into compartments of suitable diameter for joint operation with the punch or knife I, substantially as and for the purpose described.

This specification signed by me this 8th day of March, 1870.

JOHN RUSHWORTH.

Witnesses:
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