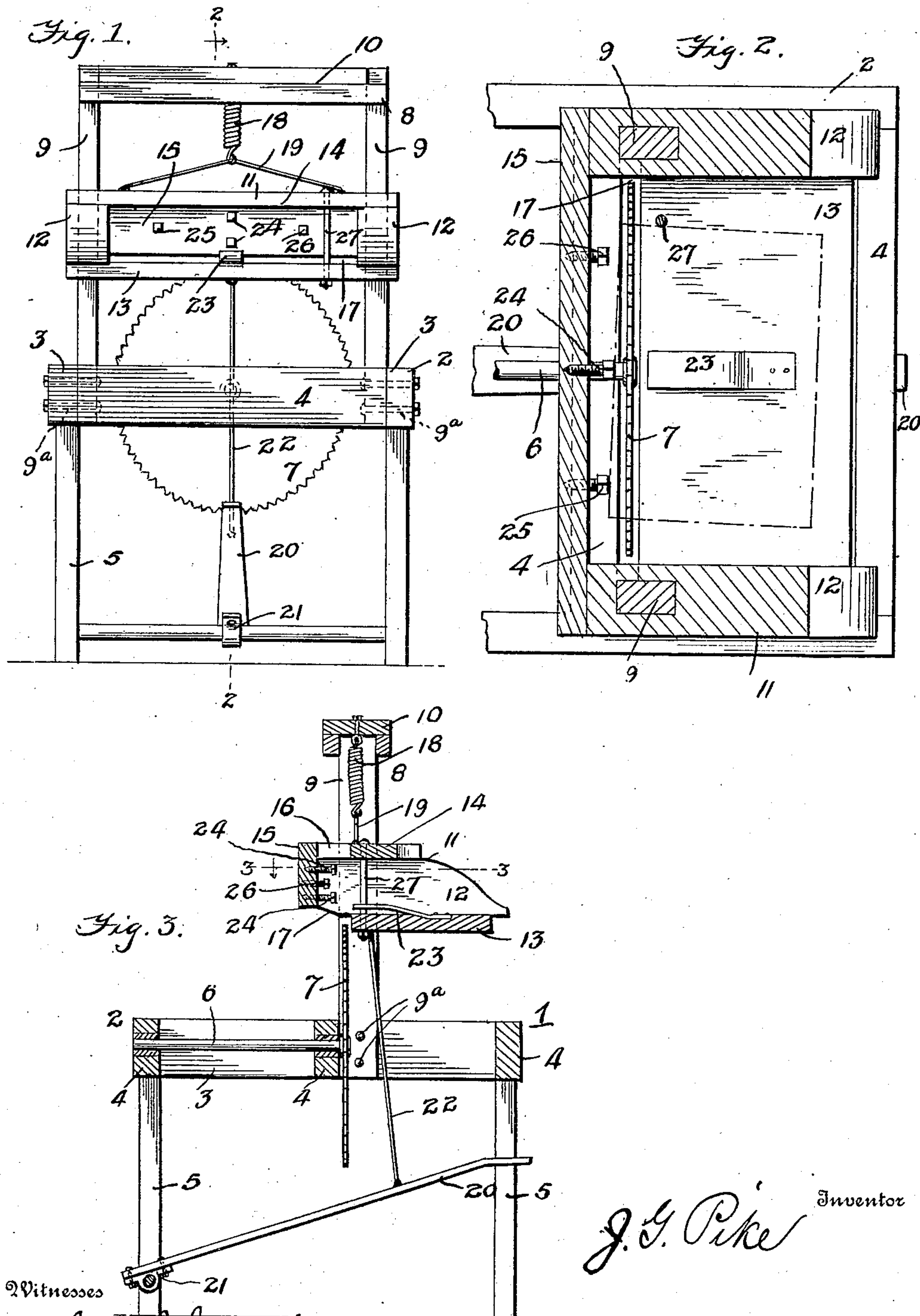


No. 883,912.

PATENTED APR. 7, 1908.

J. G. PIKE.
SHINGLE SAWING MACHINE.
APPLICATION FILED MAY 18, 1907.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN GURNIE PIKE, OF SILER CITY, NORTH CAROLINA.

SHINGLE-SAWING MACHINE.

No. 883,912.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed May 18, 1907. Serial No. 374,456.

To all whom it may concern:

Be it known that I, JOHN GURNIE PIKE, a citizen of the United States, residing at Siler City, in the county of Chatham and State of North Carolina, have invented certain new and useful Improvements in Shingle-Sawing Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to wood sawing machines and more particularly to a device which may be readily attached to the table of a rip saw and used for cutting shingles or the like.

The object of the invention is to provide a simple and practical device or machine of this character, and the invention consists in the features of novelty hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which

Figure 1 is a front elevation of a rip saw having my attachment mounted thereon; Fig. 2 is a detailed horizontal section taken on the plane indicated by line 3—3 in Fig. 3; and Fig. 3 is a vertical section taken on the plane indicated by the line 2—2 in Fig. 1.

While my invention may be built in and form a part of a sawing machine of any suitable construction, the embodiment illustrated in the accompanying drawings is in the form of an attachment for use upon an ordinary rip saw, such as the one shown in the drawings. This sawing machine 1 comprises a table 2 consisting of side beams 3 connected by cross bars 4 and supported by legs 5. The saw arbor or shaft 6 is mounted in suitable bearings upon the bars 4 and is provided with a circular saw 7 of comparatively large diameter.

My improved shingle cutting attachment comprises an upright support or frame 8 consisting of vertical side bars 9 connected at their upper ends by a cross piece 10 and having their lower ends bolted or otherwise detachably secured, as at 9^a, to the side beams 3 of the table. Mounted for sliding movement upon the guide frame 8 is a carrier 11 for the bolt or block of wood from which the shingles are cut. This carrier 11 comprises two side pieces 12 connected by a bottom piece 13, a top piece 14 and a back piece 15. The sides 12 and top 14 are formed with vertically alining openings for the reception of the uprights 9 upon which latter the carrier is vertically movable; and in the central portion of the top 14 is formed a vertical slot 16

for the reception of the saw, as hereinafter explained.

At the inner or rear end of the carrier and directly beneath the slot 16 is an opening 17 also for the reception of the saw, said opening being formed by spacing the adjacent longitudinal edges of the bottom 13 and back 15, as clearly shown in Fig. 2. The carrier is held normally elevated so that the upper face of its bottom 13 is in a plane above the upper edge of the saw, by a coil spring 18 or its equivalent. As shown, said spring has its upper end secured in the cross piece 10 of the support 8 and its lower end attached to a bail 19, the ends of which are suitably connected to the top of the carrier. The latter is moved downwardly against the tension of said spring or elevating means by depressing a treadle or foot lever 20 which is detachably pivoted at its rear end, as shown at 21, upon a cross piece or brace connecting the legs 5 and which is connected at a point intermediate its ends by a link or rod 22 to the bottom of the carrier. The front of the carrier is open for the reception of a bolt or block of wood, which latter is pressed upwardly against the under face of the top 14 by a leaf spring 23 arranged centrally upon the bottom 13 or by any other suitable resilient support.

In order to permit shingles of different thicknesses to be cut and also to permit the taper or bevel which is given them to be varied, I provide upon the center of the inner or front face of the back 15, one or more adjustable stop pins 24 and also upon each side of said pins similar stop pins 25, 26. These stop pins 24, 25, 26 are preferably in the form of screws, the threaded ends of which are screwed into the back 15 and the heads of which limit the inward movement of the bolt or block into the carrier. The centrally arranged stops 24 are in vertical alinement and project forwardly to a greater extent than the end stops 25, 26 so that when a bolt is inserted in the carrier and pressed against the stops 24 it may be turned to either side and thus held in an angular position in the carrier with its inner or rear end above the opening 17 and hence above the saw in order that when the carrier is moved downwardly by depressing the treadle 20, the bolt will be carried downwardly across the upper portion of the saw and a shingle will be cut from its inner or rear end. It will be observed that by adjusting the screws or stops 24, the

thickness of the shingle may be varied as desired and by adjusting the stops 25, 26, the bevel or taper which is given the shingle may be varied.

5 The operation of the invention will be readily understood from the foregoing description taken in connection with the drawings. It will be seen that the carrier will be held normally above the saw and that when
10 the bolt or block of wood is inserted in the same and pressed against either the stops 25, 24, or 26, 24 while the treadle 20 is moved downwardly, the carrier will be lowered so that the saw will cut a shingle from the bolt, the shingle dropping from the carrier through
15 the opening 17. When the treadle 20 is released the spring 18 will elevate the carrier to its normal position and the bolt or block may then be tilted in the opposite direction and
20 the above described operation repeated to cut the next shingle. If desired I may also employ a stop 27 against which one end of the bolt or block may be held while the saw is cutting it. This stop is here shown in the
25 form of a bolt passing vertically through the top and bottom pieces or members of the carrier. If desired the stop 27 may be adjustable longitudinally of the carrier to permit shingles of different lengths to be cut.
30 By means of this device a block may be quickly cut up into shingles of uniform dimensions and that owing to the comparatively large diameter of the saw 7, the grooves left in the faces of the shingles by the
35 saw will extend longitudinally of the shingles so that when the shingles are used upon a roof, said longitudinally extending grooves will serve to direct rain water running over them downwardly off of their lower ends and
40 not transversely into the joints between the shingles, as would be the case if the saw cuts or grooves extended transversely of the shingle.

It will be seen that the present embodiment of the invention may be readily applied
45 to and removed from an ordinary rip saw table so that when the attachment is removed, the saw may be used for ordinary purposes.

50 I claim:

1. In a shingle sawing machine, the combination of a main frame or support, a circular saw mounted thereon, upright guide bars upon said support, a cross piece connecting
55 the upper ends of said bars, a vertically movable bolt carrier consisting of end members slidably mounted upon said upright bars, a back member connecting said end members and top and bottom members also
60 connecting said end members and spaced from the back member to form vertical openings in the carrier for the reception of the saw, a spring arranged between the cross piece and the carrier for supporting the latter above the
65 saw and a foot lever for moving the carrier

downwardly toward the saw, substantially as described.

2. In a shingle sawing machine, the combination of a main frame or support, a circular saw mounted thereon, upright guide bars upon said support, a cross piece connecting
70 the upper ends of said bars, a vertically movable bolt carrier consisting of end members slidably mounted upon said upright bars, a back member connecting said end
75 members and top and bottom members also connecting said end members and spaced from the back member to form vertical openings in the carrier for the reception of the saw, a spring arranged between the cross
80 piece and the carrier for supporting the latter above the saw, means for moving the carrier downwardly toward the saw, and a broad leaf spring arranged upon the bottom member and adapted to support a bolt in
85 contact with the top member, said leaf spring being disposed forwardly and rearwardly of the carrier and having its front end set in the bottom member flush with the upper surface of the same, the rear end of
90 said spring projecting upwardly to support the bolt, substantially as described.

3. In a shingle sawing machine, the combination of a main frame or support, a circular saw mounted thereon, upright guide
95 bars upon said support, a cross piece connecting the upper ends of said bars, a vertically movable bolt carrier consisting of end members slidably mounted upon said upright bars, a back member connecting said
100 end members and top and bottom members also connecting said end members and spaced from the back member to form vertical openings in the carrier for the reception of the saw, a spring arranged between the cross
105 piece and the carrier for supporting the latter above the saw, means for moving the carrier downwardly toward the saw, the central and end stops upon the back member and the upright stop bolt 27 arranged in
110 the top and bottom members of the carrier, substantially as described.

4. The combination with a table or support carrying a circular saw, of a shingle cutting attachment detachably mounted there-
115 on and comprising connected upright guides, a bolt carrier vertically slidable upon said guides and having side members connected by top, bottom and back members, said carrier having vertical openings for the recep-
120 tion of the saw, stops upon said back member for limiting the movement of the bolt into said carrier and means for operating said carrier.

5. The combination with a table or sup-
125 port carrying a circular saw, of a shingle cutting attachment detachably mounted thereon and comprising connected upright guides, a bolt carrier vertically slidable upon said
130 guides and having side members connected

by top, bottom and back members, said carrier having vertical openings for the reception of the saw, stops upon said back member for limiting the movement of the bolt
5 into said carrier, a spring connection between said carrier and its connected upright guides for holding said carrier normally above the saw, a treadle mounted upon said support and

connected to said carrier for moving the same downwardly toward the saw.

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

JOHN GURNIE PIKE.

Witnesses:

MILLARD M. FOX,
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