

J. H. RICE.

Improvement in Shingle Machine.

No. 123,048.

Patented Jan. 23, 1872.

Fig. 1

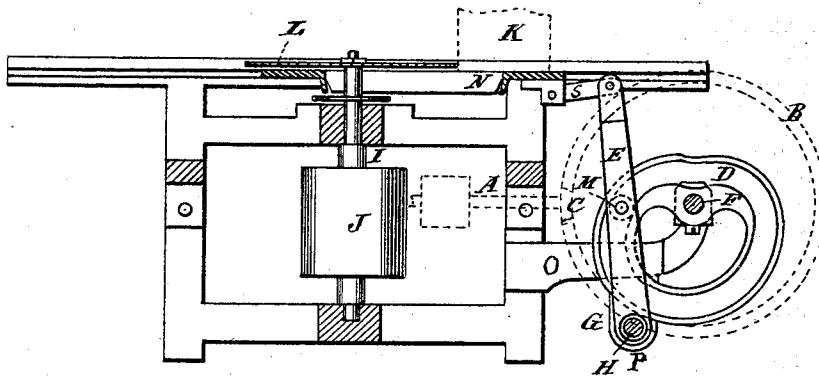
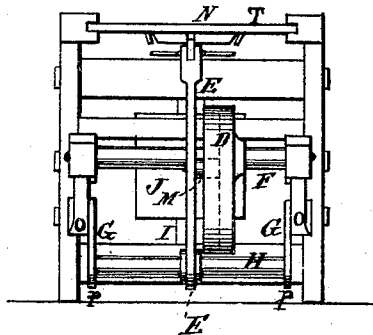


Fig. 2



Witnesses.

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JOHN HENRY RICE, OF OSHKOSH, WISCONSIN.

IMPROVEMENT IN SHINGLE-MACHINES.

Specification forming part of Letters Patent No. 123,048, dated January 23, 1872.

To all whom it may concern:

Be it known that I, JOHN HENRY RICE, of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented a new and useful Improvement in Shingle-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a sectional elevation of a shingle-machine, showing the application of my improvements; and Fig. 2 is an end elevation of the same.

Similar letters of reference denote corresponding parts in the several figures of the drawing.

My invention has for its object to improve the means for operating the sliding carriage of a shingle-machine; and to this end it consists in the combination of an oscillating lever and a connecting-rod with a rotating double cam and the sliding carriage of the machine, whereby the irregular jarring movement of the carriage, as ordinarily operated, is effectually overcome.

I do not claim broadly the application of a double cam and lever to a shingle-machine for the purpose of operating the bolt-carriage, as I am aware that this is not new. My invention consists more particularly in the combination of these parts in connection with the connecting-rod, by which the motion is communicated from the cam to the bolt-carriage, as I will now proceed to describe.

The accompanying drawing represents one-half of a "Valentine shingle-machine," called a "double-block machine," the other half being the counterpart of that represented. My im-

provements are shown applied to this machine, though they are, of course, applicable to machines of a different construction.

L is the saw resting upon a plate or disk at the top of a vertical arbor, I. A is a horizontal driving-shaft, terminating at either end with a pinion, as at C, which drives the bevel-wheel B, this being keyed to the shaft F, having its bearings in the brackets O affixed to the end of the machine. D is a double cam mounted upon the shaft F between the brackets. Motion is imparted to the cam by the driving-shaft C, through the medium of the beveled wheel B and shaft F. E is an oscillating lever having a central bolt and nut, M. The lower end of the lever turns freely upon a shaft, H, as a fulcrum, which shaft is affixed to hangers P, depending from the lower edges of the brackets O. On the bolt, at M, is placed a thimble, which fits with easy contact within the groove of the cam. The upper end of the lever E is connected by a rod, S, with the carriage T, upon which the shingle-bolt K is placed. As the cam is rotated the lever E oscillates upon its shaft, imparting a slow, steady, forward movement to the carriage for cutting the shingles from the bolt and a quick backward movement after the shingles are cut.

Having thus described my invention, what I claim is—

The upright oscillating lever E and the connecting-rod S, in combination with the double cam D and bolt-carriage T, as herein shown and described, for the purpose specified.

JOHN HENRY RICE.

Witnesses:

C. N. DAVIS,
E. C. BURGESS.