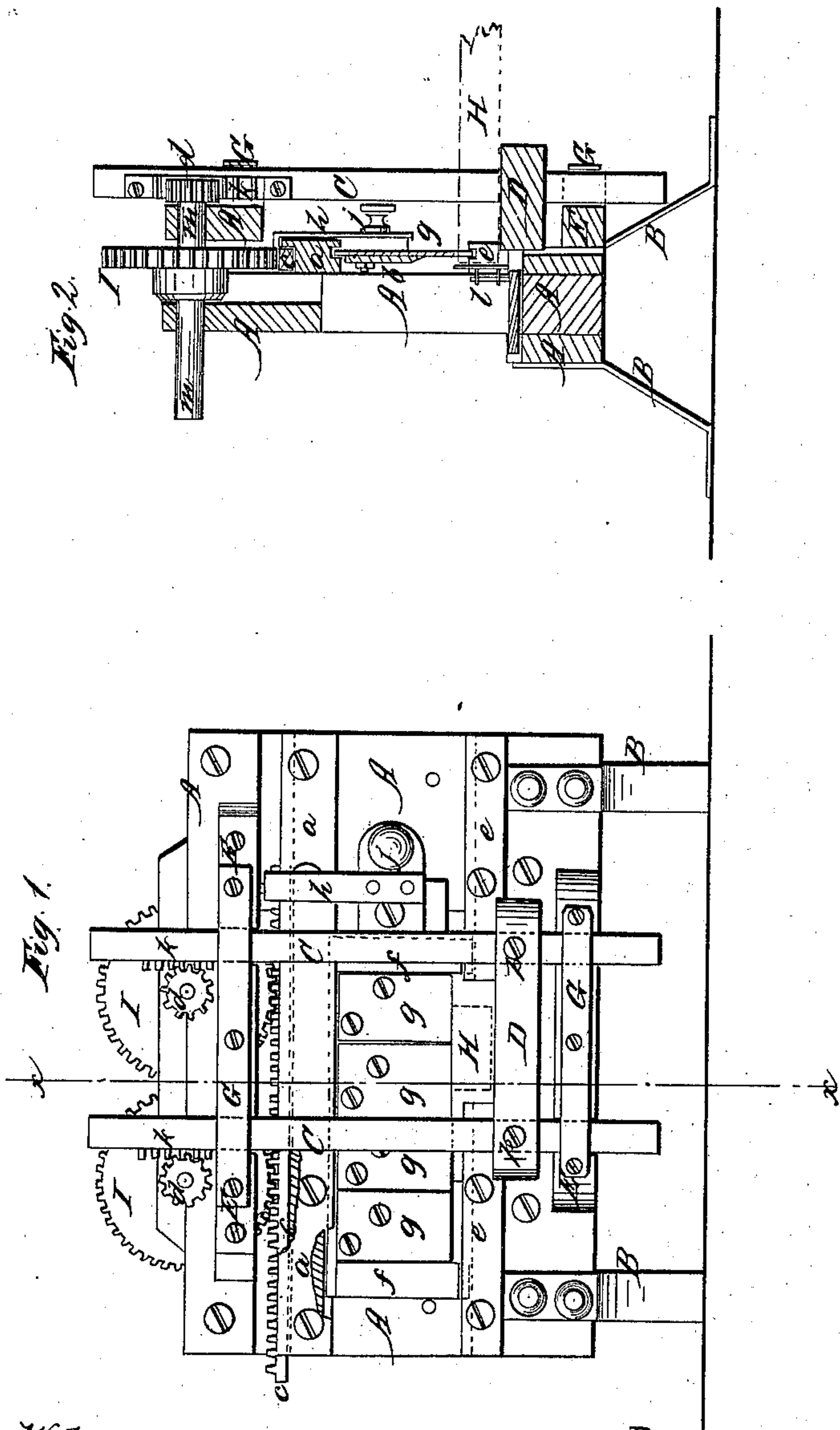


L. Jennings,
Cutting Shingles.
N^o 78,744. Patented June 9, 1868.



Witnesses
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LYMAN JENNINGS, OF WINCHENDON, MASSACHUSETTS.

Letters Patent No. 78,744, dated June 9, 1868.

IMPROVEMENT IN SHINGLE-MACHINES.

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, LYMAN JENNINGS, of Winchendon, in the county of Worcester, and State of Massachusetts, have invented a new and useful Improvement in Shingle-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a front view of my improved machine.

Figure 2 is a vertical cross-section of the same, through the line *x x* of fig. 1.

Similar letters of reference indicate like parts.

This invention consists in the horizontal action of the cutter and elevating-block rest, together with the mechanism conducting to the operation of the same, as will hereinafter be fully set forth.

In the machines heretofore made, the cutter operated with an oblique or shear cut, which was disadvantageous in many respects.

In my improved machine the knife slides horizontally, keeping the edge of the knife in the same line, and the block-rest is made to rise and bear the shingle against the cutter in an even and equable motion, which conduces to the production of good work.

In the accompanying plate of drawings the general frame of the machine is shown at *A A A*, &c., and upon which the mechanism is affixed. This frame is supported upon legs *B B*.

The cutter is composed of several separate parts, *g g g*, &c., which are bolted to a back plate, *b*, as shown, the said back plate sliding in a grooved metal bar, *a*, which is bolted horizontally across the frame *A*, as shown. The upper edge of the back plate is held in the said groove by means of vertical guide-bars *ff*, at each end of the cutter, and which are bolted to the back plate. The lower ends of these bars slide in a grooved bar, *e*, which is bolted to the frame *A*, and is parallel with the bar *a*. The back plate *b* is connected with a rack, *c*, which slides with easy contact within a groove in the upper face of the bar *a*, as shown. The arm *h* which connects the back plate with the rack is bolted to both, and is bent over and upon the rack, as shown.

The pitman or connecting-rod which actuates the cutter to and fro, is in practice connected with a strap-joint to a wrist-pin, projecting from the back plate, as represented by the knob *j*.

The block-rest *D* is moved up and down with a reciprocating motion by means of the pinions *d d*, which engage with the rack-teeth *k k* affixed to the lifting-uprights *C C*, as shown. These uprights pass through mortises in the block-rest *D*, and are held there by screw-bolts *p p*, as shown.

Guide-blocks *E E*, having recesses and plates *G G*, serve to keep the racks *k k* engaged with the pinions. These guide-blocks are bolted to the frame *A* in any suitable manner. The pinions *d d* are upon the same shafts *m m* as the cog-wheels *I I*, which latter engage with the rack *C*, and are thereby rotated when the cutter is drawn to and fro. The shingle-block is shown in red at *H*. The gauge *l* is of the usual construction.

When the cutter is drawn to and fro by any suitable application of power, the block-rest and block are drawn upward against the edge of the cutter, which slices off a thin portion suitable for shingles, bucket-bottoms, box-stuff, and the like. The block is fed into the cutter by hand.

This machine is easily operated, and cuts the wood in a more desirable manner than the shear-cut machines.

The cutter being composed of separate parts, *g g g*, &c., is expeditiously and cheaply repaired, by the removal of the grapple part and affixing another in its place. The first cost of the whole cutter when thus made is also less than one formed of one continuous piece.

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

The combination of the horizontally-sliding cutters *g g g* and the rack *c* with the wheels *I I*, pinions *d d*, racks *k k*, for operating the sliding block-rest *D*, as described.

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Witnesses:

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