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NEW SERIES.

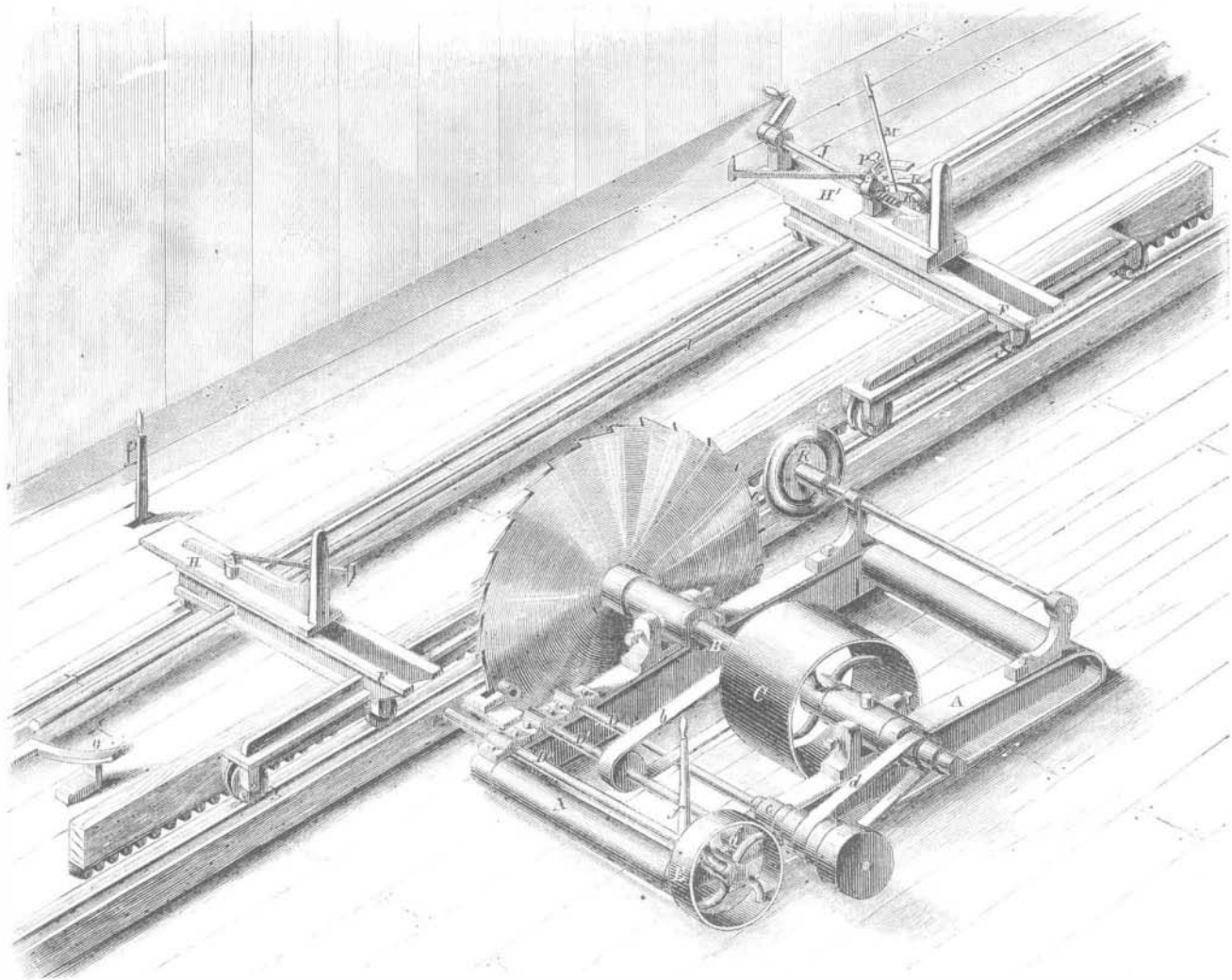
Improved Sawmill.

This cut represents an improved circular sawmill, with patent hand and self-setting rig, feed and independent headblocks, doing away with the large, heavy carriage that is generally used. A A is the frame on which the saw arbor and feed works are mounted. B is the arbor, with the main driving pulley, G, on it. R is the spreader, D D' D'' are the feed shafts, on the inside end of D'' is a pinion for drawing the log, and on the outer end is the large internal and external friction wheel, E. On the outer end of shaft, D' is an internal friction pulley, a, driven by belt, b; this

three or more blocks are used, and an endless chain is employed in place of the rack, G. H H' are slides for setting, being operated by a rack underneath and pinions on shaft, I. On the slide, H', is an extra slide, operated by crank screw, J, for moving the top of the log forward or the butt backward. The screw can be used on each block for setting, in place of the shaft, I, and the rack and pinion underneath when required. L is an internal ratchet, fastened on shaft, I. C is a loose disk, supporting fingers that play into the ratchet wheel, L, and the lever, M, that has a small roller on its lower end. When the log is first

POWDERED CHARCOAL.—Charcoal dust proves to be even a greater disinfectant and preservative than had been supposed. Rev. Dr. Osgood has exhibited to the editors of the Springfield (Mass.) *Republican* a cutlet taken from a ham which had been kept eight years completely imbedded in that preparation, and which seemed as sweet as if it had been cured only a single season. Such being the case, charcoal would be invaluable for packing provisions for long voyages in warm climates, and much more attention should be paid to its use.

[We find this paragraph "going the rounds,"



WALBRIDGE'S IMPROVED SAWMILL.

runs the log back. On the outer end of shaft, D, is an external pulley, c, driven by belt, d, and cone pulleys for different feeds; these feed the log to the saw. The outer end of shaft, D', is hung in an eccentric box, and is operated by levers, f f, by either of which the wheel, E, is brought in contact with either of the friction pulleys, a or c, and when upright it will not touch either, but leaves the head blocks stationary, to receive a log, without the necessity of stopping the saw. F F are the head blocks for supporting the log. These blocks are mounted on rollers, shown at c c' c'' c'''; rollers c and c' being grooved. These blocks are connected to rack, G, by a pin not shown, so that they can be easily separated or closed for different lengths of logs, by pulling the pin out and running either of the blocks along. In sawing long timber

on it is set by hand, through lever, M, and after the log is turned down the lever, M, is dropped down on to pin at x; this brings the lower end of the lever in contact with the spiral wedge, o, causing it to revolve the shaft, I, and set; it can be fastened to any thickness, while running, by moving the slide, P, up or down on the scale, and fastening by the thumb screw.

This machine has been patented by A. P. Walbridge, in the Canadas and in the United States, and for any further information concerning the patent parties may address him at Malone, N. Y. For any further information in relation to the machines address C. C. Whittelsey, manufacturer, at Malone, N. Y. [Mr. Whittelsey is a manufacturer of machinery and his card may be found in our advertising columns.]

but it is calculated to mislead. Charcoal is a very powerful disinfectant, but careful and repeated experiments have shown that it has no power of preserving meats from decay. Mr. Johnson, of this city, kept the body of a mouse buried in a small vessel of charcoal in his room until it was all decayed except the bones, and no odor was perceived during the whole time. The offensive gases resulting from the decomposition of animal matters are absorbed by charcoal, but their formation is not retarded by it. It was doubtless salt ham that Dr. Osgood exhibited.—Eds.

FORMERLY the pressure of steam in locomotive boilers was 100 lbs. on the square inch, now it frequently ranges from 150 to 200 lbs.