

C. Meiners,

Head Block.

No. 102,847.

Patented May 10, 1870.

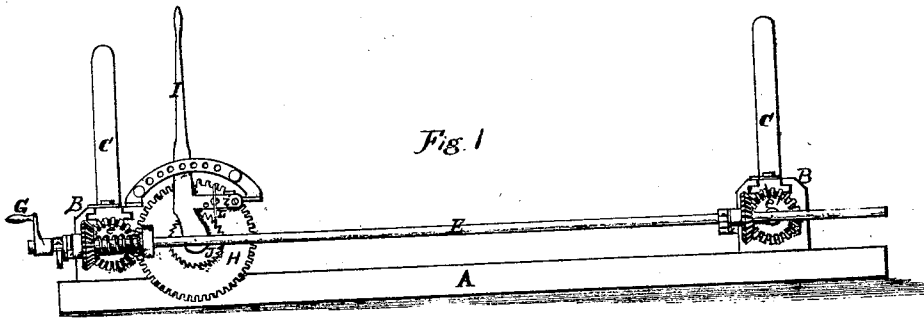


Fig. 1

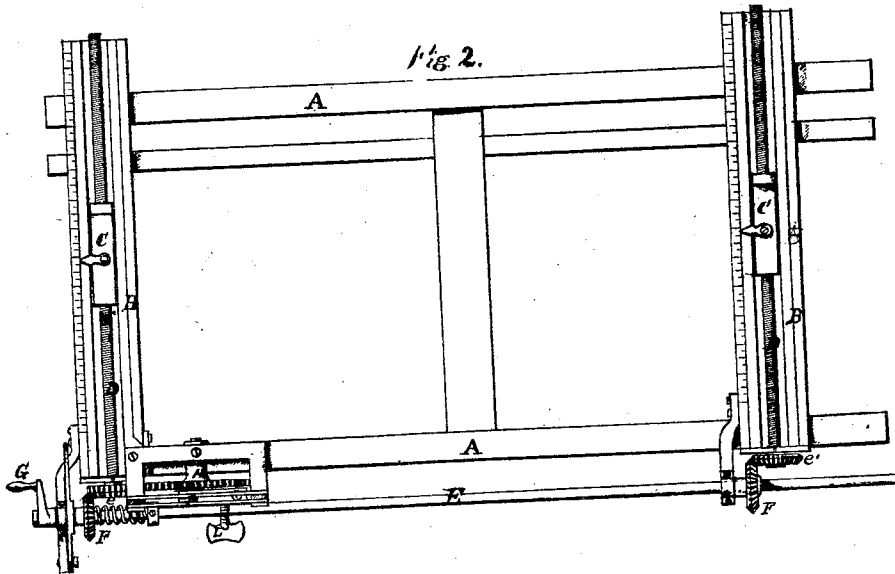


Fig. 2.

WITNESSES.

Sam. H. Knippen
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United States Patent Office.

CORNELIUS MEINERS, OF INDIANAPOLIS, INDIANA.

Letters Patent No. 102,847, dated May 10, 1870.

IMPROVEMENT IN HEAD-BLOCKS OF SAW-MILLS

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

I, CORNELIUS MEINERS, of Indianapolis, in the county of Marion and State of Indiana, have invented certain Improvements in Head-Blocks for Saw-mills, of which the following is a specification.

Nature and Objects of the Invention.

My invention relates to that class of head-blocks in which screws are employed to operate the knees, said screws being actuated by means of a longitudinal setting-shaft, furnished with miter-wheels that gear with miter-wheels on the ends of the screws; and

It consists in the arrangement of a spur-pinion and miter-wheel, to gear with a miter-wheel on the longitudinal setting-shaft, said spur-pinion and miter-wheel being operated by means of a lever, pawl, ratchet, and spur-wheel in such a manner as to enable the sawyer, while standing upright, to set the log by one or more movements of the lever, instead of requiring several turns of the crank on the setting-shaft, as heretofore, combining therewith the advantages of the great accuracy of screw head-blocks in setting the log to any desired fraction of an inch.

Description of the Accompanying Drawings.

Figure 1 is a side elevation of a saw-mill carriage, having head-blocks embodying my invention.

Figure 2 is a horizontal or plan view of the same.

General Description.

A is the log-carriage;

B, the blocks;

C, the knees;

D, the screws; and

E, the setting-shaft, furnished with the miter-wheels F, that gear with miter-wheels *e e'*, on the screws D, all of which are constructed and arranged in the usual manner.

The screws D, being usually made one-fourth inch pitch, require five turns to set the log for inch lumber. This has usually been done by means of the crank G on the end of the setting-shaft E.

In order to avoid the stooping posture required to turn the setting-shaft in this manner, and at the same time to operate the screws D more rapidly, thus saving both time and labor, I arrange a combined spur-pinion and miter-wheel *e*, on one of the screws D, instead of the miter-wheel usually employed, to gear with the miter-wheel F on the setting-shaft, as shown, and operate said spur-pinion and miter-wheel by means of the lever I, spring pawl, (not shown,) hung to arm *i*, ratchet J, and spur-wheel H.

The spur-wheel H, lever I, and ratchet J, are so proportioned and arranged with reference to each other and the spur-pinion and miter-wheel *e* on screw D, that a single stroke of the lever may be made to move the knees as much as one and one-half inch, or any desired less distance, the stroke of the lever being regulated by pins set in the holes in the guide K. For greater distances, two or more strokes of the lever may be employed.

When it is desired to run the knees back, the pawl is disengaged from the ratchet by means of a cam on the shaft of the thumb-nut L, when the screw may be operated by means of the crank G in the setting-shaft.

The mode of operating the knees for sawing tapering lumber is the same as in the ordinary screw head-block.

The ratchet J may be dispensed with, if desired, and the pawl attached to a lever in a manner to operate directly upon the teeth of the spur-wheel H.

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

The combination of knee C, screw D, and gear *e*, with gears H and E, lever I, and ratchet J, when all the parts are constructed as and for the purpose specified.

CORNELIUS MEINERS.

Witnesses:

G. A. SKINNER,
O. F. MAYHEW.