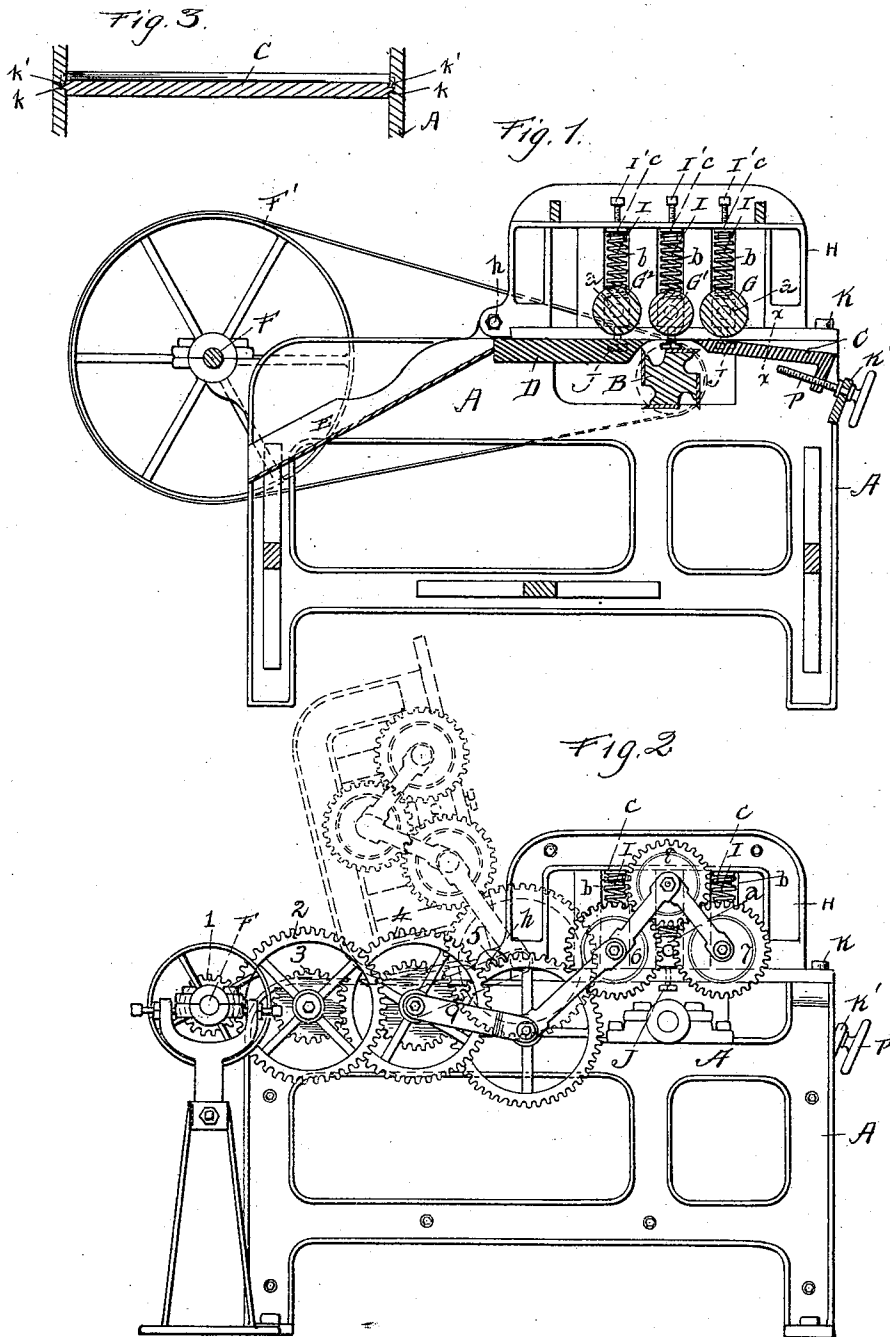


(No Model.)

W. J. PUGH.
SHINGLE PLANING MACHINE.

No. 544,121.

Patented Aug. 6, 1895.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM J. PUGH, OF MUSCATINE, IOWA.

SHINGLE-PLANING MACHINE.

SPECIFICATION forming part of Letters Patent No. 544,121, dated August 6, 1895.

Application filed December 5, 1894. Serial No. 530,901. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. PUGH, a citizen of the United States, and a resident of Muscatine, in the county of Muscatine and State of Iowa, have invented certain new and useful Improvements in Shingle-Planing 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 a central vertical section through the machine. Fig. 2 is a side elevation of same with frame H and attachments shown thrown back in dotted lines. Fig. 3 is a section on line *x x*, Fig. 1.

The object of this invention is to provide an improved feed mechanism for shingle-planing machines, together with operating mechanism therefor; and it consists in the novel construction and combination of parts, all as hereinafter described, and pointed out in the appended claim.

Referring to the accompanying drawings, the letter A indicates the frame of the machine; B, the rotary cutter thereof; C, the front feed-table; D, the rear table; E, the discharging-chute, and F the driving-shaft, having a band-wheel F' belted to a pulley on the cutter-shaft.

G G' G² designate the feed-rollers, the roller G being placed over the table C in front of the cutter, the roller G', which is an idler, and is not positively driven, directly above the cutter, and the roller G² over the table D back of the cutter. These rollers are each journaled in boxes *a*, held and slidable in vertical slots *b* in a frame H, which, at its lower rear portion at *h h*, is hingedly or pivotally connected to the frame A.

Bearing upon each box *a* is a spring I, seated in the slot *b*, and confined between the box and a nut *c* of a tension-adjusting screw I'. Each box is also engaged at the under side by an adjusting-screw J, which affords means for the vertical adjustment of the roller to the desired point.

Driven by a pinion 1 on the shaft F is a large gear-wheel 2, having an attached pinion 3, which drives a second gear-wheel 4. The gear-wheel 4 also has a pinion which drives a third gear-wheel 5, and into which meshes a gear-wheel 6 on the shaft of the feed-roller G², a similar gear-wheel 7 on the shaft of the roller G being driven by a gear-wheel 8 placed above and centrally of the gear-wheels 6 and 7, and meshing with each, whereby they are positively driven.

Connecting the journal of the gear 4 with the journal of the gear 5 is a link 9, similar links connecting the gears 6 and 7, 6 and 8, and 8 and 7. These links consist of rigid bars of metal, the arrangement permitting the gears to spread or draw together as may be necessary under different adjustments of the feed-rollers.

The frame H is normally secured to the frame at the front by means of bolts and nuts K. By removing the nuts it may be readily swung up and back, as indicated in Fig. 2, to permit access to the knives and to see that the table C is properly set, the gears, as will be readily seen, remaining in full mesh during such operation. The said table C is adjusted to the proper incline to carry the forward portion of the shingle above the knives until it passes the first feed-roller. Said rollers are adjusted above the table sufficiently to allow the thin portion of the shingle to pass through to the proper extent without being planed. The adjustment of the table C is effected by means of a screw P, which is held against endwise movement in a bar K of the frame, and which takes into a nut on the under side of the table. The lateral edges of said table are provided with tongues or guides *k*, which slide in ways or grooves *k'* in the frame of the machine. Said ways or grooves are inclined upwardly from front to rear, and by working the screw the table is moved forwardly or back therein.

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

In a machine for planing shingles, the combination of a main frame, a cutter head having its shaft journaled transversely in said frame, an upwardly inclined front feed table

C adjustable in lateral guides of said frame and having its rear end portion extending partially over the cutter, a rear feed table D, a supplementary frame H hinged to said main
5 frame, the positively driven yieldable and adjustable feed rolls G, G² one of which is journaled in said frame H above the table C forward of the cutter head, and the other above the table D, an idle roll G' directly over the

cutter, and gear for driving said rolls G G² 10 and the cutter head, substantially as specified.

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

WILLIAM J. PUGH.

Witnesses:

H. J. PUGH,

S. A. PATRICK.