J. Bennet,

Cutting Shingles.

N°4,678.   Patented July 31, 1846.

Fig: 3.

Fig: 4.

Fig: 2.

Fig: 1.
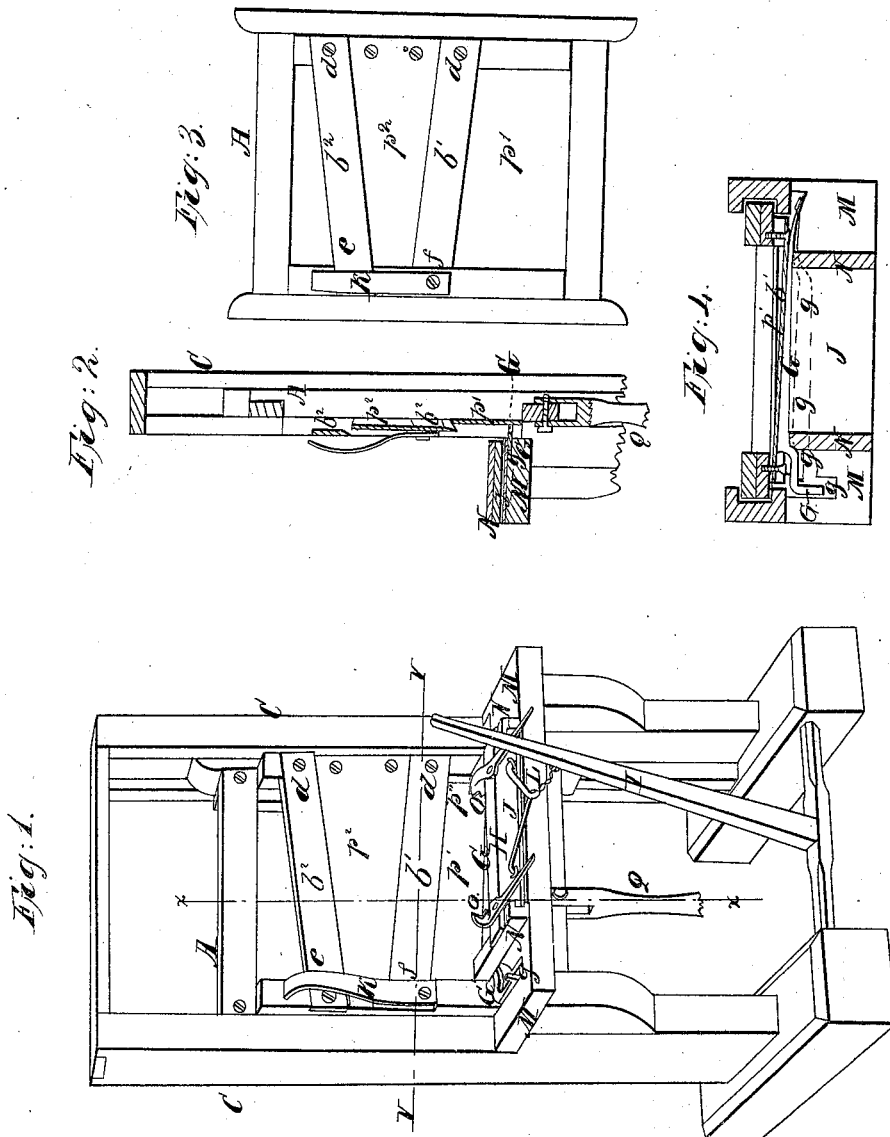
UNITED STATES PATENT OFFICE.

JONATHAN BENNET, OF AMENIA, NEW YORK.

SHINGLE-MACHINE.

Specification of Letters Patent No. 4,678, dated July 31, 1846.

To all whom it may concern:

Be it known that I, JONATHAN BENNET, of Amenia, in the county of Dutchess and State of New York, have invented a new
5 and useful Machine for Cutting Shingles, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a perspective view of the ma-
10 chine. Fig. 2 is a vertical section on the line, *x x* of Fig. 1. Fig. 3 is a front elevation of the gate detached from the frame. Fig. 4 is a horizontal section on the line *x x* of Fig. 1.

15 The nature of my invention and improvement consists in the arrangement and adaptation of two knives to a sliding frame in such manner as to cut at each down motion of said gate, two shingles, each from butt
20 to tip. Also in the adjustment of a spring rest to the table in such way as to procure uniform pieces to be severed from the block at one stroke, while the block is at rest. Also the direct presentation of the block to
25 the knives in the successive motions of the gate or frame instead of the vibrating manner of presenting the block as in other machines at each stroke of the knife. And also in the manner of bringing the block to a
30 proper size by first straightening it at one side with the knives and then changing it so as to bring the straight side of the face of the gage block, by which process shingles of uniform width are produced and a saving
35 of timber effected.

To enable persons skilled in the art of making shingles to make and use this machine the following description of it is given—

40 *Description.*—C represents the frame, A the sliding gate to which the knives, plates, and cam are secured. b^1 b^2 are the knives for severing the shingles from the block. p^1 p^2, the gage plates; K the cam; M the
45 bench; H the gage block to which the shingle bolt is dogged.

N N are parallel grooved guides for guiding the gage block.

O O are two dogs for dogging the bolt to
50 the block.

L is a link for attaching the block H to the lever I for operating it.

J is a bed plate secured to the top of the table and upon which the block with the bolt dogged thereto slides. 55

G is a spring rest for increasing the width of the table in order to sustain the outer edge of the shingle-bolt during the passage of the lower knife through the bolt in severing a shingle therefrom. When the upper 60 knife b^2 arrives at the bolt this spring rest is pushed back by the cam K in order to allow the knife to pass through the bolt without coming in contact with the said spring rest. It is fastened by one of its ends 65 to the table by bolts, or other suitable fastenings. The outer end G^1 is loose and plays back and forth, or toward, or from, the knives in a groove made in the table, of such size and form as to allow of this movement 70 of the spring rest. Said groove is marked *g* in the drawings. The bed plate J (over which the shingle bolt slides) is placed partly over this groove in such manner that the spring rest can move freely under it 75 without touching the said bed plate. When the spring rest is extended its outer edge is parallel and in the same vertical plane with the face of the lower knife b^1 and gage plate p^2; and when the rest G is contracted or 80 forced back into the groove *g* by the cam K it will be parallel and in the same vertical plane with the face of the upper knife and lower plate p^1. The upper and lower knives and plates are arranged so as to cut the butts 85 and tips of two shingles at every downward motion of the gate—that is to say the end *f* of the knife b^1 is set back from the face of the gate and on a line with the plane of the gage plate p^1, and the end p^{11} of the 90 gage plate p^1 is set back from the end *d* of the knife b^1 equal to the thickness of the butt of the shingle. The two ends *d e* of the knife b^2 are to be in the same vertical plane with the end *d* of the knife b^1, and 95 inner edge of the bed plate J, (see Fig. 2)— but the end of the gage plate p^2, next the end *e* of the knife b^2 is to be set back from the face of the gate or knife b^2 equal to the thickness of the butt of the shingle; the 100 other end is to be in the same plane with the knife at *d*. The operation of the gate of the machine is the same as in other shingle machines in use—that is to say it is made to slide vertically up and down between fender 105 posts by the application of any convenient

power applied to the lower cross bar of the gate, but the arrangement and operation of the knives is different as above set forth.

What I claim as my invention and desire 5 to secure by Letters Patent is—

The peculiar arrangement of the knives in combination with the gage plates and spring rest in such way that their combined action shall effect the production of two shingles at one complete downward motion of the 10 gate, cutting both, from butt to tip without changing the block or shingle bolt.

JONATHAN $\overset{\text{his}}{\times}\underset{\text{mark}}{}$ BENNET.

Witnesses:
   NATT. P. PERRY,
   HENRY I. FULLER.