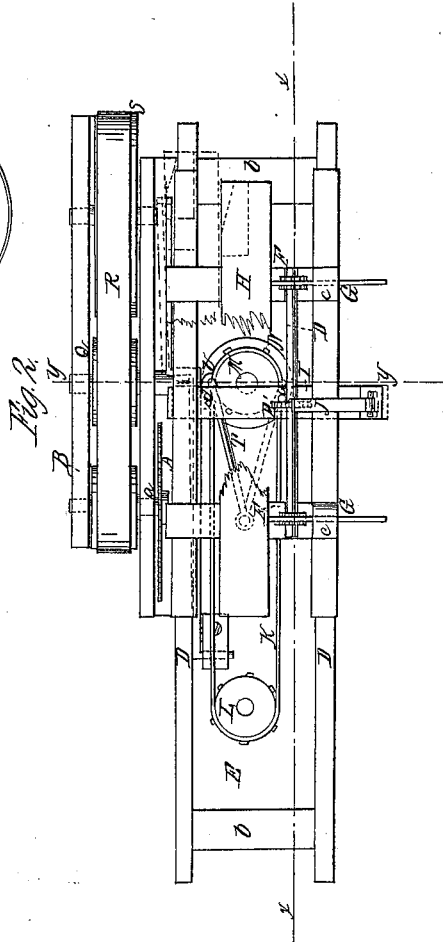
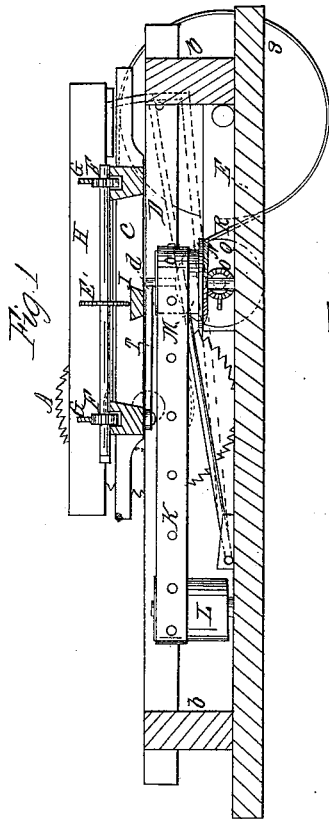
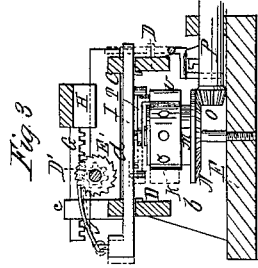


J. M. Carlisle,
Circular Saw Mill.

N^o 15,062.

Patented June 10, 1856.



UNITED STATES PATENT OFFICE.

JOHN M. CARLISLE, OF WILLIAMSTON SPRINGS, SOUTH CAROLINA.

METHOD OF OPERATING HEAD-BLOCKS OF SAWMILLS.

Specification of Letters Patent No. 15,062, dated June 10, 1856.

To all whom it may concern:

Be it known that I, JOHN M. CARLISLE, of Williamston Springs, in the district of Anderson and State of South Carolina, have invented a new and useful Improvement in Sawing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a longitudinal vertical section of my improvement, (x), (x), Fig. 2, showing the plane of section. Fig. 2, is a plan or top view of the same. Fig. 3, is a transverse vertical section of the same, (y), (y), showing the plane of section.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in the peculiar means employed for operating the carriage, or feeding the log to the saw and also setting the log as will be hereinafter fully shown and described.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, represents a circular saw, the arbor (a), of which is fitted in suitable framing B.

C, represents a carriage on which the log or stuff to be sawed is placed. This carriage works on ways D, D, the ends of which are secured to ledges (b), (b), on the platform or flooring E. On the carriage there is placed a longitudinal shaft D', having a ratchet wheel E, upon it, and two pinions F, F. These pinions gear into racks G, G, which are attached to a bar H, placed longitudinally on the carriage, the racks working through guides (c), (c), on the carriage.

I, represents a sliding bar fitted transversely in the carriage C, and having a pawl J, attached to it, said pawl catching into or between the teeth of the ratchet E, see Figs. 2 and 3. To the under side of the sliding bar I, there are attached two pins (d), (d), one of which is adjustable.

K, represents an endless apron which works around the vertical pulleys L, M, on the platform or flooring E. One of these pulleys M, has a toothed wheel N, on its lower end, and a pinion O, gears into this wheel, the pinion being upon a shaft P, which has a pulley Q, upon it driven by the belt R, which belt drives the saw A.

S, is the driving pulley around which the belt R, passes.

To the underside of the carriage C, there is attached an arm T, said arm being pivoted to the carriage. The outer end of the arm is curved or bent downward so that it will fit in a socket U, attached to the endless belt K.

The operation is as follows. Motion is given the driving pulley S, in any proper manner and the endless belt K, is operated by the gearing N, O, previously described, and as the belt K, moves, the carriage C, of course has a reciprocating motion communicated to it, as it is attached to the belt K by the arm T, the outer end of which passes around the pulleys L, M, as the outer end of the arm passes around the pulleys the arm will strike against the pins (d), (d), and actuate the slide I, and the pawl J, will turn the ratchet E', and move the bar H, and also the log which is placed or attached to the side of the said bar. The log consequently will be operated or set to the saw at each stroke or vibration of the carriage and as one of the pins (d), is adjustable the log may be moved a greater or less distance at each stroke of the carriage so that the log may be sawed into stuff of greater or less thickness.

A suitable stop lever or device may be employed to prevent the bar H, from being brought in contact with the saw.

By the above improvement, the feed movement of the carriage is rendered automatic and also the setting or adjusting movement whereby the log is set to the saw.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is—

Attaching or connecting the carriage C, to an endless chain or belt by means of an arm T, arranged as shown so that it will actuate, at each end of the stroke of the carriage, a slide I, having a pawl J, attached which, by means of suitable gearing as shown, moves or sets the log to the saw whereby the feed movement of the carriage and also the setting movement of the log are rendered automatic or self acting, as herein described.

JOHN M. CARLISLE.

Witnesses:

THOS. McABBION,
F. A. HOKE.