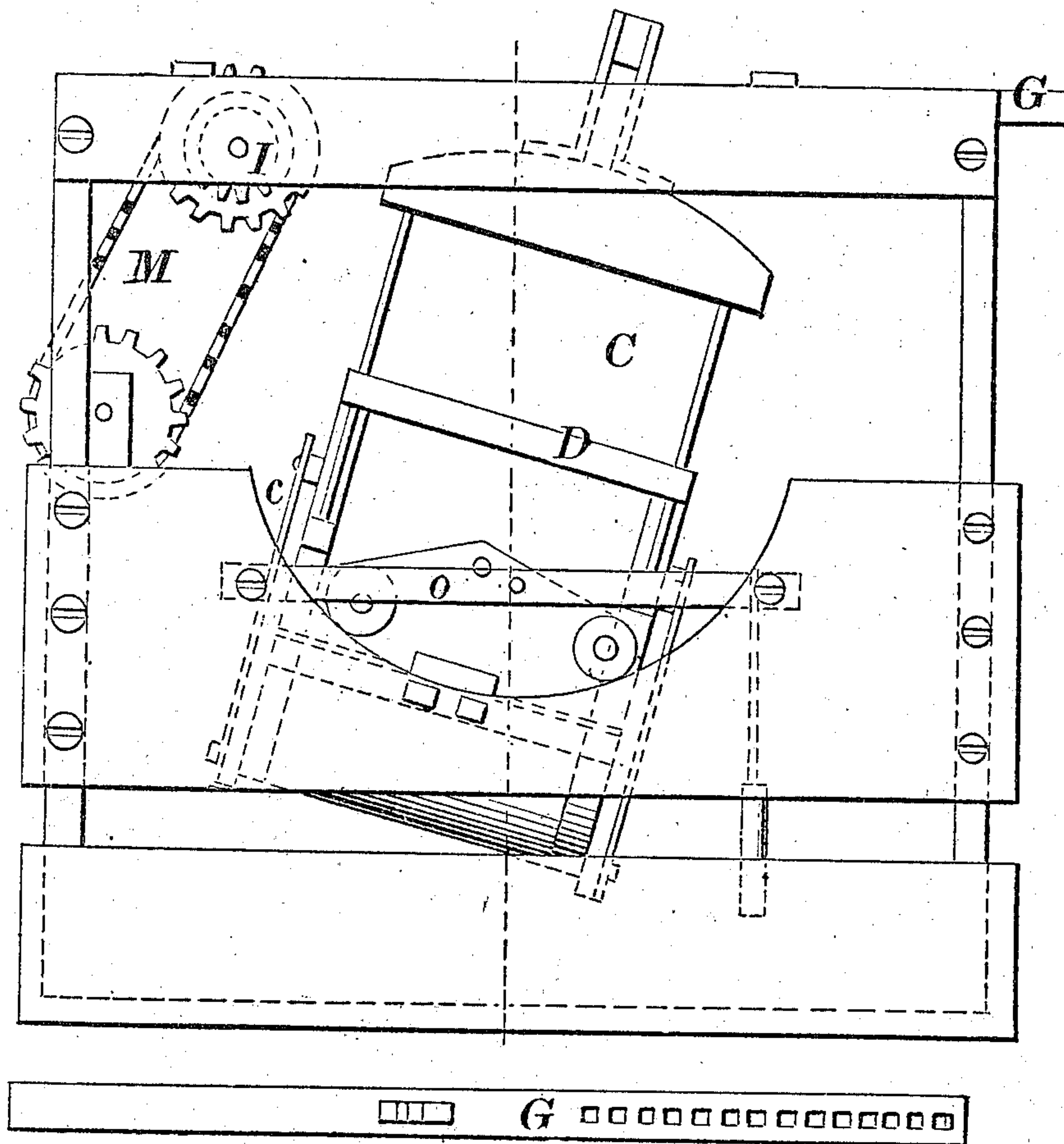


J. J. DEPUTY.
SAWMILL.

No. 42,276.

PATENTED APR. 12, 1864.



TAKEN FROM PATENT OFFICE REPORT
1864 VOL-II-
ONLY DRAWING ACCESSIBLE (1911)

UNITED STATES PATENT OFFICE.

JESSE J. DEPUTY, OF PEORIA, ILLINOIS.

IMPROVEMENT IN SAW-MILLS.

Specification forming part of Letters Patent No. 42,276, dated April 12, 1864.

To all whom it may concern:

Be it known that I, JESSE J. DEPUTY, of the city and county of Peoria, and State of Illinois, have invented a new and useful improvement in sawing-machines for sawing ship-timber and other bevel stuff; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the machine. Fig. 2 is a front elevation of the same. Fig. 3 is a vertical longitudinal section at the line *a b* of Fig. 2. Fig. 4 is a perspective view of the rack *G*. Fig. 5 is a face view of the frame *C*. Fig. 6 is an edge view of the same.

Like letters in all the figures represent the same parts.

The nature of my invention mainly consists in the construction and arrangement of an adjustable frame, with which the saw frame or gate is connected in such a manner as to admit of an accurate and quick adjustment of the saw to all the angles which may be required of the sawed stuff.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is the standing frame of the machine. *B B* are uprights, to which the several parts are attached. *C* is a quadrilateral frame, on whose upright rods *a a* the saw frame or gate *D* slides by means of the lugs *b b b b*, which fit thereon. The frame *C* has a partially revolving adjustment each way from its perpendicular position, so as to bring the saw *E*, which is hung in the frame *D*, at any angle which may be required of the sawed stuff. I effect this by the following arrangement: The plate *F*, which is secured to the uprights *B B*, has a segmental surface, *c*, which supports the frame *C*, there being friction-wheels *d d* on the lower cross-piece, *e*, of the frame, which bear on the said curved surface so as to admit of the frame being turned easily each way to adjust it; and there are friction-wheels *d' d'* connected to the lower side of the arm *d''* of the frame, which bear against the face of the plate *F* to keep the lower side of the said frame against the opposite

side of said plate. On the upper edge of the upper cross-piece, *f*, of the frame *C* there is a yoke, *g*, which fits in the rack *G*, that is movable between the guide-strips *H H*, which have ways *h h*, on which the rack rests. The said yoke *g* fits on the block *i*, which is hung on the pin *j*, which passes through the mortise *k* in the rack. To give the various adjustments to the frame, there is a pinion, *I*, on the shaft *J*, which gears into the under side of the rack *G*, and on the said shaft there is a wheel, *K*, which is connected with the crank-wheel *L* by means of the endless chain *M*. By turning the crank-wheel *L* the pinion *I* on the shaft *J* is operated so as to move the rack *G*, and consequently the upper end of the frame *C*, to give the requisite angles to the saw *E*. On the endless chain *M* there is a scale of bevels which number each way from the cipher—there being odd numbers in one direction and even numbers in the other; and there is an index-hand, *N*, to which the numbers are adjusted, so that by turning the crank-wheel *L* until the number on the chain which indicates the right bevel to commence sawing is opposite the index-hand *N* the saw *E* is brought to its proper position, and when a twist bevel is desired to the stuff the bevel of the saw is varied during the operation of sawing by changing the position of the chain *M* in the manner above described. The same result will be attained by placing the scale of bevels on either of the wheels *K* and *L*.

A modification of shifting the lower end of the frame *C* is represented in the drawings.

Motion is given to the saw frame or gate *D* by means of the connecting-rods *P P* and crank-arms *Q Q* on the shaft *R*, there being a drum, *S*, on said shaft, over which a belt passes from the driving-shaft. The journals of the shaft *R* have bearings in the block *n n* on the rods *a a* of the frame *C*.

The manner of feeding the stuff to the saw I have not represented, as I do not confine myself to any particular arrangement.

Having thus fully described the construction and operation of my improvement in sawing-machines, what I claim therein as new, and desire to secure by Letters Patent, is—

1. Combining and arranging the frame *C* or its equivalent at one end with the curved sur-

face *c* and bar *O*, and at the other end with the rack *G* and pinion *I*, when arranged to operate substantially in the manner and for the purpose above set forth.

2. The scale of bevels arranged on and operated by the endless chain *M*, substantially as above set forth.

In testimony that the above is my invention I have hereunto set my hand and seal this 12th day of November, 1863.

JESSE J. DEPUTY. [L. S.]

Witnesses:

STEPHEN USTICK,
JAMES MCCAHEN.