

(No Model.)

2 Sheets—Sheet 1.

D. CHASE.
SAWING MACHINE.

No. 479,244.

Patented July 19, 1892.

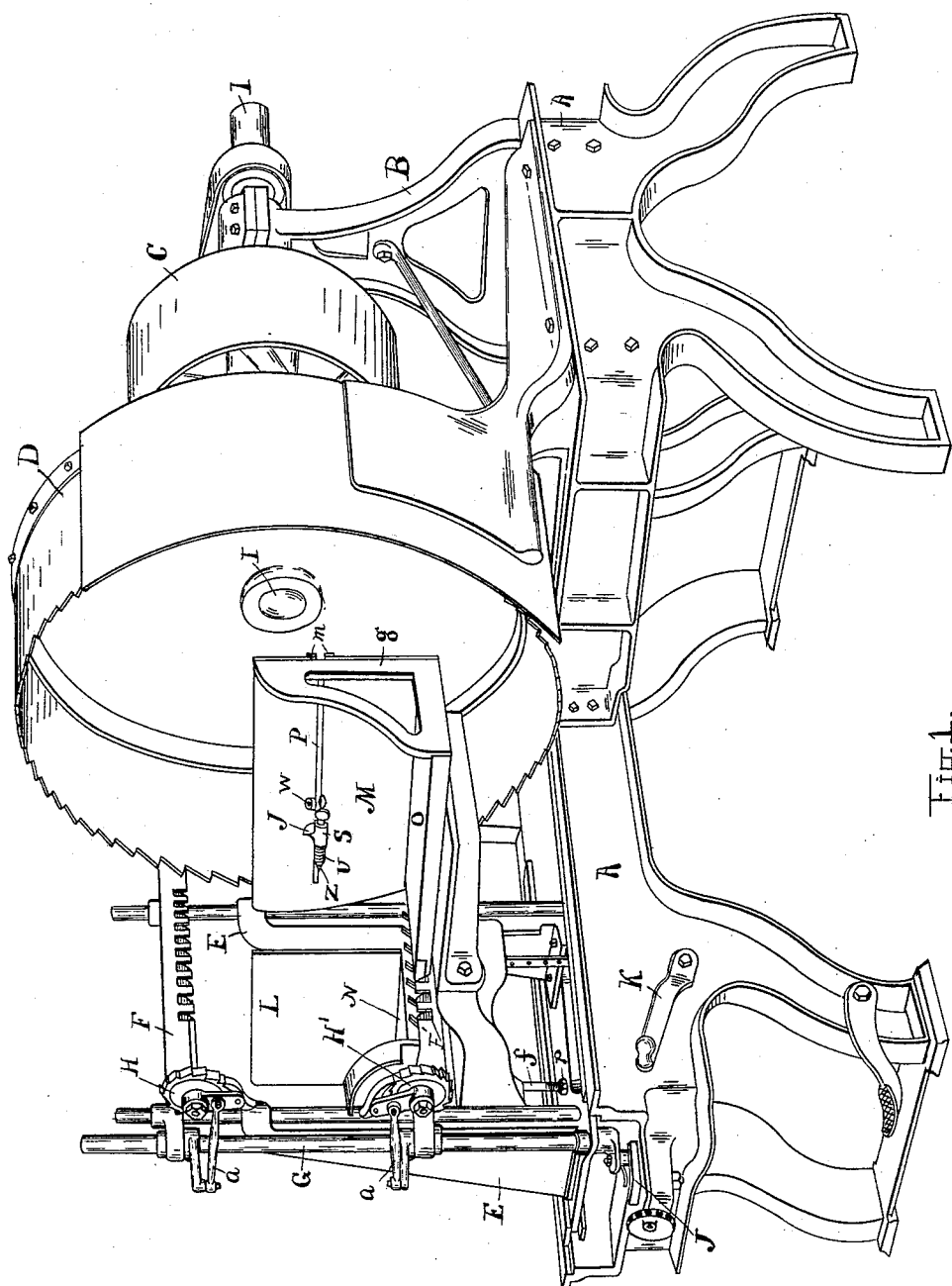


Fig. 1.

WITNESSES

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O. H. Kean

INVENTOR

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2 Sheets—Sheet 2.

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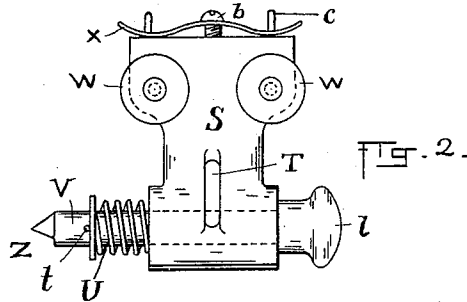
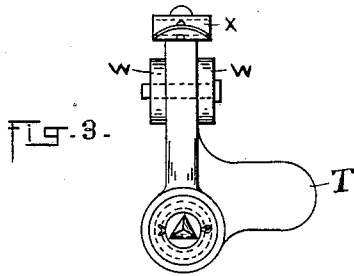


FIG. 4.

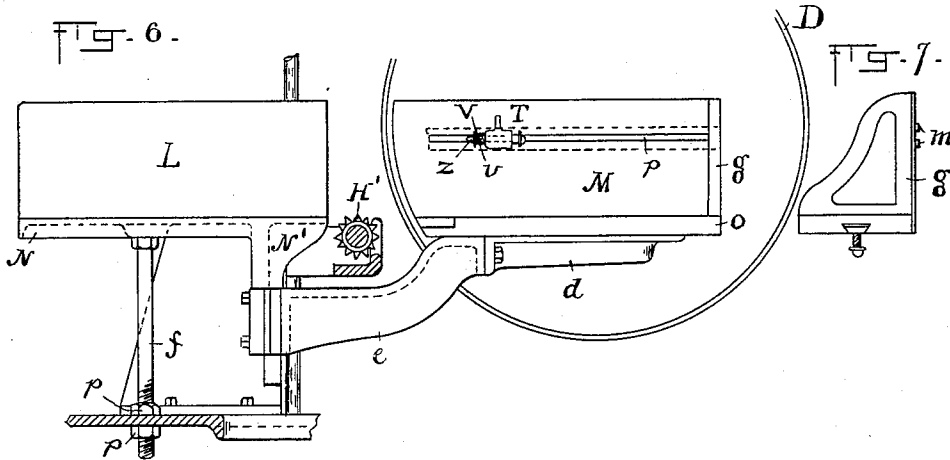
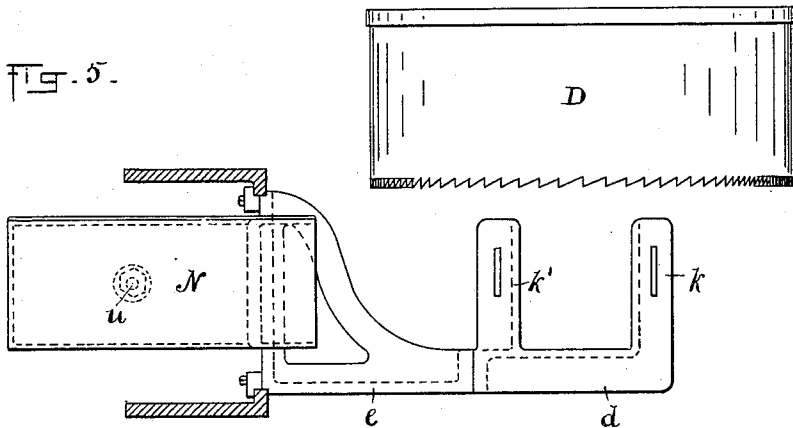
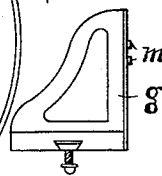


FIG. 7.



WITNESSES

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UNITED STATES PATENT OFFICE.

DENISON CHASE, OF ORANGE, MASSACHUSETTS.

SAWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 479,244, dated July 19, 1892.

Application filed May 26, 1891. Serial No. 394,218. (No model.)

To all whom it may concern:

Be it known that I, DENISON CHASE, of Orange, in the county of Franklin and State of Massachusetts, have invented certain new and useful Improvements in Sawing-Machines; and I do hereby 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.

My invention relates particularly to that class of saw-machines in which a barrel-saw is used and which is employed for sawing chair-backs. It is, however, adapted for use in shingle-machines and in all machines for sawing slabs.

The invention consists of means for holding together the chair-backs as they are sawed from the block until the block is sawed up, so that they will be ready for packing when taken from the machine. Heretofore it has been customary to allow the chair-backs to fall from the machine in a pile as they are cut from the block, in consequence of which considerable labor and time was required to pick them up and arrange them compactly for transportation. This is obviated by my invention.

The machine employed by me to illustrate my invention is the same in most respects as that described in Letters Patent issued to me and William L. Chase for a machine for sawing shingles, dated February 19, 1889, and numbered 398,230.

In the present machine I have substituted a barrel-saw for the circular saw and have mounted the saw upon a shaft journaled at right angles to the shaft in the former machine and have attached to it the parts which constitute the chief features of my invention, hereinafter described.

Figure 1 is a perspective view of a barrel-saw machine with my attachment. Fig. 2 is a top plan view of my invention. Fig. 3 is a side elevation of the same. Fig. 4 is a top plan view of the barrel-saw. Fig. 5 is a top plan view of the support for the block and of the frame which supports the box. Fig. 6 is a front elevation of the machine with parts removed, showing my invention. Fig. 7 is an end view of the box to receive the chair-backs.

A is the supporting-frame of the machine,

to which are bolted uprights B. The saw-shaft I is journaled in the uprights B and carries a barrel-saw D of the usual construction for sawing chair-backs and similar articles. The carriage is constructed like and operated in precisely the same way as that described in my Letters Patent No. 398,230, to which reference may be had for a description of all the parts of the machine not particularly described herein.

L N represent the support for the block while it is being sawed. The bottom N of the support is preferably made of cast-iron, and is secured to the top of the rod *f*, which may be raised or lowered by means of the nuts *p*, as shown in Figs. 1 and 6. The purpose of this adjustment is to present blocks of different thicknesses to the saw at the proper cutting-point. The back L of the block-support is preferably made of sheet-steel and bolted to the bottom N at a right angle. The bottom N has a downward extension N', to which are bolted castings *d e*, which constitute the frame for supporting the box. The bottom O of the box is preferably made of cast-iron, the back M of sheet-steel, and the end *g* of cast-iron, as shown in Figs. 1 and 7. The box is bolted to the frame *d e* through the slots *k k'*. By means of these slots the box may be adjusted horizontally. In the back M of the box is a horizontal slot P, in which the sliding piece S travels. The front portion of the sliding piece S forms a horizontal cylindrical bearing for the rod V, having a sharp point Z at one end, and a knob *l* at the other. The sliding piece S is held in place by the rollers W W bearing upon the inside of the box and by the spring X bearing upon the outside of the box. On the edges of the slot P on the back of the box are ribs *m m*, on which the ends of the spring X bears. On the rod V is a coiled spring U, which is compressed between the pin *t* on the rod and the end of the sliding piece S.

The operation of the machine is as follows: After the block is placed in the machine and secured between the teeth in the set rollers F F' the point of the rod V is thrust into the block by striking against the projection T. The machine is then started in motion and a chair-back sawed from the block, which is sustained in an upright position by the point

Z, until the carriage has retracted and the saw is withdrawn from the block. During this time the coiled spring U is compressed. When the carriage has withdrawn the block
5 from the saw, the coiled spring U forces the point Z forward, and thereby closes the opening made by the saw, so that the chair-back is held firmly against the block. The block
10 is then fed forward a distance equal to the thickness of a chair-back by means of the cam J, rod G, links *a a*, and their connections to ratchets H H', precisely as described in my said former patent, No. 398,230. The
15 chair-backs which have been cut from it are held firmly together in an upright position in the box, and the sliding piece S recedes gradually as the block is fed forward by the set-rollers F F' and their connections. When the
20 block is entirely sawed up, the chair-backs are packed closely together and are ready to be placed in the crate for shipment.

What I claim as my invention is—

1. In a saw-machine, a box to receive the chair-backs or other articles as they are cut
25 from the block, in combination with a sliding

piece S, forming a bearing for a rod V, provided with a sharpened point and being normally thrust forward by a coiled spring U, said piece S sliding in a horizontal slot P in the back of said box and receding under
30 pressure from the block as it is fed forward, substantially as described.

2. In a saw-machine, a box to receive chair-backs or other articles as they are cut from the block, in combination with a sliding piece
35 S, forming a bearing for a rod V, provided with a sharpened point and being normally thrust forward by a coiled spring U, said piece S sliding in a horizontal slot P in the back of said box and having rolls W W bearing upon
40 the inside of said box, and a spring X, bearing upon the outside thereof to sustain the sliding piece S in position, substantially as described.

Dated May 7, 1891.

DENISON CHASE.

Witnesses:

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ELISHA S. HALL.