H. C. Babcock,

Shingle Machine.

No. 111,029. Patented Jan. 17, 1871.

Fig. 1

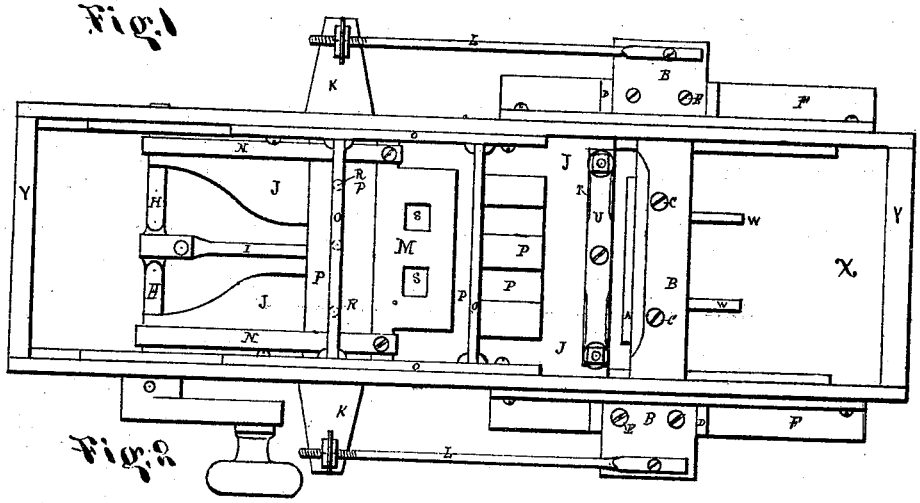


Fig. 2

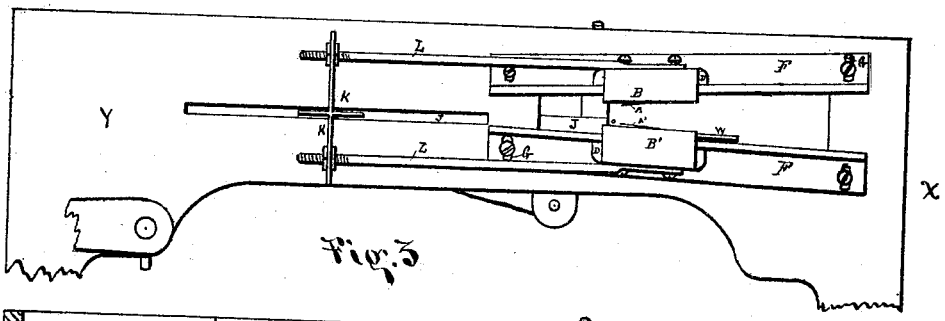
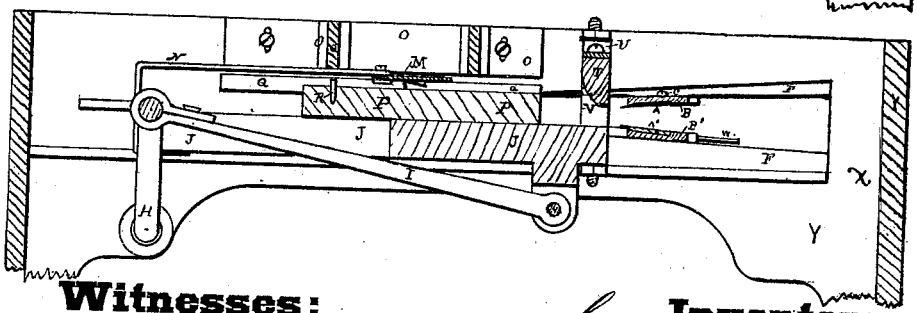


Fig. 3



Witnesses:

David T. Smith

Jno. Pickett Wms

Inventor:

Holiday C. Babcock

Assignor to himself and Francis G. Burke

By his Atty C. W. M. Smith

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

HOLIDAY C. BABCOCK, OF EUREKA, CALIFORNIA.

Letters Patent No. 111,029, dated January 17, 1871.

IMPROVEMENT IN SHINGLE-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HOLIDAY C. BABCOCK, of Eureka, in the county of Humboldt and State of California, have invented certain new and useful Improvements in Machines for Shaving and Riving Shingles; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to shingle-machines, and consists of certain details of construction which will be fully described hereinafter.

Figure 1 is a plan;

Figure 2, a side elevation; and

Figure 3, a longitudinal section taken through the center of said machine.

Like letters refer to like parts in all of the figures.

A A′ are the knives, having their edges parallel to each other, and of a length exceeding the widest shingle, and are attached to the cross-heads B B′ by means of the screws C.

The cross-heads pass through openings in the sides of the frame, and are adjusted by means of the gibs D and screws E to the converging guides F.

The guides F are adjustable by means of the elongated holes G, to any desired angle or distance apart, in order to vary the thickness or taper of the shingle.

H is the crank-shaft, and

I, the connecting-rod, by means of which a reciprocating motion is imparted to the sliding plate or platform J.

To the platform J are strongly secured arms K, projecting through the sides of frame Y.

These arms are provided with cross-arms, to which are rigidly attached rods L for communicating motion to the cross-heads B B′.

M is the river or instrument for splitting the bolt or block.

This river is also moved by the plate or platform J, to which it is connected by means of the rods N.

In order to provide a support and holder for the bolt, so that it may be operated upon, I employ the frame O and fixed platform P.

The bolt should be held down by a spring or other suitable device, not shown in the drawing.

To understand the operation of my invention, let us suppose that the movable parts are placed in their extreme forward position toward the letter X.

Then, if the bolt is placed upon the platform P, and the shaft H be caused to revolve, the river M, guided between the frame O and the guide-piece Q, will come in contact with the bolt at a height above the platform P of about three-eighths (⅜) of an inch, or equal to the greatest thickness of the proposed shingle; and if the grain of the wood composing said bolt was reasonably straight, said river would be drawn straight through, splitting off a piece from the under side of said bolt, having a uniform thickness of three-eighths (⅜) of an inch. But to allow for following the grain, the frame O and guide-piece Q are a little further apart at the rear than at the forward end.

The piece thus riven off is prevented from coming out backward by means of the pins R, shown in dotted lines in fig. 1.

Spring-catches S are attached to the under side of the river, that shut in out of the way while the river is passing through the bolt, but spring down between the pins R, in readiness to catch the piece split off, and, during the advance movement of the parts, push said piece forward along the platform P out from under the bolt and off the forward end of said platform, when it drops onto the sliding platform J.

During the return or second backward stroke, this piece, by coming in contact with the forward end of the platform P, is held stationary, and its forward end, (held down by the guide-bar T and the spring U,) is caught between the knives A A′, and said knives, moving with the platform P, will be caused, as they complete the stroke, to shave off all the superfluous wood, and perfect the shingle, giving a taper and thickness corresponding to the angle and distance apart of the guide F.

The projection V, to which the guide-bar T is secured, should be so high or so well jointed to said guide-bar that shavings cannot be forced into the joint.

The guide-bar T, and the end of the platform P, are made to dovetail into each other, so that the piece from which the shingle is to be formed can be forced quite off the platform J.

In order to support the shingle until it leaves the knives, the prongs or rods W are provided and attached as shown.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. The riving machinery, consisting of the frame O, platform P, pins R, and guide-piece Q, in combination with the river M having spring-catches S, constructed and operating substantially as described, for the purpose set forth.

2. In combination with said riving machinery, constructed and arranged as described, the platform J, having the guide-bar T, spring S, and projections V, as described.

3. The shingle-machine, constructed specifically as described, with its frame, platform, knives, guides, and operating mechanism, when arranged as described, for the purpose set forth.

In witness whereof I have hereunto set my hand and seal.

HOLIDAY C. BABCOCK. [L. S.]

Witnesses:

C. W. M. SMITH,

H. S. TIBBEY.