

Walter B. Noyes' Lath Machine.

PATENTED JAN 18 1870

98996

Fig. 1.

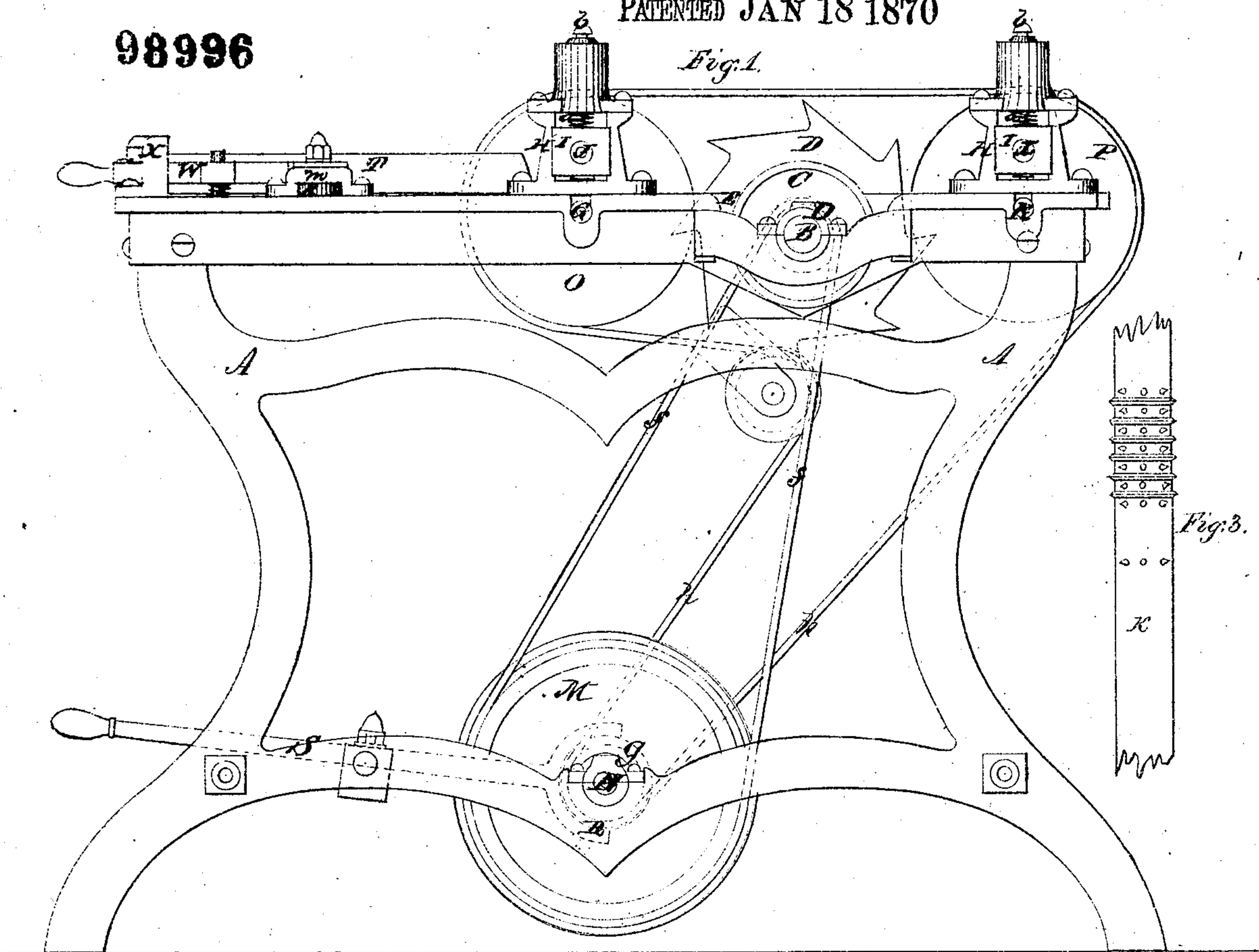


Fig. 3.

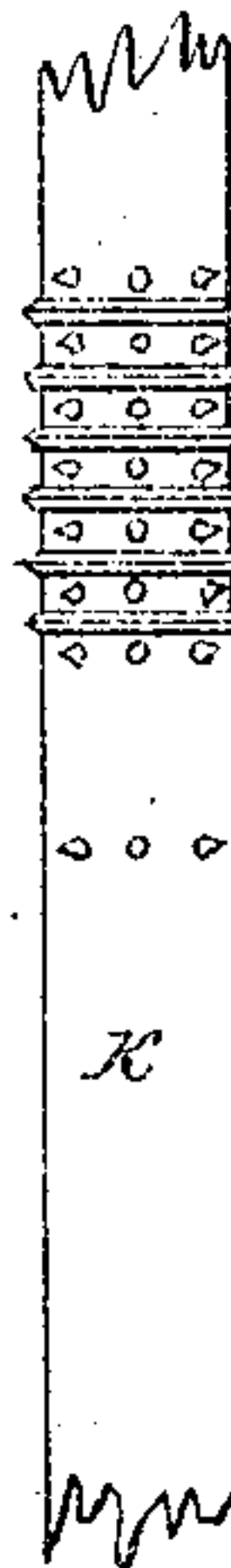
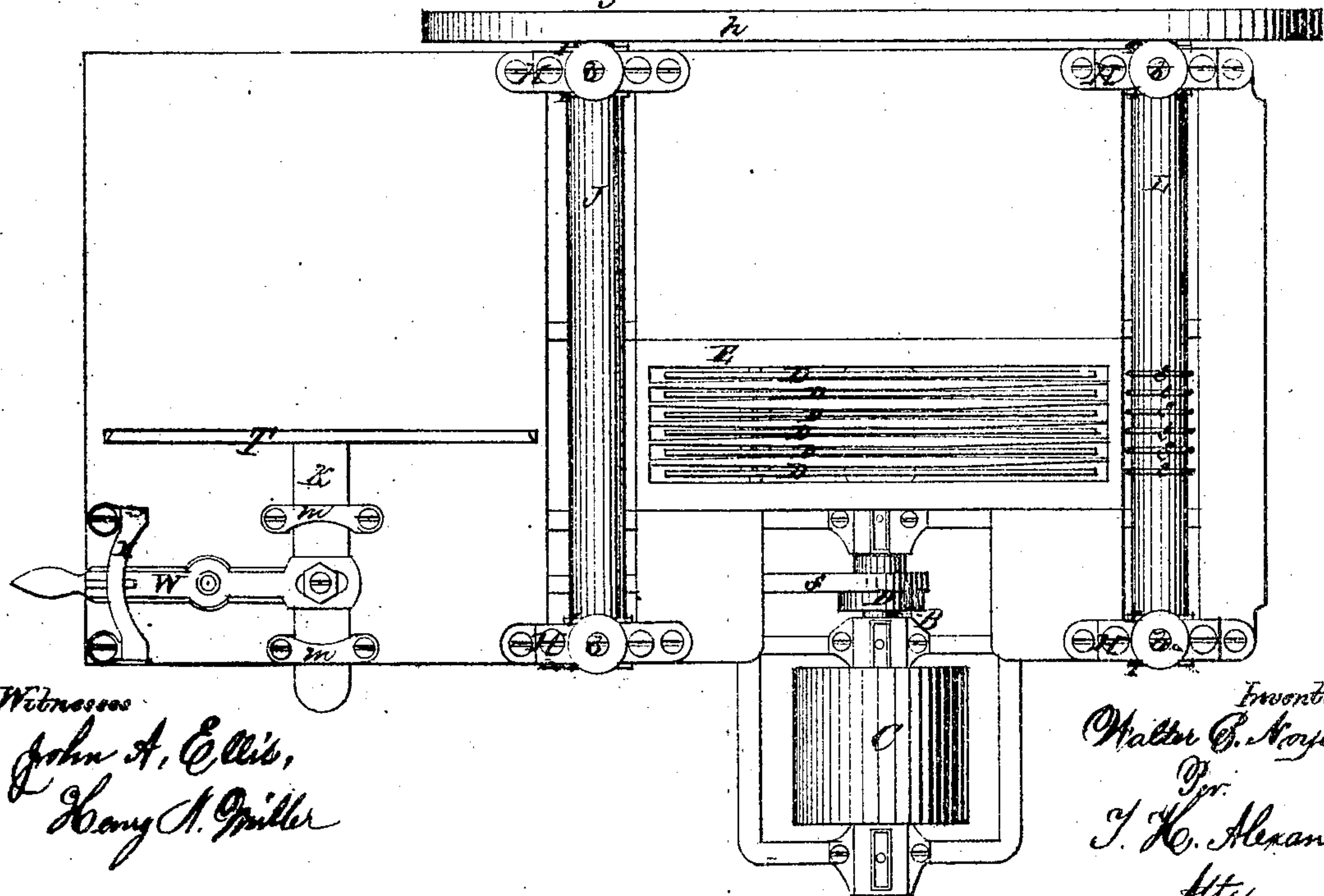


Fig. 2.



Witnesses

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WALTER B. NOYES, OF MANCHESTER, NEW HAMPSHIRE, ASSIGNOR TO HIMSELF AND C. S. BAKER, OF SAME PLACE.

Letters Patent No. 98,996, dated January 18, 1870.

IMPROVEMENT IN LATH-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, WALTER B. NOYES, of Manchester, in the county of Hillsborough, and State of New Hampshire, have invented certain new and useful Improvements in Lath-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and general arrangement of a "lath-cutting machine," by which a series of laths may be cut from one piece of lumber at the same time.

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side elevation, and

Figure 2, a plan view, and

Figure 3 is a view of the under roller, showing its flanges and projections.

A represents the frame of the machine, made of any suitable size and height, such that the operator can stand alongside of the same, and feed the lumber on the top.

Immediately under the top of the frame A, in suitable journal-boxes, runs the main shaft B, said shaft extending on one side beyond the frame, and is at this end provided with a pulley, C, which, by a belt or other suitable means, is connected with the engine or motive-power.

Upon the shaft B is keyed a series of saws D D, placed at regular intervals, and projecting through the table or top of the frame.

This portion E of the saw-table is slotted or provided with a series of slots, at equal distances apart, through each of which one of the saws D passes.

Directly in front of the saws D D, and in suitable journal-boxes in the sides of the frame A, is placed a shaft or roller, G, which runs transversely across the frame, and projects the least possible distance above the upper surface of the top of the frame, through a slot in the same. The roller or shaft G is corrugated longitudinally, for a suitable distance around its entire surface, forming sharp edges or teeth for the purpose of catching and feeding the board, from which the laths are to be cut, to the saws.

Above the journals of the roller G are vertically-slotted standards H H, in which are placed boxes I I, forming the bearings for another roller J, which runs above and parallel with the corrugated roller G.

The journal-boxes I I are pressed downward by spiral springs a a, operated upon by set-screws b b, in such a manner that the roller J can by this means be placed as close as necessary to the roller G, and still

yield sufficiently for the lumber to pass between said rollers, the upper roller pressing the lumber against the sharp edges on the lower roller, so that when said lower roller G revolves, it may carry the board along with it. It will readily be seen, that by this means the rollers can be adjusted to any thickness of lumber.

In like manner are placed in rear of the saws D D, two rollers, K and L, between which the laths, when cut, or as they are being cut, are carried out.

Both of these rollers are provided with series of circular flanges, e e, placed at equal distances apart, and directly in rear of the saws; that is, each flange on the lower roller K, is directly in rear of one of the saws, and the flanges on the upper roller L are directly above the lower ones, so that as the board is cut into laths, and passes in rear of the saws, each lath will pass in between two of these flanges on each roller.

Between the flanges on the lower roller K, are sharp-pointed projections i i, which, as the roller revolves, catch in the lath and carry it along.

The rollers G and K are revolved in the following manner:

Upon the main or saw-shaft B is a pulley, d, which, by a belt, f, is connected with a wheel, M, on a shaft, N, in the lower part of the frame A.

The shaft N is provided with a pulley, g, which, by a belt, h, is connected with the wheels O and P, upon the ends of the rollers G and K respectively, and thus the required rotary motion is communicated to said rollers.

The wheel M is placed loosely upon the shaft N, and a feathered collar, R, is thrown in and out of gear with the same, by means of the pivoted lever S, so that the operator can at any time stop the motion of the feeding-mechanism without stopping the motion of the saws.

Upon the table or top of the frame A is placed a guide, T, against which the board is laid before being caught by the feeding-roller G.

This guide is adjustable, it being provided with an arm, k, which moves in loops m m, as seen in fig. 2.

Upon a pin on the top of the frame A is pivoted a lever, W, the inner or rear end of which is provided with an elongated slot, and passed over a pin or bolt on the arm k, by which means the sliding guide T can be moved out or in at pleasure.

A spring, placed under the lever W, presses its outer or front end against a rack-bar, X, under which it passes, so as to hold the lever at any point desired.

The saws D D are all keyed firmly on a line on the shaft B, and their teeth are arranged, as shown in the drawing, even or on a line, so that they can be filed at the same time, without removing the saws from the shaft, or removing the shaft from its bearings.

In the slots, upon the portion E, of the frame A, are

Placed suitable projections, which form guides between which the-saw teeth pass, so as to preserve their edges, and prevent them from bending.

Having thus fully described my invention,

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

1. The roller K, constructed as described, with flanges *e e* and projections *i i*, and operating in combination with the flanged adjustable yielding roller L, substantially as and for the purposes herein set forth.

2. The adjustable sliding guide T, operated by means

of the arm *k*, loops *m m*, lever W, and rack-bar X, substantially as and for the purposes herein set forth.

3. Frame A, saws D D D, shafts B D J, corrugated roller G, rollers or shafts K and L, when all are constructed and arranged to operate as and for the purpose set forth.

In testimony that I claim the foregoing as my own, I affix my signature, in presence of two witnesses.

Witnesses: WALTER B. NOYES.

T. H. ALEXANDER,

W. F. MCCHESENEY.