

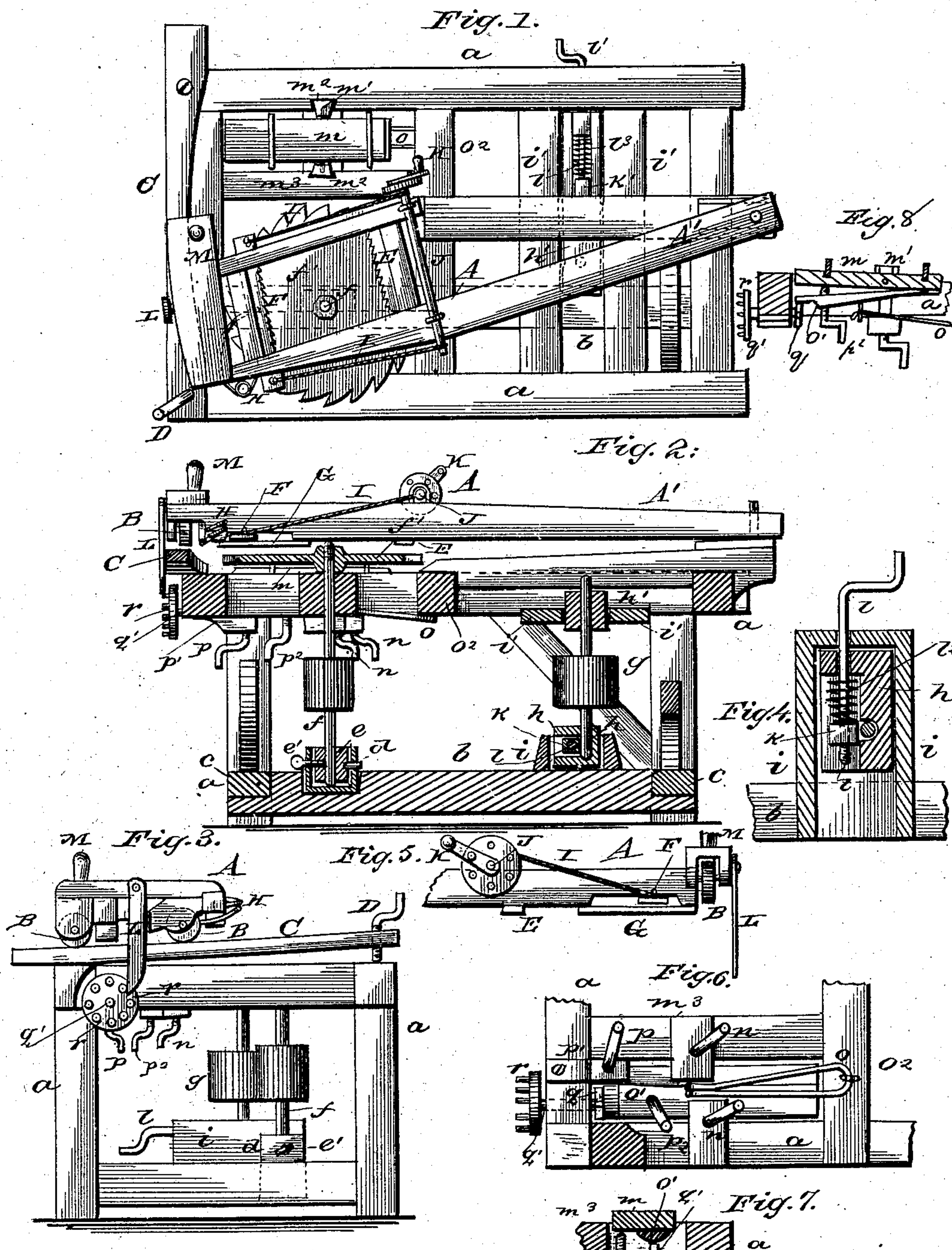
(No. Model.)

H. WRIGHT.


SHINGLE SAWING MACHINE.

No. 290,164.

Patented Dec. 11, 1883.



Witnesses:
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UNITED STATES PATENT OFFICE.

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SHINGLE-SAWING MACHINE.

SPECIFICATION forming part of Letters Patent No. 290,164, dated December 11, 1883.

Application filed July 28, 1883. (No model.)

To all whom it may concern:

Be it known that I, HEZEKIAH WRIGHT, a citizen of the United States, resident at Ava, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Shingle-Sawing Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of top view. Fig. 2 is a vertical section. Fig. 3 is an end view. Figs. 4, 5, 6, and 7 are detail views. Fig. 8 is a detail view of my device, showing the means for tilting the shingle-block holder.

This invention has relation to shingle-machines; and it consists in the construction and novel arrangement of devices, as will be hereinafter fully described, and particularly pointed out in the claim appended.

Referring by letter to the accompanying drawings, *a* designates the frame of the machine, provided with a bridge-tree, *b*, between its lower cross-rails, *c c*. A square box, *d*, is secured in a recess in the upper face of the bridge-tree *b*, near one end thereof, and within it is placed an adjustable seat, *e*, provided with a single set-screw, *e'*, for adjusting it. In this seat the lower end of the saw-arbor *f* is stepped, the saw *f'* being secured to the upper end of the arbor and revolving in a horizontal plane above the frame *a*.

g designates a tightening-pulley, placed near the other end of the frame, having its journal-bearings in sliding blocks *h* and *h'*, the former working in guides *i*, secured to the bridge-tree, and the latter in guides *i'*, secured to the under faces of the top rails of the frame *a*. The sliding blocks *h h'* are provided with internal nuts, *k* and *k'*, respectively, through which threaded crank-rods *l l'*, encircled by springs *l'' l'''*, work to adjust the sliding blocks and thereby tighten or loosen the pulley *g*, as may be necessary.

The saws used in this machine are made with gage No. 10 at and from the center out-

wardly ten and five-eighths inches, and thence tapered to gage 15 on the edges.

At the top of the frame, and at one side thereof in front of the saw, is a shingle-block bed, *m*, which is pivoted between two vertically-adjustable slide-arms, *m' m'*, working in ways *m'' m''* in the frame and the short rail *m'''*. These arms *m' m'* are adjusted and held by pinch-nuts or screw-cranks *n n*. A spring, *o*, is connected to a spring-piece, *o'*, on the under side of the shingle-block bed, to the right of the axial line of the pivotal points and extends to the left, and is connected to the under side of the central cross-beam, *o''*. This spring *o* is intended to hold the right-hand end of the bed *m* down upon the point of the screw-crank *p*, by which that end of the bed *m* is adjusted, the screw-crank *p* having its bearing in a threaded block, *p'*, extending inwardly from the end rail of the frame at the right-hand end of the frame.

A fourth screw-crank, *p''*, has its bearing in the spring-piece *o'*, near its right end, the point of the screw *p''* bearing against the under face of the bed *m*, for the purpose of adjusting the spring-piece *o'*, to cause its point to engage a four-point wheel, *q*, on the inner end of a shaft, *q'*, having bearings in the under face of the end rail at that end of the frame. On the outer end of the shaft *q'* is a wheel, *r*, having eight teeth. By adjusting the shingle-block bed *m* the thickness of the shingles may be regulated. The four-point and eight-toothed wheels, when operated, tilt the shingle-block bed *m* from butt to point, to give the required bevel to the shingles as they are cut from the block.

A designates the carriage, by means of which the shingle-block is fed to the saw. This carriage is pivoted by its arm *A'* to a stud at the left end of the frame *a*, and is provided at its other end with wheels *B B*, which travel on a flat track, *C*, at the right end of the frame *a*, said track *C* being adjusted vertically at its rear end by a crank-screw, *D*, so that the track may be given the necessary inclination from front to rear, to give the transverse incline to the surface of the shingle. The shingle-block is held in place in the carriage-frame by the dogs *E* and *F*, the former being stationary, while the latter slides in

ways G on the under face of the carriage-frame. A spring, H, holds the sliding dog F in its normal position at the right end of the carriage-frame, and straps I connect its ends
5 to a shaft, J, having bearings on the frame at the left end. This shaft J is provided with an adjustable crank, K, by which the shaft J is turned to draw the dog F into engagement with the end of the shingle-block. When the
10 shingle has been cut and the carriage returned to its place over the bed *m*, the dog E is released, the block drops on the bed *m*, which has been tilted by a pivoted dog, L, on the outside of the end rail of the carriage, engag-
15 ing one of the teeth of the eight-toothed wheel *r*, and thereby turning the four-point wheel *q*, which alternately engages the point of the spring-piece *o'* and a recess, *o''*, therein, so that the ends of the bed *m* are alternately elevated
20 and depressed, which operation causes the butts of the shingles to be cut alternately from opposite ends of the shingle-block, thereby making a considerable saving in the amount of timber used over the waste entailed where
25 the butts are all cut from one end of the shingle-block.

A handle, M, is provided at the front of the

end rail of the carriage, by which the carriage is made to travel back and forth in its track.

Having thus fully described my invention, 30 what I claim as new, and desire to secure by Letters Patent, is—

In a shingle-machine, the combination, with the frame *a*, of the vertically-adjustable shingle-block bed *m*, pivoted between its adjust- 35 ing slides, and provided with a pivoted and recessed spring-piece, *o'*, of the spring *o*, the four-point wheel on the shaft *q*, the eight-toothed wheel on the outer end of said shaft, operated by the pivoted dog L on the car- 40 riage-frame to tilt the bed *m* alternately, the dogs E and F, the latter being provided with a retracting-spring and connected by straps to the rotary shaft J, and the flat track C, rendered adjustable at its rear end by means 45 of the threaded crank-rod D, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

HEZEKIAH WRIGHT.

Witnesses:

WM. E. WRIGHT,
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