

J. A. FRENZEL.
SHINGLE EDGING MACHINE.

Patented July 15, 1884.

Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN A. FRENZEL, OF WAUSAU, WISCONSIN.

SHINGLE-EDGING MACHINE.

SPECIFICATION forming part of Letters Patent No. 302,121, dated July 15, 1884.

Application filed May 3, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. FRENZEL, of Wausau, in the county of Marathon, and in the State of Wisconsin, have invented certain new and useful Improvements in Shingle-Edging Saws; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to improvements in shingle edging or jointing machines; and it consists of certain peculiarities of construction, as will be fully described hereinafter.

In the drawings, Figure 1 is a side elevation of my improved device. Fig. 2 is a like view showing the opposite side of the machine, partly in section on the line *x x* of Fig. 3. Fig. 3 is a top view of the machine, and Fig. 4 is a rear end view of the machine.

A A indicate the frame of my machine. B is the edging-saw mounted, as usual, on the shaft *b*, running in the box-bearings of the frame. The shingle-table C runs, as in ordinary machines, on rails *c c*, supported on adjustable brackets *C' C'*, in the ordinary manner, the improvement I have designed consisting merely in the arm D and its connections, the purpose of which is to hold the shingle in place when presented to the saw, the teeth of which are shaped so as to cut from the under side of the shingle. This arm D is hinged in any suitable manner, as by shaft *D²*, journaled in the upper ends of the brackets *d d*, bolted to the frame at the rear of the machine. It is however preferably made in two parts, the arm proper fitting squarely between the flanges *d' d'*, formed on the outer face of the plate *D'* of the rear hinged part, *D²*. The two parts are connected by the screw-bolt *d²*, the arm itself being adapted to receive an adjustment on said bolt by means of the slot *d³*. A similar slot, *d³*, formed in about the center of the arm D, serves to adjust in its attachment on bolt *d⁴* the leg E, which supports the arm in position for use. The lower end of the leg E is notched on its rear edge, and the shoulder *e*, so formed, rests against the upper face of the plate *E'*, bolted to the frame. In the front edge of this plate an open slot, *e'*, (shown in dotted lines in Fig. 3,) is cut to receive the inner edge of the notched end of the leg E, which is thus guided in its up and down mo-

tion with the arm. The arm D has an eccentric, F, pivoted to it near its front end, the play of which is limited by the stops *f f'*. Normally the arm *f²* of eccentric F rests upon stop *f*, and its point *f²* projects below the under face of arm D in position to strike the shingle as it is carried under it by table C; and as the table C, on which the shingle to be trimmed is carried, advances, the shingle is wedged tightly between the point *f²* of the eccentric F and the top of table C, and is held by the weight of the arm D against the under cutting action of the saw; but after the cut has been made, and as soon as the return of the table begins, the eccentric will be lifted, and the weight of the arm D will be taken by the plate E, so that there will be no resistance to the withdrawal of the shingle. To allow of the adjustment of the pressure which the point *f²* of the eccentric F exerts against the shingle, I provide a weight, G, the perforated shank *g* of which is adapted to rest in either one of the notches *g' g'*, formed in the upper edge of the horizontal bar *G'*, fastened in any suitable manner on the outer face of the arm D, as shown at *g²*.

H is a flanged plate, which I propose to attach by a slot and an adjustable bolt, *h*, to the front end of the arm on the outer face of the same. This plate will serve as a guard or guide to prevent the waste from too much of the shingle being presented to the saw.

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

1. In a shingle-edging machine, the combination, with a traveling table, of a hinged arm, D, and eccentric F, pivoted thereto, and the saw, substantially as described.

2. The combination of the saw, hinged arm, and eccentric pivoted thereto, with the shingle-table-supporting leg and its plate *E'*, substantially as described.

3. The hinged arm D, its adjustable weighting mechanism, and pivoted eccentric and supporting-leg E, all combined with the traveling table, saw, and plate *E'*, as set forth.

4. The combination of the saw and traveling table, hinged arm, and eccentric pivoted thereto, with the supporting-leg adjustably secured thereto, and its supporting-plate, the latter

adjustably secured to the frame of the machine,
substantially as described.

5. The saw and traveling table, arm D,
hinged to the frame at one end and having a
guard-plate at the other, in combination with
the eccentric pivoted thereto, and the sup-
porting-leg and its supporting-plate, substan-
tially as described.

In testimony that I claim the foregoing I
have hereunto set my hand, at Milwaukee, in
the county of Milwaukee and State of Wis-
consin, in the presence of two witnesses.

JOHN A. FRENZEL.

Witnesses:

S. S. STOUT,

H. G. UNDERWOOD.