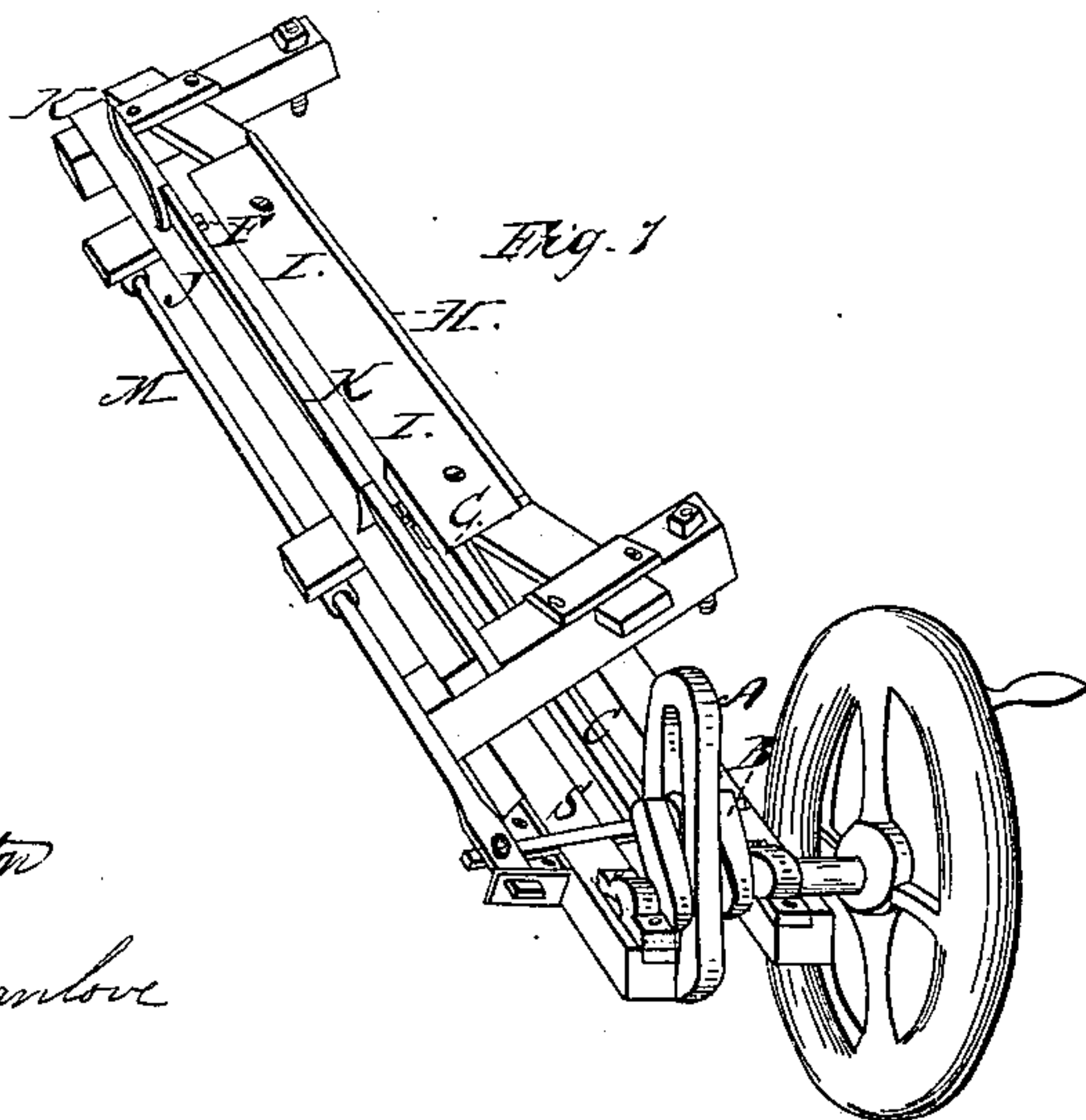
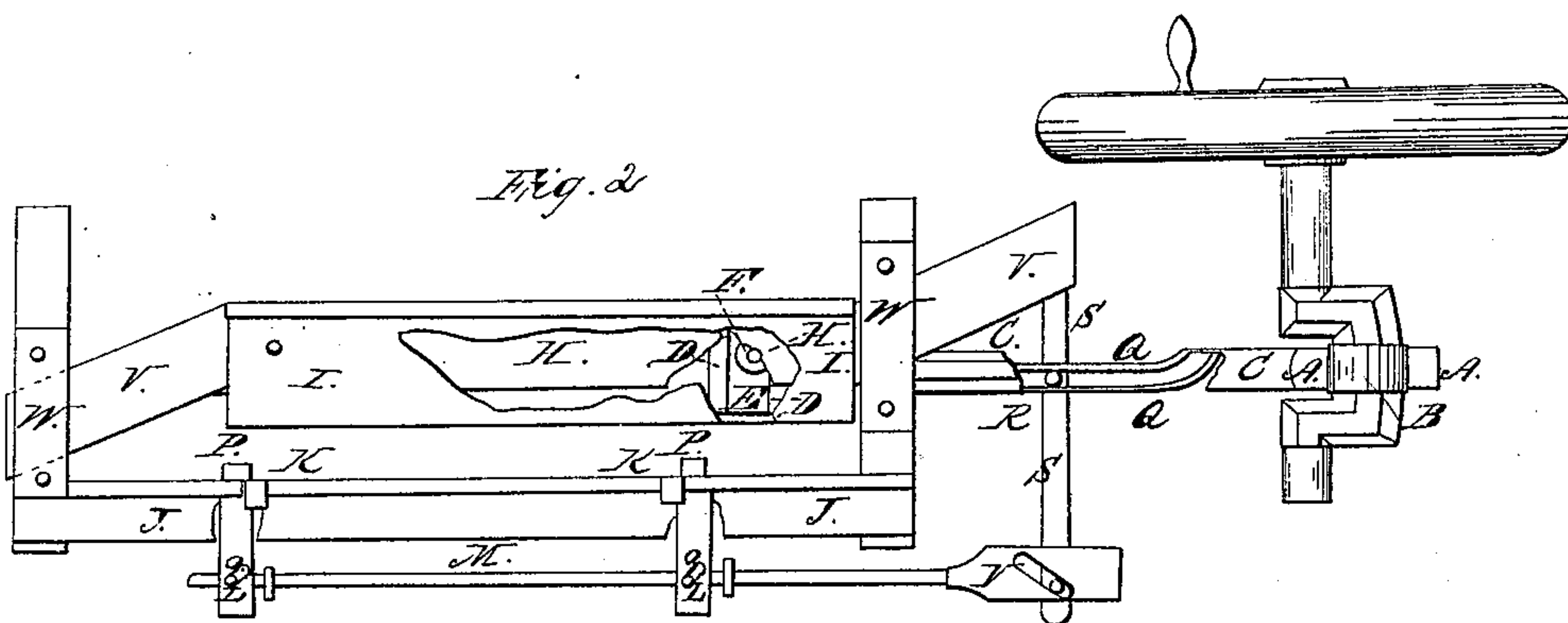


J. H. & A. E. Redstone,

Making Laths.

N^o 26,125.

Patented Nov. 15, 1859.



Witnesses

G. H. Canington

Wm. R. Manlove

Inventor

John H. Redstone

Albert E. Redstone

UNITED STATES PATENT OFFICE.

JNO. H. REDSTONE AND A. E. REDSTONE, OF INDIANAPOLIS, INDIANA.

LATH-MACHINE.

Specification of Letters Patent No. 26,125, dated November 15, 1859.

To all whom it may concern:

Be it known that we, JOHN H. REDSTONE and ALBERT E. REDSTONE, both of Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Lath-Machines, of which the following is an exact description, reference being had to the accompanying drawings and the letters marked thereon.

Figure 1 is a perspective and Fig. 2 a sectional view showing the construction and operation of the machine.

B, represents an eccentric which operates the yoke A, A, to which is attached the sliding bar C, C, on the end of which is the projection D, D, in which is the yoke or groove E, the sides of which serve as bearings for the friction roller F, which is attached to the knife plate H, H, by the pin G, upon which it revolves.

J, J, is the bench or bearing under which the knife I, I, is passed when cutting.

K, and K, are standards which support the lumber while the same is being cut.

P, and P, are rests in which are the slots O, and O, in which the pins L, and L, are operated by the rod M, to which they are attached.

S, S, is a slide or bar which operates the bar M, by means of the pin T, which works in the slot Y, the slide S, S, is operated by the roller R which operates between the guides Q, and Q, which are attached to the sliding bar C, C. The knife guides or slides V, and V, operate in the boxing W, and W.

The following is the operation of the machine: As the lumber is placed in the same in front of the standards K, K the edge of the same lies upon the rests P and P. As the yoke A, A, is operated by the eccentric B, forcing the knife plate H, H, forward by means of the sliding bar C, C, a side motion is given to the knife by the angular guides or slides V, and V, which operate in the boxing W, W, while the roller F operates in the groove or yoke E, allowing the knife to pass through the lumber and under the bench J, J. At the proper time the crank or eccentric B, being thrown forward the roller R is passed by the guides Q and Q until the curves in the same reach it, when it draws up the slide S, S, which operates the bar M, by means of the slot and pin Y, and T, withdrawing the same. The pins L, L, upon the bar M, operating in the slots O, O, withdraw the rests P, P, as the

bar M, is drawn back. It will be seen by this arrangement that the time for operating the rests P, and P, and the extent to which they are drawn out is wholly governed by the guides Q, Q, and that by the use of the slots O, O, and Y, the motion is not varied, which is imparted by the guides Q, and Q.

The object sought in the construction of this machine is the construction of one which while it combines the necessary strength may be furnished at a price which will place it into the hands of those who use the article of lath, while at the same time we produce a superior article of lath, which will be seen when its advantages are fully set forth. The operation of the rests is such that they remain motionless under the plank until the knife engages the same for the purpose of severing the lath when it is withdrawn for the purpose of discharging the same and returns to a state of rest in time to receive the bolt as it drops from the knife. This is important where the lumber is fed to the knife by its own weight and lies loosely upon the rests, thereby insuring a uniform lath which is never the case where the rest is allowed to move and displace the board. Our knowledge in relation to this fact is the result of experiment having seen the same thoroughly tested. The great advantages which we claim to have gained are seen in the fact that we are able to construct a machine using only one fourth the amount of metal necessary in the construction of any other machine which performs the same amount of work. This is accomplished by the manner in which the power is applied to the knife plate, being in a direct line with same and with the length of the machine, causing no top, bottom or side strain either to the knife plate or to the frame of the machine. The common crank attachment would and does produce an angular strain corresponding to the sweep of the crank above, below or aside from the line of the knife plate. When the crank or fly wheel shaft is operated at an angle from or in direct line with the machine the machine must be made stronger or it will be readily seen that where the knife is engaged in cutting the lath there being a heavy strain the machine is twisted with the whole force of fly wheel, this being effected while the lath is cutting and slacking or giving back as soon as the same is cut produces a vibration

which if the machine be strong enough to stand the strain of without actual breakage soon racks it to pieces. The danger of this it will be readily seen is entirely avoided in
5 the construction of this machine.

Therefore, what we claim and desire to secure by Letters Patent is—

1. Operating the knife plate H, H, by the sliding bar C, C, and groove or yoke E in
0 combination with the roller F when attached

to the knife plate H, H, substantially as set forth.

2. The guides Q, and Q, roller R, slide S, S, pins T, L, and L, and slots Y, O and O, where combined and operated as set forth.

JOHN H. REDSTONE.

ALBERT E. REDSTONE.

Witnesses:

G. H. HARRINGTON,

W. R. MANLOVE.