J. Gilman,

Saving Shingles.

No. 18,354, Patented Oct. 6 1857.

Fig: 1.

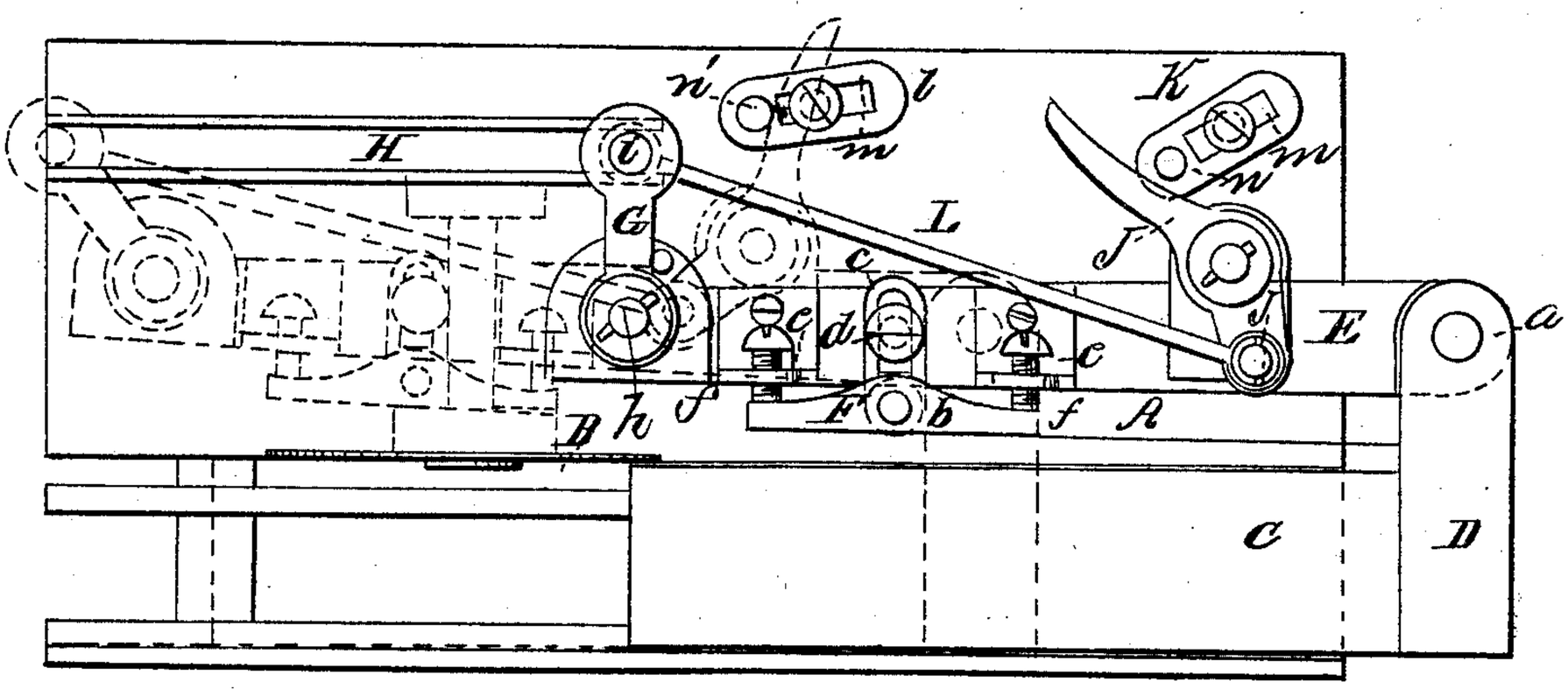
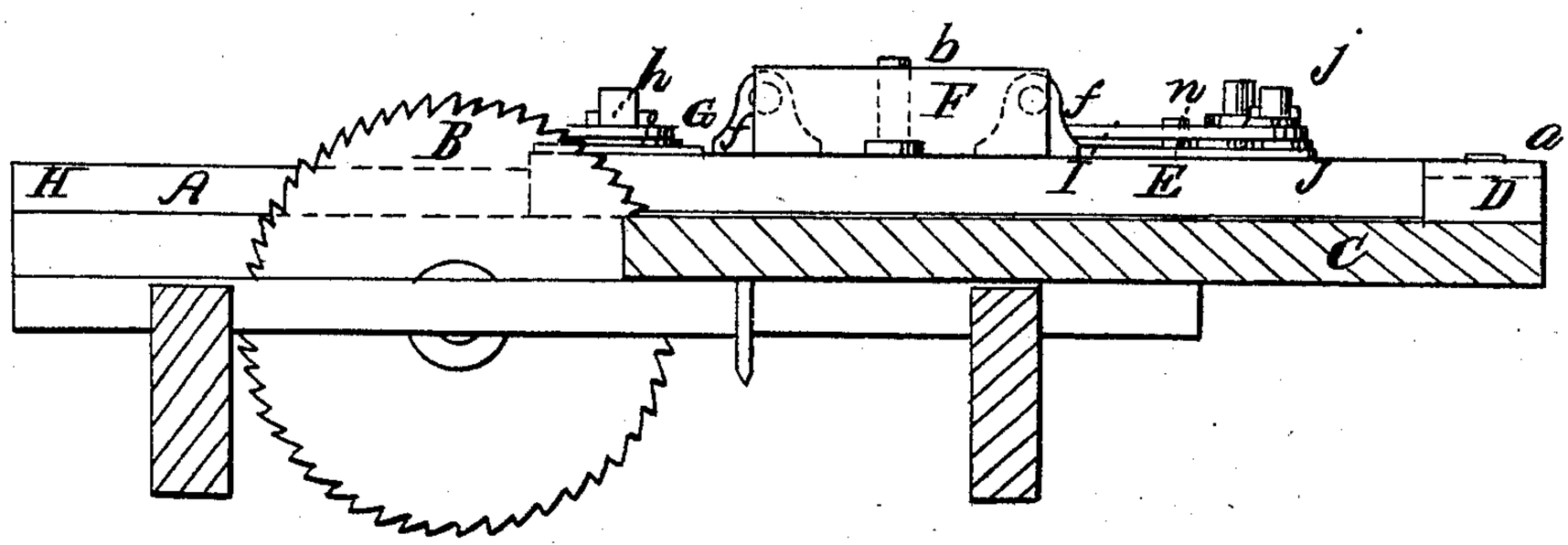


Fig. 2.



UNITED STATES PATENT OFFICE.

JESSE GILMAN, OF NASHUA, NEW HAMPSHIRE.

MACHINE FOR SAWING SHINGLES.

Specification of Letters Patent No. 18,354, dated October 6, 1857.

To all whom it may concern:

Be it known that I, JESSE GILMAN, of Nashua, in the county of Hillsboro and State of New Hampshire, have invented a new and useful Improvement in Circular-Saw Mills; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a plan or top view of my improvement. Fig. 2, is a side view of ditto; the side of the bed or framing nearest the eye being removed.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to an improvement in circular saw mills for sawing taper stuff such as shingles, etc.

The object of the invention is to make a suitable provision to prevent the stuff when it is sawed from the bolt from binding or wedging against the saw. This object is attained by, and the invention therefore consists in, having the guide attached to a moving arm which is connected with the carriage on which the "bolt" is placed; said arm being so arranged as to move the guide out free from the bolt when the stuff is sawed from it.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, represents the bed plate or platform of a circular saw mill; and B, is the saw, placed on a suitable arbor which is fitted in suitable bearings underneath the bed plate, the upper part of the saw working through a slot in the bed plate.

C, is a carriage which is fitted between proper guides arranged in any suitable way on the bed plate, so that it may move freely back and forth thereon. To the front or outer end of the carriage C, there is secured a bar D; and to the inner end of the bar D, there is attached, by a joint or pivot *a*, an arm E. This arm is rather longer than the carriage C, and an adjustable guide F, is attached thereto. This guide is merely a block fitted on a vertical pin *b* which is attached to a slotted horizontal plate *c* secured to the arm E, by a set screw *d*. The pin *b* passes through the center of the guide F, and a set screw *e* bears against each end of the guide, said set screws passing through vertical ledges or plates *f*, attached to the arm E; see more particularly Fig. 1. By means of the set screws *e* the guide F may be set more or less obliquely with the plane of the saw.

To the outer end of the arm E, an arm G, is attached. The arm G, is fitted loosely on a vertical pin *h* which is attached to the outer end of the arm E. The opposite or outer end of the arm E, has a vertical pin *i* attached to its under side, and this pin is fitted in a groove or guide H, which is placed on the bed or platform A, parallel with the plane of the saw.

To the outer end of the arm G, one end of a rod I, is attached; and the opposite end of this rod is connected to the inner end of a lever J, which works on a pin *j*, on the arm E. To the bed or platform A, there is attached two plates *k*, *l*, said plates being secured to the bed plate by set screws *m*, *m*, which pass through oblong slots in said plates into the bed plate or platform. To each plate *k*, *l*, there is attached a vertical pin *n*, and between these two pins the end of the lever J, works. The pins *n*, n^1, may be adjusted or their position varied as circumstances may require, by loosening the screws *m*, so that, the plates *k l*, may be moved, and then screwing them down so as to secure the plates firmly to the bed plate.

From the above description of parts, it will be seen that when the carriage C, is moved forward a certain distance toward the saw B, the outer end of the lever J, will strike against the pin n^1, and the lever J, will consequently be turned, and the arm G, will be actuated through the medium of the rod I, and the groove or guide H, so as to move the front or outer end of the arm E, outward or from the saw B; see red lines, Fig. 1, in which the arm E, is moved outward to its fullest extent, the carriage C, being at the termination of its forward movement. Consequently it will be seen that the bolt which is placed on the carriage C, will have the guide F, moved out from it as it reaches the termination of its outward stroke, and the sawed strip or shingle will have a free movement or chance to escape. The guide F, is moved back to its original position upon the return movement of the saw in consequence of the outer end of lever J, coming in contact with pin *n*.

It will be understood that the guide F, is

set by means of the set screws *e*, *e*, so as to be placed in an oblique position relatively with the plane of the saw corresponding to the desired taper to be given the stuff, the bolt being placed against the face of the guide as indicated in blue Fig. 1.

The within-described device is extremely simple, and may be applied at a trifling cost to all circular saw mills and thereby made available for sawing stuff in taper form as well as stuff with parallel sides.

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

Attaching the adjustable guide F, to the movable arm E, attached by a joint to the carriage C, and operated by the movement of the carriage through the medium of the arm G, lever J, and groove or guide H, substantially as and for the purpose set forth.

JESSE GILMAN.

Witnesses:

GEO. Y. SAWYER,

CHAS. H. NUTT.