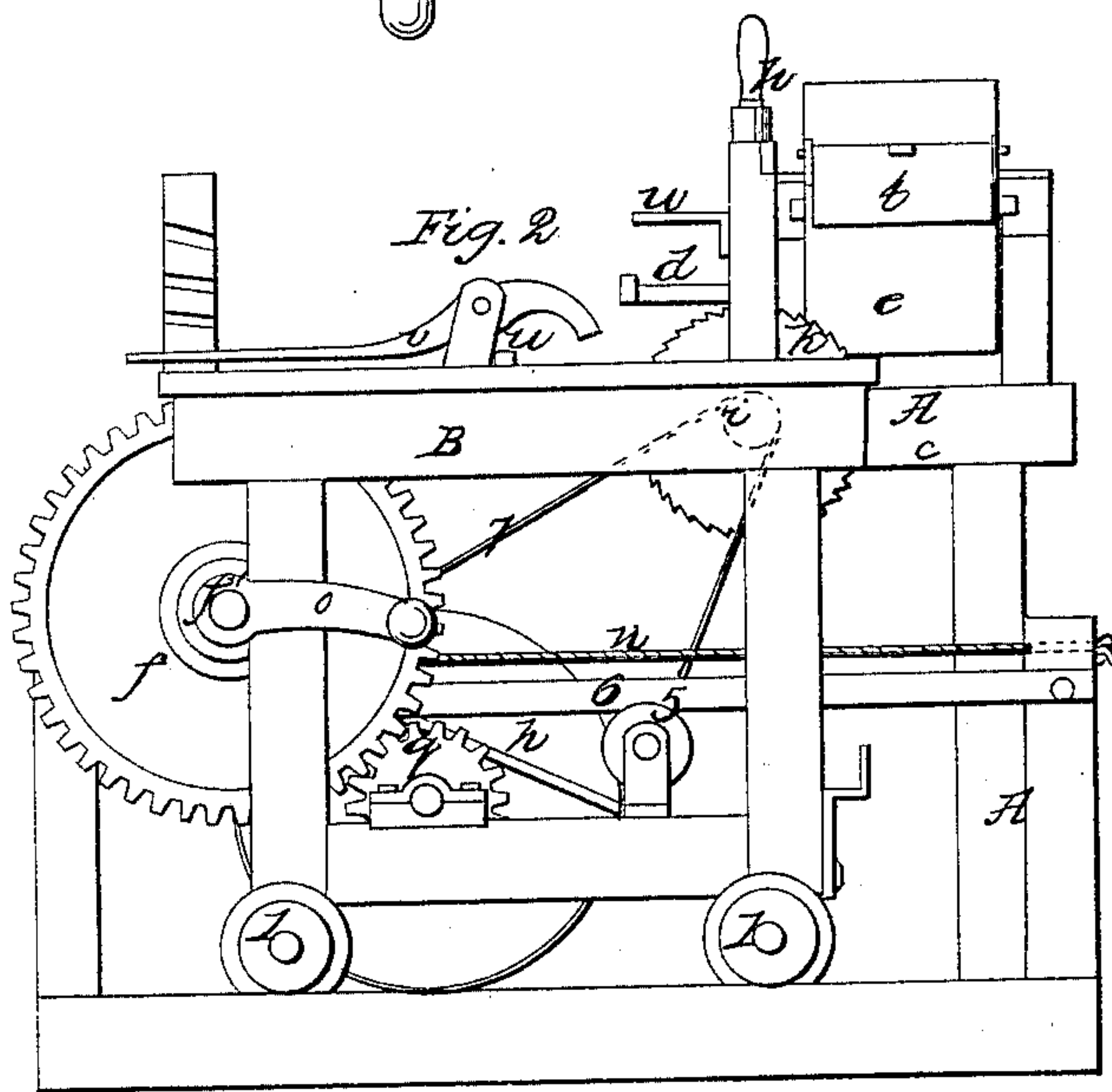
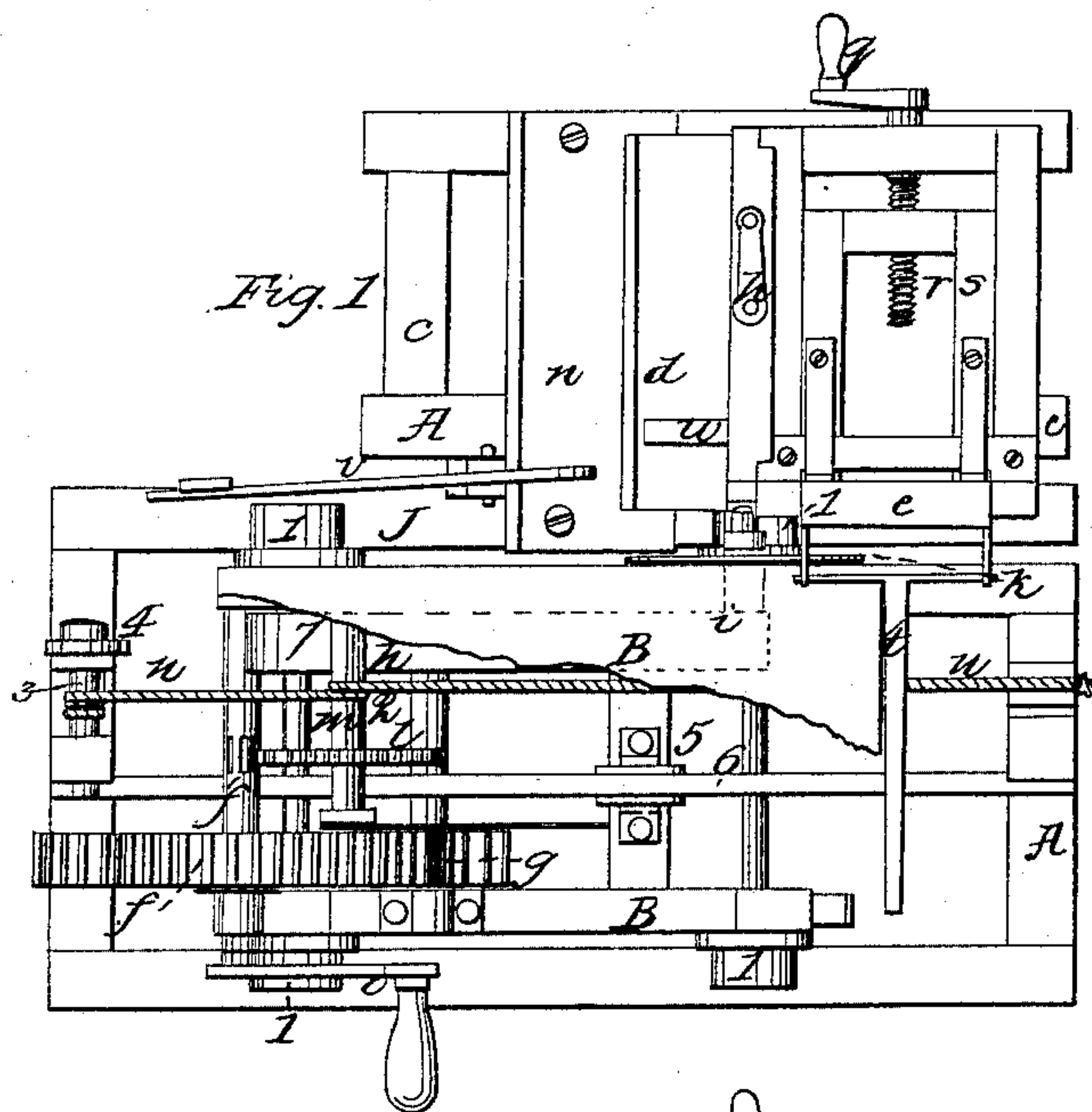


J. W. Schmitt,
Circular Sawing Machine.
N^o 24,762. Patented July 12, 1859.



Inventor

Witnesses:

George Pfeiffer
My Witness

J. W. Schmitt

UNITED STATES PATENT OFFICE.

J. W. SCHMIDT, OF PHILADELPHIA, PENNSYLVANIA.

SAWING-MACHINE.

Specification of Letters Patent No. 24,762, dated July 12, 1859.

To all whom it may concern:

Be it known that I, J. W. SCHMIDT, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Machine for Sawing by Hand; 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, represents a top view, and Fig. 2 a side elevation, like letters in both figures indicating the same objects.

The nature of my invention consists in providing a stationary frame fitted with a track, and with adjustable holders for the lumber; and a moving saw-carriage in connection therewith, both being constructed and arranged, as hereinafter described; whereby the operator is enabled to adjust the lumber; and operate and feed the saw so as to accomplish the sawing, with great facility and accuracy, without the aid of an assistant—advantages very desirable to many packing box and cabinet makers and other workers in wood whose shops are small, or in locations which do not admit of the use of steam power.

In the drawings A, represents the stationary frame, consisting of the rail tracks, and raised platform frame, *c*, which supports the adjustable holders *d* and *e*; and B, the moving saw-carriage, with its gear-wheels *f* and *g*, and pulleys *h* and *i*—for giving rotary motion to the saw, *k*; and *l*, the gear wheel, *m* the shaft, and *n*, the cord or chain whereby the said carriage is moved upon the track rails when the wheel (*f*) is rotated in either direction by hand-crank *o*.

In the stationary frame (A), the crank handle (*p*)—being attached to a saw—when operated, raises or lowers a vertically sliding frame which carries the horizontal lumber-holder (*d*) as the cut to be made in it by the saw (*k*) may require; and the crank handle *q*,—being attached also to a screw, *r*—when operated, moves the horizontally sliding frame, *s*; the said frame (*s*) being fitted with an upright piece *e*, and a lever clamp, *t*, (which may be weighted), whereby a piece of lumber can be held adjusted firmly, in the plane of the saw (*k*), so as to be operated upon thereby as occasion may require. A stationary floor *u*, having a spring lever *v*, is provided for supporting and holding such pieces of lumber as require merely to be cut through transversely.

The sliding frame which carries the holder (*d*), has a staying arm *w*, for enabling the operator to fasten the piece of lumber thereto, by wedging or blocking.

The carriage (B) is moved upon the rails, *j, j*, on four wheels 1—1, when the crank (*o*) is operated; because the shaft *f'*, of the spur wheel (*f*) gears in to the spur wheel (*l*) whose shaft is surrounded by a coil 2 in the rope *n*, which is stretched tightly from one end of the stationary frame (A) to the other, (by means of the roller 3, and ratchet wheel and pawl 4,) so as to be parallel with the rails (*j, j*), and also on a line with the said shaft. The pulley 5, rolling against the fixed bar 6, keeps the carriage (B) from being thrown off the track, when in motion. Rotary motion is given to the saw (*k*) in either direction, through the media of the band 7, and pulleys (*h* and *i*).

It will be perceived that by the operator's turning the crank (*o*) in either direction, the carriage (B) will be moved accordingly; and at the same time rotary motion will be given to the saw (*k*); and that consequently, either transverse or longitudinal cuts, as occasion may require, can be readily and accurately made in the pieces of lumber when the latter are secured and adjusted in the supports *d*, *e*, or *u* accordingly, as described, and without the aid of an assistant—which could not be done if the said lumber were required to be moved up to the saw as heretofore.

Having thus fully described my improved machine for hand-sawing, what I claim as new therein, of my invention, and desire to secure by Letters Patent, is—

The combined arrangement of the stationary frame (A)—fitted with the adjustable holders (*d*, *e*, and *u*) as described—and the saw carriage (B)—operated by the crank (*o*), shaft (*f'*), spur wheel (*l*) shaft (*m*), and rope or chain (*n*), as set forth and described; while the saw (*k*) is at the same time rotated through the media of the gear-wheels (*f* and *g*) pulleys (*h* and *i*) and band (7), arranged and combined as set forth and described; the said stationary frame (A), and the said moving saw-carriage (B) operating together as and for the purpose set forth and described.

J. W. SCHMIDT.

Witnesses:

BENJ. MORISON,
GEORGE PFEIFFER.