

J. E. AUSTIN.

Machines for Edging Shingles.

No. 148,799.

Patented March 24, 1874.

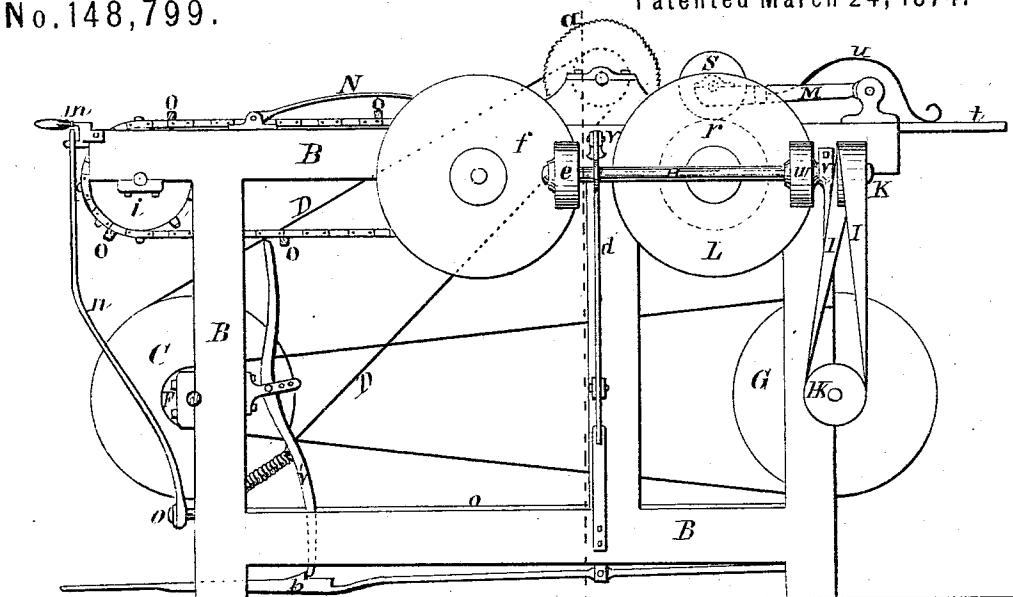


Fig. 1 a

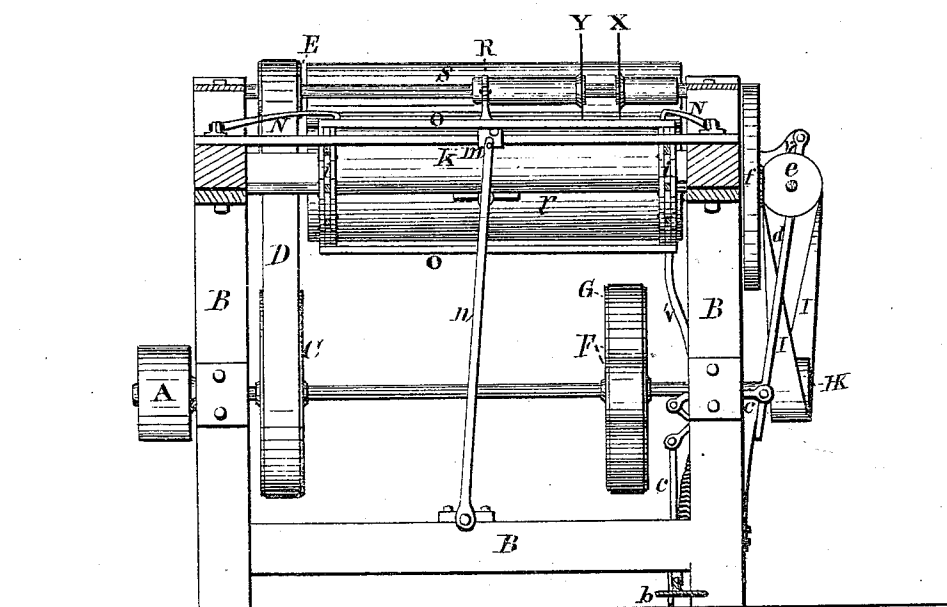


Fig. 2

WITNESSES :

E. G. Cushing
Edw. Perkins

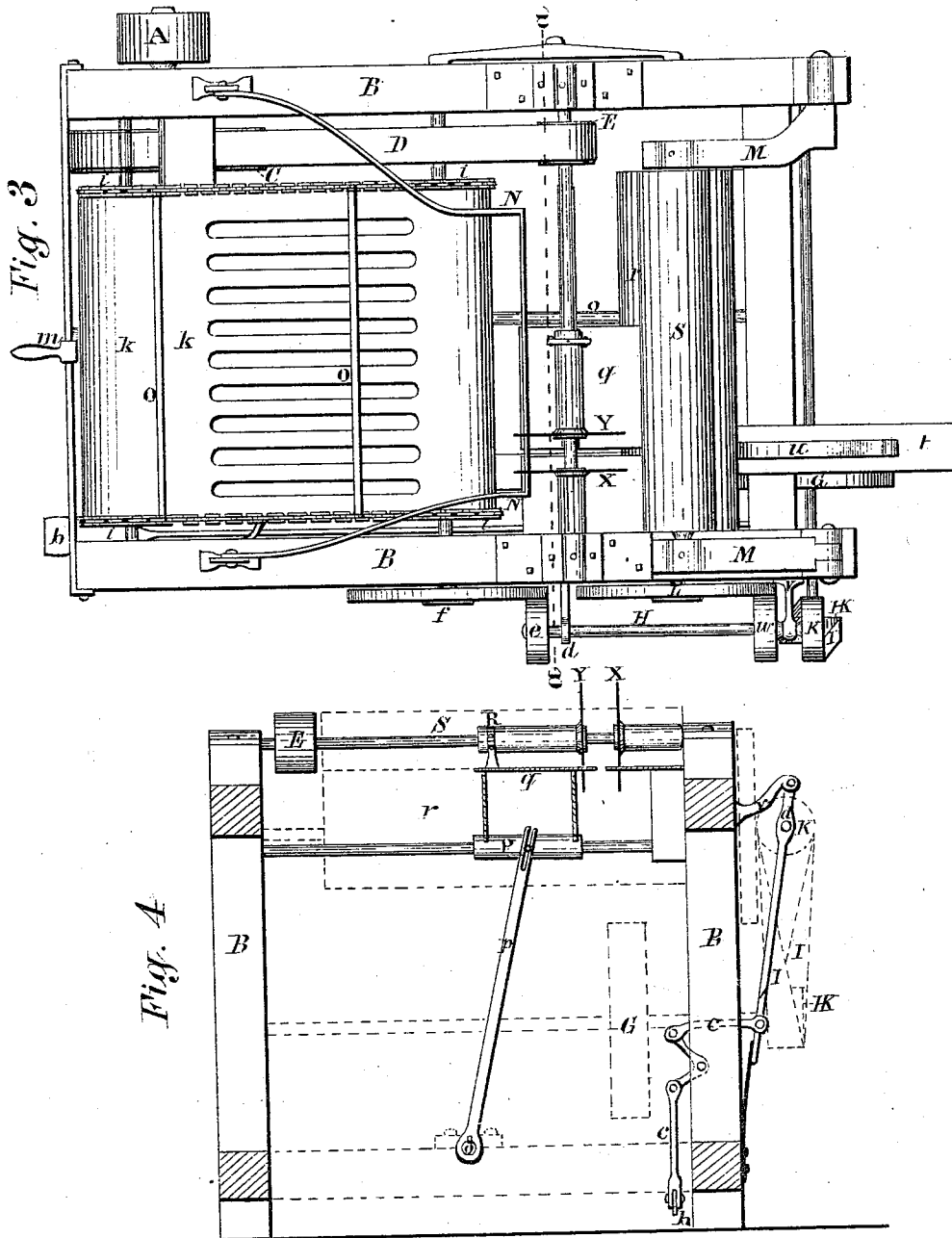
INVENTOR:

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James E Austin

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WITNESSES :

W. H. Hushing
E. C. Perkins

INVENTOR :

James E. Austin

UNITED STATES PATENT OFFICE

JAMES E. AUSTIN, OF OSWEGO, NEW YORK, ASSIGNOR OF ONE-HALF HIS
RIGHT TO MIDDLEBROOK & MACK, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR EDGING SHINGLES.

Specification forming part of Letters Patent No. **148,799**, dated March 24, 1874; application filed
June 19, 1873.

To all whom it may concern:

Be it known that I, JAMES E. AUSTIN, of Oswego, in the county of Oswego, in the State of New York, have invented a new and useful Improvement in Machine for Edging Shingles, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

In the drawings, Figure 1 is a side view of my newly-invented shingle parallel-edging machine. Fig. 2 is an end view of same. Fig. 3 is a top view; and Fig. 4 is a section through *a a*, showing more fully the arrangement for gaging the movable saw and the device for connecting and disconnecting the feed.

Similar letters of reference indicate corresponding parts.

Shingles generally are wider at the butt than at the top, and when laid on the roof the former will be close to each other, and leave the latter apart, thus forming receptacles for the water, which is forced to spread under the shingles, and is there retained. The action of the sun on the top side with the water on the under side has a tendency to warp and rot the shingles.

My invention has for its object to furnish a shingle parallel-edging machine which shall trim and form the shingles so that their sides shall be parallel and at right angles to the bottom edge, and will lie close, uniform, and true, and hence will save time in laying, and last much longer than ordinary shingles, the machine being constructed and arranged as hereinafter described.

A is the driving or main pulley. *B* is the frame. *C* is a drum on the shaft of the driving-pulley, and drives the saws by means of the belt *D* and pulley *E*. *F* is a pulley on the same shaft, and drives the drum *G*. *H K* is a pulley on the same shaft with the drum *G*. The former drives the longitudinal shaft *H* by the belt *I* and pulley *K*. *w* is a pulley or pinion on the shaft *H*, and drives the drum or wheel *L*, and with it the roller *r*. *e* is another pulley or pinion on the shaft *H*. The latter runs in the arm or bar *d*, which is hinged on and suspended from the arm *v*. The lower end of the bar *d* is pressed outward by a spring,

thereby disconnecting the pulley or pinion *e* from the drum or wheel *f*. The lower end of the bar *d* is also connected with the foot-lever *b* by the rods *c c* and elbow-crank, so that when the foot-lever is pressed downward the bar *d* is forced inward, connecting the pulley *e* with the drum *f*. *S* is a roller for guiding the shingles from the saws, and is in a hinged frame, *M*. *u* is a spring attached to the frame *M* at one end, the other end resting on the bar *t*, for the purpose of holding the shingles while the edgings separate from them until forced out over the end of the bar by succeeding ones. *N N* are bars for steadying the shingles as they pass between the saws. *k* is a stationary table or platform, upon which the shingles are placed. *i i* are chain-wheels driven by drum or wheel *f*, and connected by chains. *O O* are guide-bars attached to the chains for the purpose of forcing and guiding the shingles under the saws. *X* is a circular saw attached to the shaft. *Y* is a circular saw attached to a loose sleeve, which slides on a feather in the shaft. *q* is a table resting on the movable sleeve *P*. To the table *q* is fastened the standard and collar *R*. *p* is an arm for moving the loose sleeve *P*. *o* is a horizontal bar, to which the arm *p* is attached. *n* is a lever for operating the horizontal bar *o*. *m* is a gage with a handle attached, sliding on a bar across the end of the frame. This gage has a pin which passes through the lever *n*, thereby forming a connection with the loose saw *Y*. The wheels *f* and *L* and their auxiliaries may be either pulleys or cog-wheels.

In operating the machine, the shingles are placed on the table *k* so that their bottom or lower edges will rest against the guide-bar *O*, and one edge is within the cutting line of the stationary saw *X*; then the movable saw *Y* is set for the opposite edge by means of the gage *m* and its connection with the lever *n*, horizontal bar *o*, arm *p*, and movable table *q*. The chain-wheels *i i* are then set in motion by pressing the foot-lever *b* downward, which, by its connection with the bar *d*, forces it inward, and connects the pulley or pinion *e* with the drum or wheel *f*, the pulley *f* being on the shaft of the chain-wheels *i i*. As the chains,

with their guide-bars O O, traverse over the table *k*, they will carry the shingles forward to the saws X and Y, from whence they are drawn and guided by the rollers *r* and S, and forced out between the bar *t* and spring *u*, where the edgings will separate from them. From thence they are forced over the end of the bar *t* by succeeding shingles. When the foot-lever *b* is pressed downward, the lever *v'* will catch and hold the same until the upper end of the latter comes in contact with the guide-bars O O, when it will be thrown off the foot-lever, thereby stopping the chain-wheels and their auxiliaries, and giving the operator time for feeding the machine.

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

In a shingle parallel-edging machine, in combination with a stationary saw, the movable saw Y, with its standard and collar R, and movable table *q*, constructed and arranged in such a manner that the saws will cut under the arbor, substantially as shown.

In testimony whereof I have signed my name and affixed my seal in the presence of two attesting witnesses, at Oswego, in the county of Oswego and State of New York, this 13th day of June, 1873.

JAMES E. AUSTIN. [L. S.]

Witnesses:

ORLANDO S. OSTER HOUT,
GEORGE W. BURT.