

June 1, 1915.

DRAWING

717

A careful search has been made this day for the original drawing or a photolithographic copy of the same, for the purpose of reproducing the said drawing to form a part of this book, but at this time nothing can be found from which a reproduction can be made.

Finis D. Morris,

Chief of Division, E.

AWK.

# UNITED STATES PATENT OFFICE.

JAMES SECOR, OF NEW YORK, N. Y.

## SAWMILL FOR SAWING TIMBER.

Specification of Letters Patent No. 717, dated April 28, 1838.

*To all whom it may concern:*

Be it known that I, JAMES SECOR, of the city, county, and State of New York, have invented a new and Improved Mode of Constructing Sawmills; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in making a portable saw mill, the feed being more uniform than that of the ordinary mill by means of a band or chain round the ratchet wheel and secured to the saw gate. The saw gate is operated on by means of a lever and fly wheel.

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

The carriage A of this mill and that part of the frame B which supports the carriage and the ratchet wheel C are similar to those of the ordinary saw mill. Said frame consisting of sills and cross timbers E placed on the level surface having one upright post D on each side of said frame and cross timbers at top and bottom which supports the fender posts F against which the saw gate S works in the ordinary form and manner. The cross timbers which support the fender posts at the bottom extend on one side half the width of the frame at the farther part of which is placed a shaft G and fly wheel H of the ordinary size for a saw mill. Said fly wheel is connected with the saw gate by means of a lever I that extends from the bottom of the saw gate to the fly wheel and connected by means of a pitman K or may be some other convenient mode that gives a vibrating motion to the lever. A fulcrum L is placed in the middle part of said lever on which it vibrates. The feed or movement of the carriage is given by means of a band T or chain passing round the ratchet wheel and secured to the saw gate by means of a small lever M secured at one end in the middle part of the saw gate by means of a pivot or hinge. At the other end of said lever is secured a movable piece P which raises and falls as occasion requires. The

band or chain which passes round the ratchet wheel has a spring O at one end as it may be weight. The other end of said band is secured to the last mentioned lever. The feed of the carriage is varied by means of a movable bearing or fulcrum P on which the last mentioned small lever vibrates, as is more fully explained in the drawing. The band around the ratchet wheel is made slack for the purpose of stopping the feed when the head block comes in contact with the movable piece U which supports the piece N. Said movable piece N is let down which stops the feed of the carriage, and at the same time lifts the hands from the ratchet wheel by means of a pin on the inside of the piece N which comes in contact with the ends of the hands V. The carriage is run back by means of a band or chain W extending from the main fly wheel shaft the ratchet wheel which is made to operate by means of a friction pulley R at the stopping of the feed, as it may be gearing. The main shaft on which the fly or balance wheel is placed may run on friction rollers having the weight of the saw gate counterbalanced in the fly wheel. The different parts of this mill is explained in the drawing. The construction of this mill will admit of higher speed than the ordinary saw mill. It may be operated on from the main shaft by any common power. The lever which gives motion to the saw gate may be applied to the top instead of the bottom of the saw gate. The large lever which gives motion to the saw may be placed as described, as it may be parallel with the carriage.

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

The mode of feeding the carriage and the connecting lever for giving motion to the saw gate in combination there with substantially as above described.

JAMES SECOR.

Witnesses:

THOS. B. HUDSON,  
WILLIAM MONTGOMERY.