E. C. DICEY.

LATH-MACHINE.

No. 189,613. Patented April 17, 1877.

Fig: 1.

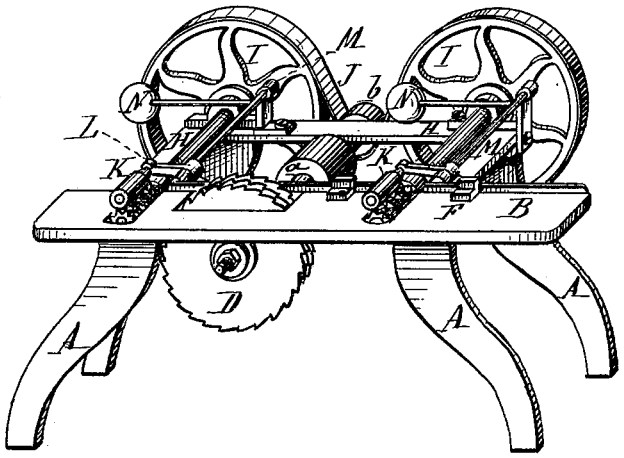


Fig: 4.

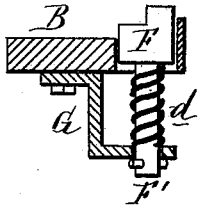
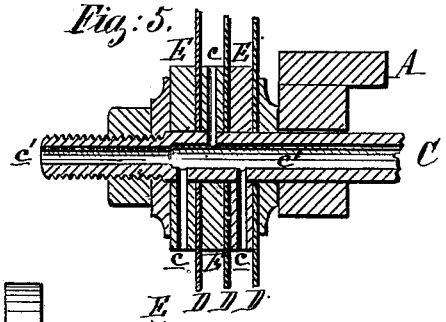


Fig: 5.



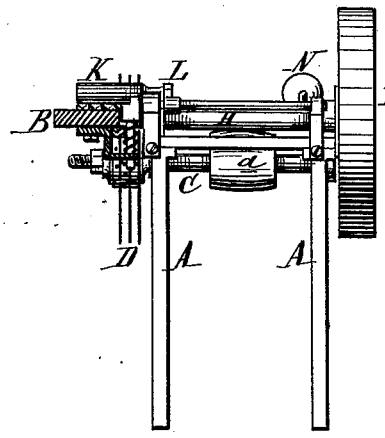


Fig: 2.

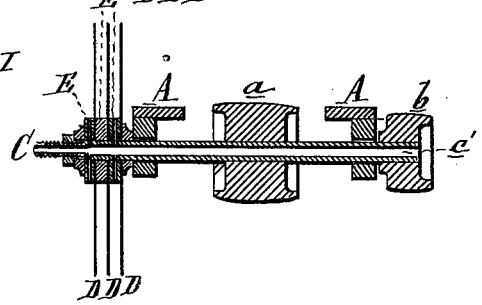


Fig: 3.

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UNITED STATES PATENT OFFICE.

ELMER C. DICEY, OF GRAND HAVEN, MICHIGAN.

IMPROVEMENT IN LATH-MACHINES.

Specification forming part of Letters Patent No. **189,613**, dated April 17, 1877; application filed November 23, 1875.

To all whom it may concern:

Be it known that I, ELMER C. DICEY, of Grand Haven, in the county of Ottawa and State of Michigan, have invented an Improvement in Lath-Machines, of which the following is a specification:

The first part of my invention relates to the combination, with the saw-table, of a spring-guide, by means of which the sawyer can so present the bolt to the saws as to have the latter cut one, two, or three laths from its edge.

The second part of my invention relates to the peculiar construction of the press-rolls, as more fully hereinafter set forth.

Figure 1 is a perspective view of the machine. Fig. 2 is an end elevation; Fig. 3, a cross-section of the frame, saws, collars, and pulleys, taken through the center of the arbor. Fig. 4 is an enlarged sectional elevation of the spring-guide and its supporting-bracket. Fig. 5 is an enlarged section of the hollow arbor, collars, and saws.

In the drawing, A represents the main frame, to one side of which the saw-table B is attached. C is a hollow arbor, transversely journaled in the frame, and extending across the under side of the saw-table. It is provided with a driving-pulley, *a*, and a second or feed pulley, *b*. D D D are circular saws, mounted on the arbor, separated from each other and from the outer clamping-collar by gage-collars E E E, in each of which is drilled an aperture, *c*, to communicate with the bore *c'* of the hollow arbor.

When in operation, air will be drawn through the hollow arbor, and discharged through the apertures in the gage-collars, whereby the latter and the centers of the saws will be kept cool, the latter being very liable to heat and "buckle" from friction with the kerf while sawing.

F is a gage, made with two steps on its upper surface, each the width of the thickness of a lath, and it projects up through a slot in the table, close to the guide on the inner edge of the latter, and in front of the first feed-roll. There is a shank, F', pendent from this gage, which plays through an opening in an angular guide-bracket, G, on the under side of the table. A spring, *d*, spirally coiled about the shank, is interposed between the bracket and the guide, to throw the latter up above the table-top. In the position shown, the side of the guide F serves as a gage for a bolt to be so presented to the saws as to have but one lath cut from it. If two laths can be cut from it, the bolt is laid on the first step, the side of the second serving as a gage to present the bolt to two of the saws. If three laths can be cut from it, the bolt is laid on top of the said guide, which is depressed to the plane of the table by the weight of the bolt, which is laid alongside the table-gage and presented to all three of the saws.

H H are the feed-roll shafts, journaled across the frame, each carrying one of the V-grooved feed-rolls shown and described in the Letters Patent issued to me October 13, 1868. At the back end of each there is a pulley, I, around which passes a belt, J, passing also under the pulley *b* of the arbor, to rotate both rolls in the same direction.

K K are the press-rolls, each sleeved on a crank-arm, L, keyed on a shaft, M, journaled across the main frame. To the shaft M is secured a weighted lever, N.

By this arrangement the requisite pressure on the bolt is secured in the simplest and cheapest manner, and the press-rolls may be raised up by simply throwing over the weighted levers.

I am aware that a hollow saw-mandrel, in combination with perforated collars, said perforations to connect with the hollow in the mandrel, have been used with a circular saw, for the purpose of cooling or keeping the saw cool by forcing cool air or other cooling substance upon the sides of the saw, as such device is seen in the patent granted to E. P. Cavett, January 19, 1858. I therefore do not claim, broadly, for such device, as the same is in public use; but,

Having thus described my machine, what I claim as my invention, and desire to secure by Letters Patent, is—

1. In a gang lath mill, the combination, with the table B and the bracket G on the under side of said table, of the step-guide F, having two steps on its upper surface, and a shank, F', playing in the said bracket G, and a spiral spring, *d*, placed around said shank, between

it and the head of the step, all substantially as described and shown.

2. The press-rolls K, arms L, shafts M, and weighted levers N, in combination with the frame and feed-rolls of a lath-mill, substantially as described.

3. In a gang lath mill, the combination of the hollow mandrel C, perforated gage-collars E E E, gang-saws D D D, and V-shaped feed-rollers on shafts H H, constructed to operate substantially as and for the purposes described.

ELMER C. DICEY.

Witnesses:
WM. H. LOTZ,
WM. G. HOFFMANN.