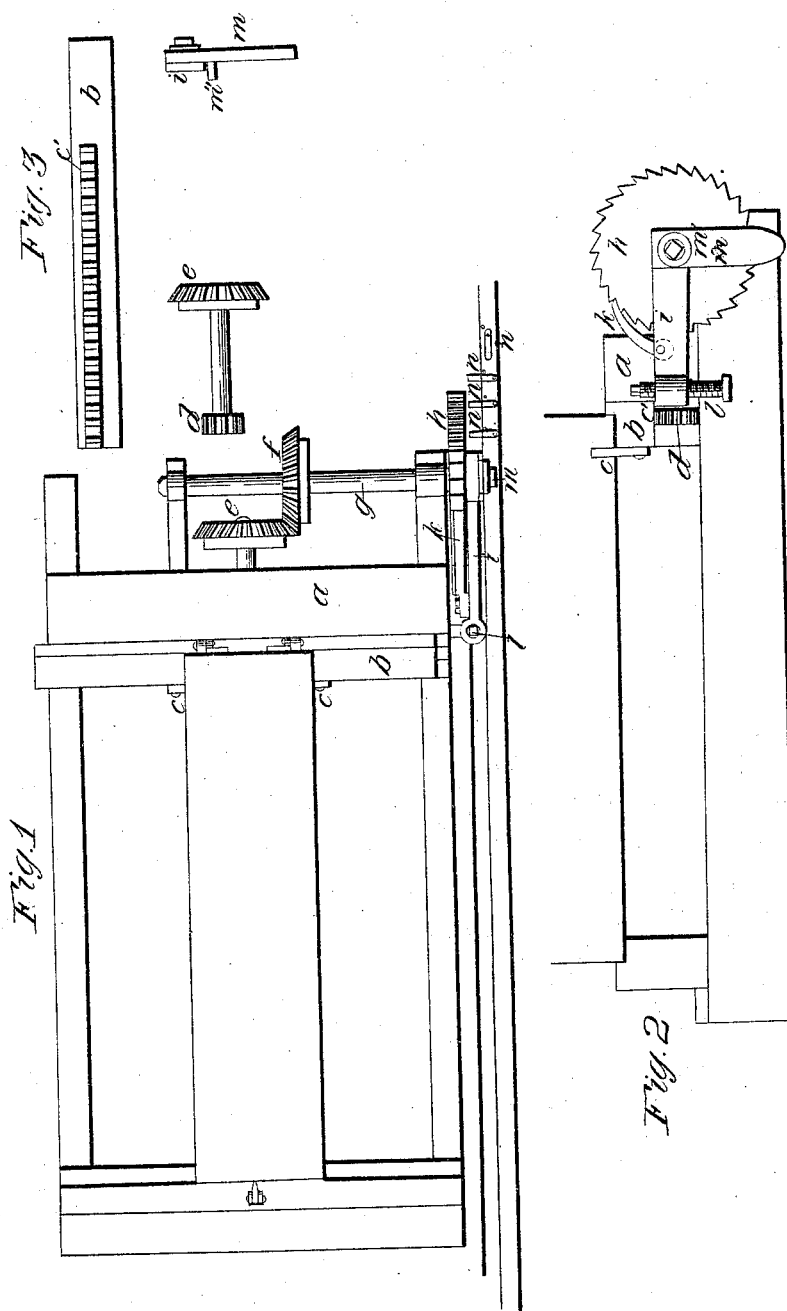


*D. V. Thomas,  
Sarr-Mill Head-Block.  
Patented Sep. 17, 1842.*



# UNITED STATES PATENT OFFICE.

D. V. THOMAS, OF RICHFIELD, NEW YORK.

MODE OF SETTING FOOT-BLOCKS OF SAWMILLS BY THE MOTION OF THE CARRIAGE.

Specification of Letters Patent No. 2,774, dated September 17, 1842.

*To all whom it may concern:*

Be it known that I, D. V. THOMAS, of Richfield, in the county of Otsego and State of New York, have invented a new and useful Improvement in Sawmills, which I denominate "The Self-Setting and Gaging Tail-Block Slide," and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a top view; Fig. 2 a side elevation; Fig. 3, detached parts.

The nature of my invention consists in an apparatus for setting and gaging the log by a slide, which is moved by running back the carriage in a manner hereafter described

The carriage of my sawmill should be constructed like those in common use; the tail block (*a*) is made similar to those that have a slide in them, a rabbet being formed on its upper forward edge, into which the slide (*b*) fits which sustains the log, it being fastened thereto by side dogs (*c*) of the usual construction; on the under side of this slide a rack (*c'*) is formed into which a pinion (*d*) Figs. 2, 3) works; the horizontal shaft of this pinion runs through the block (*a*) at right angles to, and extending out back of it having on the end a bevel pinion (*e*) which meshes into another bevel pinion (*f*) of the same size, at right angles to it on a shaft (*g*) placed parallel to and in the rear of the tail block; this shaft extends out on one side beyond the carriage and has attached to it a ratchet wheel (*h*); a lever (*i*) is also put onto this shaft which serves as its fulcrum; this lever has attached to it one or more pawls (*k*) on its outer end working on the ratchet; the lever is also furnished with a set screw (*l*) for the purpose of regulating the vibration of the lever

which gages the thickness of the boards; the shaft has also another lever (*m*) on its outer end which hangs down below the carriage; from its inner side a stud (*m'*) projects which when the lever is moved back bears against the underside of the lever (*i*) and causes it to move the ratchet wheel; this lever (*m*) extends down low enough to strike the catches or buttons (*n*) fastened to the floor. This lever may be made longer or shorter which will tend to act more or less on the ratchet wheel. The buttons (*n*) are made to swivel on a pin so that they can be turned back when not in use.

When the carriage is run back the pendent lever (*m*) comes in contact with a projecting button (*n*) and is turned, which causes the stud (*m'*) to act on the lever (*i*) and vibrate it; this by means of the pawls conveys motion through the ratchet and bevel wheels to the rack on the under side of the slide on which the log rests; when the carriage again runs forward the lever (*m*) is vibrated the other way without coming in contact with the lever, (*i*); the log can be gaged to any thickness by means of the screw (*l*) which allows the lever (*i*) a greater or less vibration.

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

1. The lever (*m'*) in combination with the graduating lever (*i*) hand (*k*) and ratchet wheel (*n*) for the purpose and in the manner herein set forth.

2. I also claim the set screw (*l*) for gaging the vibrations of the lever (*i*) in combination with the above described apparatus.

D. V. THOMAS.

Witnesses:

CHARLES PORTER,  
JARED C. MUNSON,