G. M. HINKLEY.

Improvement in Sawing-Machines.

No. 133,100. Patented Nov. 19, 1872. WITNESSES:

UNITED STATES PATENT OFFICE.

GEORGE M. HINKLEY, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. 133, 100, dated November 19, 1872.

To all whom it may concern:

Be it known that I, GEORGE M. HINKLEY, of Milwaukee, in the county of Milwaukee, in the State of Wisconsin, have invented certain Improvements in Lath-Bolter, of which the following is a specification:

Nature and Object of the Invention.

My invention is a lath-bolter with a carriage to carry the slab up to the saw to be bolted, said carriage attached to an arm or lever at the ends, which lever is attached to a firm footing at the bottom, with an equalizer attachment between the lever and the carriage and a sleeve on the lever, which slides up and down on it, which sleeve is attached to a revolving wheel, and as the wheel revolves it moves the upper end of the lever toward the saw, carrying the carriage slowly and regularly by the saw. The regulation of the carriage to move with the same velocity in all parts of the stroke in that direction is managed by the regulator, and the stroke of the carriage carried back rapidly by means of the sleeve working on the short end of the lever.

Figure 1 is a perspective view of my invention; and Fig. 2 a reversed-side perspective view.

A is the frame. B is the fence to regulate the thickness of the bolt; C, the saw; D, the carriage, on which the slab rests to be sawed into bolts; E, the slide under the carriage, securing the carriage to the frame; F, fastening to the side of the carriage; G, equalizer, secured, by a bolt, to fastening F; H, lever, its

upper end secured to equalizer G; I, sleeve sliding on lever H; K, crank on wheel L; M, pinion meshing into wheel L; N, shaft, on which is pinion M; O, feed-wheel on shaft N; P, feed-roller; Q, lever, to which is attached feed-roller P; R, friction-roller on saw-shaft; S, pulley on saw-shaft, to which is attached a belt to run the machine; T, shaft of wheel L; U, a brace to support the lower end of lever H; V, lower joint of lever H.

This machine is operated by a belt from the power-shaft to pulley S on saw-shaft, which will put the saw in motion. Q has a weight hung on its outer end, which will press feedroller P on pulley R and feed-wheel O, and the feed-pulley R will put the feed-roller P in motion, and that, pressing against feed-wheel O, will revolve wheel O and turn pinion M, which will revolve wheel L, and crank on wheel L will move lever H back and forth, and with it the carriage D. The equalizer G, to which lever H is attached will move up as the carriage moves forward, and, by thus shortening the throw of the lever H as the sleeve I and crank K work onto the greatest travel, equalize the travel of the carriage and make it move up to the saw with an equal motion.

I claim—

Equalizer G, lever H, and crank K, in combination with carriage D, substantially as set forth.

GEORGE M. HINKLEY.

Witnesses:

J. B. SMITH, E. J. SMITH.