

J. Stewart,

Reciprocating Saw Mill,

Nº 63,114,

Patented Mar. 19. 1867.

Fig. 3

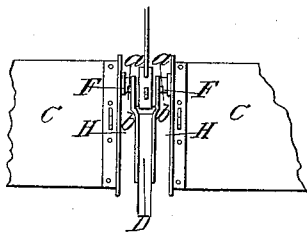


Fig. 2

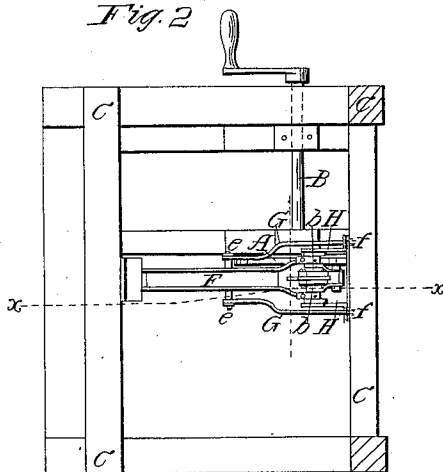
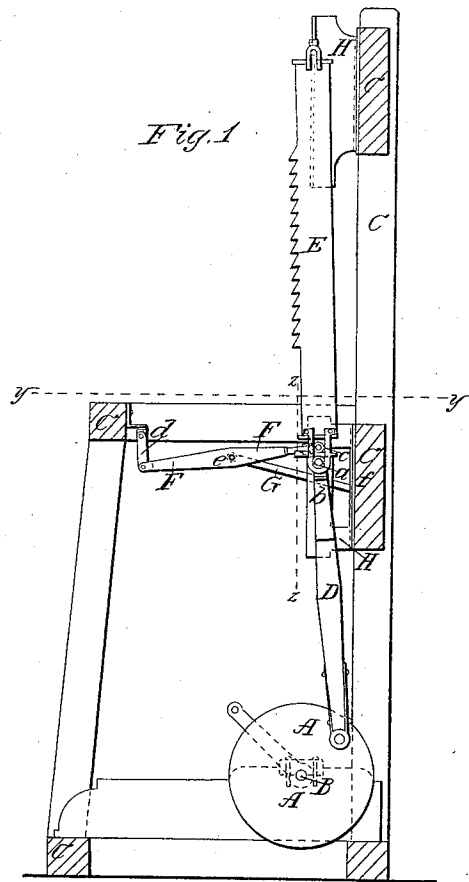


Fig. 1



Witnesses:

Theo. Fischer
J. A. Servin.

Inventor:

Josephine Stewart
Per Munn
Attorney

United States Patent Office.

JOSEPHINE STEWART, OF OWOSSEE, MICHIGAN, ADMINISTRATRIX OF THE
ESTATE OF R. L. STEWART, DECEASED.

Letters Patent No. 63,114, dated March 19, 1867.

IMPROVEMENT IN SAW-MILLS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that R. L. STEWART, deceased, late of Owossee, Shiawassee county, Michigan, did, during his lifetime, invent a new and useful Improvement in Hanging Reciprocating Saws, and I, JOSEPHINE STEWART, of Owossee, as aforesaid, administratrix of the estate of said R. L. STEWART, deceased, do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention is designed to be an improvement upon the method of hanging saws, Letters Patent for which were granted to R. L. STEWART, February 9, 1864.

The improvement consists in so arranging the different portions of the machine that the saw may be forced back during its upward stroke to avoid unnecessary friction and to permit the escape of the saw-dust. When it descends the saw is drawn forward against the timber to be sawn. A combined vertical and horizontal motion is thus imparted to the saw. In the accompanying drawings this invention is illustrated—

Figure 1 being a vertical longitudinal sectional view, the plane of section being indicated by the line *x x*, fig. 2.

Figure 2 is a horizontal sectional view, the plane of section being indicated by the line *y y*, fig. 1.

Figure 3 is a detail sectional front view, showing the manner of hanging the saw, the plane of section being indicated by the line *z z*, fig. 1.

Similar letters of reference indicate corresponding parts.

The crank-wheel A is attached to the driving-shaft B, which has its bearings in a frame, C, and is revolved in the usual manner. The frame C is made of wood or any other suitable material strong enough to support and hold the working parts of the machine. To the crank-wheel A is pivoted the vertical pitman D, the upper end of which is pivoted to the lower end of the saw E by means of a pivot, *a*, which passes through the saw and through the branched ends *b* of the pitman D. These branched arms extend a little above the pivot *a*, and to them are pivoted by a pin, *c*, the branched arms of the horizontal pitman F, as shown in the drawings. The other end of the pitman F is pivoted to the lower end of the short vertical rod *d*, the upper end of which is pivoted to the frame C, as shown. To the centre, or nearly so, of the horizontal pitman F are pivoted, by a pin, *e*, the side arms G, as seen more particularly in fig. 2. The other ends of these side arms are pivoted to the frame C by pins *f*. H are the lateral guides to the saw, whereby the latter is prevented from side motion during its up-and-down strokes. By this construction the horizontal pitman F tends to revolve about the point *e*, as the saw moves upward; the saw is thereby forced back in the cut, thereby relieving it from the friction on the log and allowing the saw-dust to fall freely. As the saw descends it is drawn forward again against the timber to be sawn. The short arm *d* allows the horizontal movement to the pitman F. By this arrangement the machine is made simpler and less expensive than before, and it does its work in a more effective manner.

Having thus described this invention, what is claimed as new, and desired to secure by Letters Patent, is—

The pitman F, pivoted at its centre to the pivoted arms G, at its outer end to the arm *d*, and at its inner end to the pitman D, constructed and operating substantially as described for the purpose specified.

JOSEPHINE STEWART,

Administratrix of the Estate of R. L. Stewart, deceased.

Witnesses:

IRA MERELL,
LOUISA MERELL.