

UNITED STATES PATENT OFFICE.

NOAH J. TILGHMAN, OF PALATKA, FLORIDA.

SHINGLE-EDGING MACHINE.

SPECIFICATION forming part of Letters Patent No. 556,169, dated March 10, 1896.

Application filed November 26, 1895. Serial No. 570,156. (No model.)

To all whom it may concern:

Be it known that I, NOAH J. TILGHMAN, a citizen of the United States, residing at Palatka, in the county of Putnam and State of Florida, have invented certain new and useful Improvements in Shingle-Edging Machines, of which the following is a specification.

My invention relates to an improvement in shingle-edging machines; and it consists in certain novel constructions, combinations, and arrangements of parts, as will be hereinafter described and claimed.

In the accompanying drawings, illustrating the invention, Figure 1 is a top or plan view of a shingle-edging machine embodying my invention. Fig. 2 is a sectional view of the sliding carriage, showing a shingle placed thereon and illustrating the action of the pivoted gage-stops. Fig. 3 is a side elevation of the machine, parts being broken away. Fig. 4 is an end view of the sliding carriage. Fig. 5 is a perspective view of one of the pivoted gage-stops.

Referring to the drawings, the letter A designates the bed or table of the machine, which may be of any construction suitable for the purpose. In the present instance the table consists of two side bars, A', spaced apart and connected by end bars, A². This table is to be supported on suitable legs. (Not here shown.) A shaft B is journaled in bearings attached to the said side bars and carries at one end a circular saw B' and at the other end fast and loose pulleys B² B³.

The carriage C slides on two longitudinal rods $\bar{d}$ $\bar{d}'$, which are secured to the end bars, A'. This carriage comprises two side bars, C' C², spaced apart with an opening between them and connected at their ends on the under side by cross-bars e e' and at each end on the top by metal cross-plates f f' . On the plate f' is a transverse stop g , against which the end of the shingle abuts, and whereby the shingle is prevented from moving backward while it is being cut by the saw. The inner ends of the two cross-bars e e' are pivoted on the inner slide-rod, $\bar{d}$, and their outer ends are provided with notches, which rest upon the outer slide-rod, $\bar{d}'$. By this construction the carriage may be tilted.

In the open space of the carriage are two sets of gage or stop blocks, each set consist-

ing in the present instance of three blocks. The blocks h' h^2 h^3 of one set are pivoted on a rod h adjoining the cross-plate f , and the blocks i' i^2 i^3 of the other set are pivoted on a rod i adjoining the cross-plate f' . Each of these blocks is formed with an approximate V-notch or cut-out j at one end and a pivot-hole k adjoining said notch. The rods h i pass through these pivot-holes. By this construction it will be seen that the distance between the pivot-hole k and the notched end j is shorter than the distance between said pivot-hole and the other end l . Hence the greater weight of this latter end causes the stop-blocks to normally take an inclined position, as shown in Figs. 2 and 3. This position is due to the corner edge j' of the cut-out end resting against the under side of the plate f f' , and thereby preventing the block from taking a perpendicular position. The other corner edge j^2 of the cut-out end normally projects above the surface of the carriage, as shown clearly in Fig. 3, and serves as a stop or gage for a shingle to be edged, as will now be described.

In a full-sized machine when the carriage is alongside of the saw B' the distance between the saw and the two first stops h' i' is three inches, so that if it is desired to dress or square the imperfect edge of a three-inch shingle the said shingle M is laid upon the carriage with one side edge abutting against the upward-projecting corner edges j^2 of the said first two stops h' i' , and the other edge of the shingle which is to be squared or trued projecting beyond the side bar C', as shown in Fig. 4. By now sliding the carriage on the rods $\bar{d}$ $\bar{d}'$ past the saw the latter will cut the said rough edge and make it true. If it is desired to true the rough edge of a four-inch shingle, the shingle M is laid upon the carriage with its inner side edge, m , abutting against the corner edges j^2 of the two intermediate stops h^2 i^2 and resting flat upon the bar C' and first two stops h' i' , before-mentioned, as shown in Figs. 2 and 4, the pressure of the shingle on the said two first stops causing them to assume the horizontal position shown in said figures. When the shingle is removed these two gage-stops h' i' will tilt down by their own gravity to their normal inclined position. (Shown in Figs. 2 and 3.) In

the same manner a five-inch shingle may be gaged by placing its inner edge against the corner edges j^2 of the two last gravity-stops $h^3 i^3$, and a six-inch shingle may be gaged by resting its inner side edge against the two stationary stop-blocks G.

Of course the two sets of stop-blocks may be composed of more than three blocks, so as to provide for gaging shingles of any width. I contemplate making the gage-stops of hard wood or metal.

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

In a shingle-edging machine, the combination of a carriage having side and end bars connected together with an open space between them; a plate, f' , extending across the open space of the carriage; and shingle gage-stops each consisting of a straight block pro-

vided at one end with a V-notch and blunt at the other end and pivoted in the said open space of the carriage and normally inclined with its blunt end downward and with one corner of the V-notch projecting above said cross-plate and serving as a gage-stop and the other corner edge of said V-notch projecting below and in contact with said cross-plate, whereby when a shingle is laid flat upon the said upward-projecting notch-corner the gage-stop will tilt from its inclined to a horizontal position flush with the top surface of the carriage and will be wholly concealed by the shingle.

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

NOAH J. TILGHMAN.

Witnesses:

E. E. HASKELL,
ISAAC GRISE.