

(No Model.)

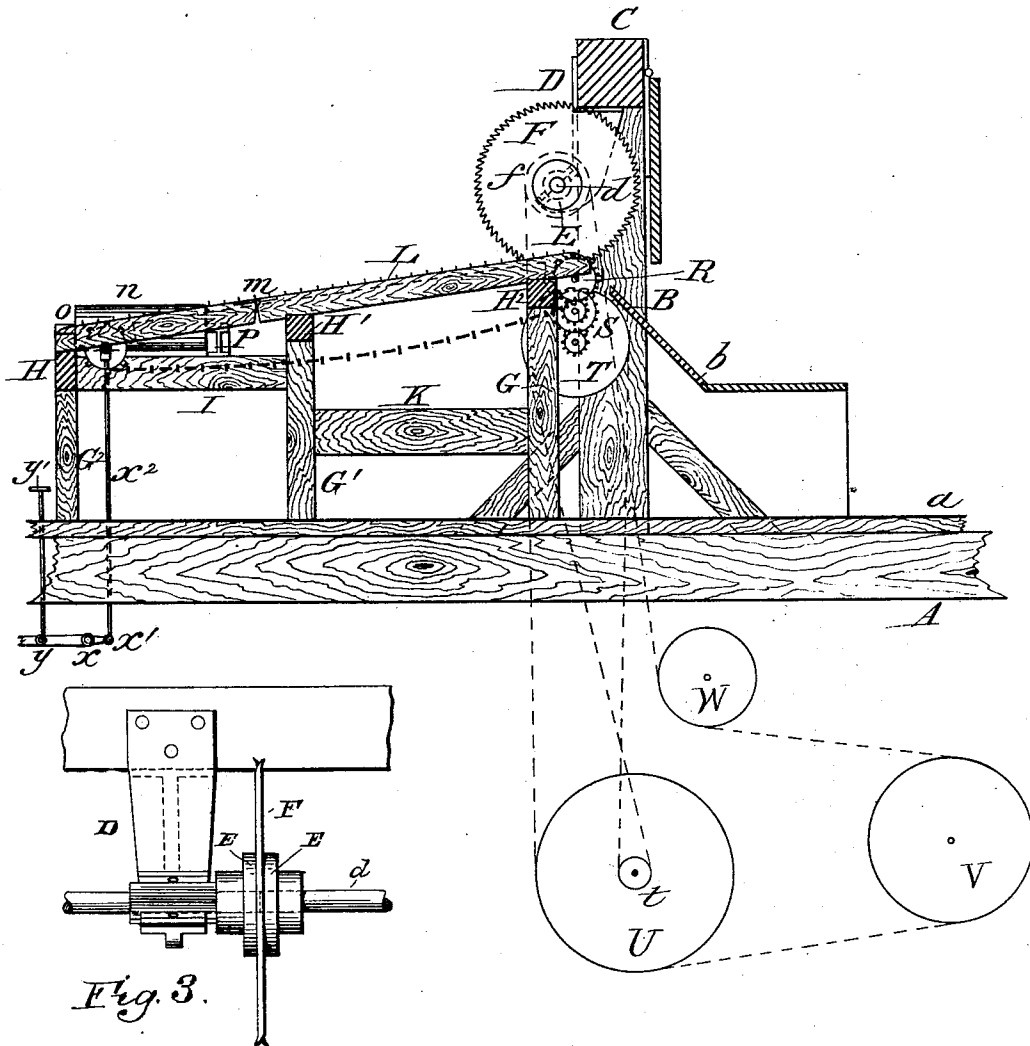
2 Sheets—Sheet 1.

S. MAFFETT & R. WEIR.
MACHINE FOR SAWING UP SLABS, &c.

No. 482,799.

Patented Sept. 20, 1892.

Fig 1.



Witnesses.
Wm L. Boyden
J. W. Maffett

Inventors.
Samuel Maffett
Robert Weir
per John C. Clarker Att'y

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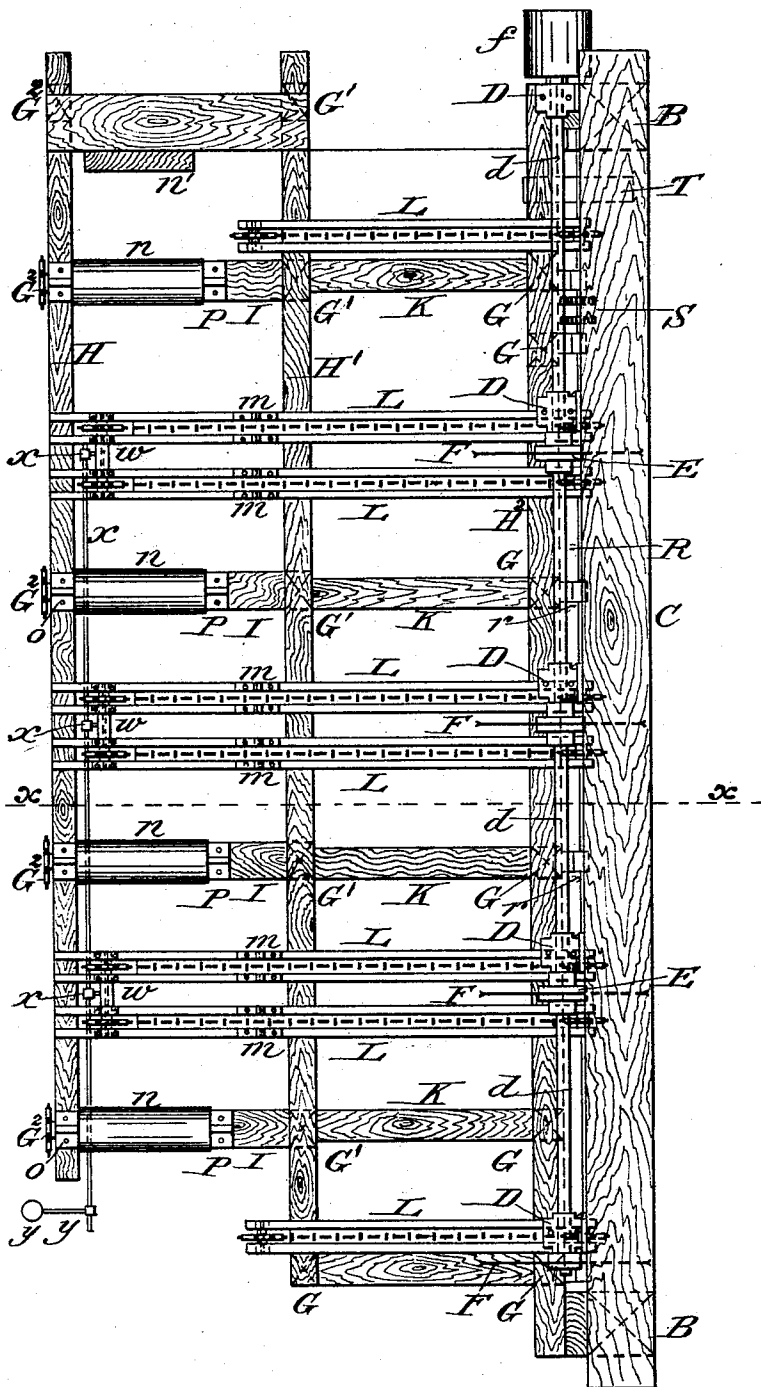


Fig 2.

Witnesses.
Jm D. Snyder
J W. Maple

Inventors.
Samuel Maffett
Robert Weir
per John C. Tasker
Atty

UNITED STATES PATENT OFFICE.

SAMUEL MAFFETT AND ROBERT WEIR, OF MUSKEGON, MICHIGAN.

MACHINE FOR SAWING UP SLABS, &c.

SPECIFICATION forming part of Letters Patent No. 482,799, dated September 20, 1892.

Application filed August 27, 1889. Serial No. 322,096. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL MAFFETT and ROBERT WEIR, citizens of the United States, residing at Muskegon, in the county of Muskegon and State of Michigan, have invented certain new and useful Improvements in Machines for Sawing Up Slabs, &c.; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to an improvement in machines for cutting or sawing up the refuse of sawmills or other mills, it being particularly applicable for the cutting up of slabs, edgings, &c.; and it consists in the construction, arrangement, and combination of parts, substantially as will be hereinafter described and claimed.

In the accompanying drawings, illustrating our invention, Figure 1 is an end elevation of our machine complete, showing one example of driving mechanism therefor. Fig. 2 is a plan view of the entire machine with the driving mechanism removed. Fig. 3 is a detail view of one of the saw-arbors.

Like letters of reference designate like parts in all the figures.

A denotes the flooring-timbers of the mill, and *a* the floor, which is laid upon said timbers. Supported on this floor are the two upright posts BB, that carry on their upper ends the beam C, which is securely fastened thereto, said beam having attached to it at suitable points throughout its length, as will be seen by inspection of Fig. 2, the brackets D, which carry the saw-arbor *d*. The upright posts, as well as several others of the parts of the frame of the machine, are for the sake of cheapness and ease of construction preferably made of wood.

In the present example of our machine there are four saws shown, (designated F.) These saws are located at the proper distances apart for cutting slabs and edgings. We do not, of course, intend to confine ourselves to four saws, for there may be a smaller or larger number of them, as desired. The saw-arbor *d*, on which these saws are all mounted, is in the present instance made in four sections and is provided with the necessary male and female collars E, placed on each side of the

saws, the whole being firmly fastened together by means of bolts, so to make a perfectly-rigid saw-arbor, which extends the full length of the machine. There is a bracket placed close to the collar of each saw and one at the outer end of the machine close to the point where the saw-arbor is provided with the driving-pulley *f*, to which a belt may be applied coming from any suitable driving-power for the purpose of actuating the saws.

In the construction of the frame of our improved sawing-machine the letter G denotes the first line of saw-table posts, which posts are located nearest to the saws. G' denotes the second line of vertical saw-table posts, and G² the outer line of posts. The line of posts G' is situated about midway between the posts G and the posts G². H represents a stringer or beam on the top of the posts G², and on this stringer H are fastened the journal-boxes which carry the outer ends or journals of the rollers *n*. H' denotes the stringer supported on the top of the posts G', and H² denotes the stringer fastened to the top of the posts G. These stringers H' and H² serve to carry the table, and also the gutters L, in which the feed-chains work. I and K denote girders, which fasten the frame together, the girder I being located between the posts G² and G' and the girder K being located, as shown, between the posts G' and G. The gutters L, which carry the feed-chains, are grooved sufficiently deep to permit the top of the teeth of these chains to project about three-quarters of an inch above the top of the table. These gutters are preferably lined with iron, so that the chain may run better upon them. Three of these gutters extend across the machine to the outside of the rollers, and at a certain point in their length, as *m*, they are hinged, so as to allow those portions of said gutters which lie alongside of the rollers to be raised at the proper time, so that they may lie clear above the line of the upper surface of said rollers when it is desired to transfer the stock or material fed by the rollers from the rollers to the table.

n denotes a series of rollers, which serve to carry the stock into the machine. The stock is usually brought from the circular or gang saw on other live-rollers and then carried into our machine by means of the rollers *n* and

fed along until this stock comes against the stop n' at the far end of the machine.

The rollers n are located in the machine parallel with the feed-chains and the saws. O denotes the outer journal-boxes for the rollers n , and P the inner journal-stands for the same. These stands P , as will be seen from inspection of Fig. 1 of the drawings, are carried upon the girder L .

The feed-chain shaft R is journaled in the box r , fastened to the posts G , which have been mentioned above. On this shaft are securely fastened the requisite number of chain-wheels, as shown, to correspond with the number of chains and gutters used in the machine. There is also on this shaft a spur-wheel for driving, which receives its motion from two counter-shafts (see Fig. 1) fastened thereon, a series of spur-gears s and a driving-pulley T being located on the lower shaft.

U , V , and t represent the pulleys, which constitute the driving-power of the mill and give motion to the machine, and W is a tight-ener-pulley for the driving-belt. The cross-belt driven from the small pulley t , and which passes around said pulley and also around the pulley T , is the one that drives the feed-works—that is to say, the feed-chain. It will thus be evident that by means of this driving-power the saws will be actuated, and also the feed-chains.

x denotes a horizontal shaft located below the flooring-beams of the mill and carrying a series of levers x' , to the ends of which levers are pivoted the upright rods x'' , the upper ends of which rods are connected to the swiveled bearings w , which work loosely on small stationary shafts extending across between the members of each pair of chain-gutters L . These shafts are fastened to the carrying-boxes by set-screws, and the chain-wheels for each gutter at this end run loosely on this shaft. y is a lever also fastened to the horizontal shaft x , and to this lever y is connected a stirrup y' for operating this mechanism for raising the hinged sections of the gutters, and thus elevating the chains at the proper times, for it will be apparent that the operator by pressing his foot upon the stirrup y' will, through the intermediate leverage, cause the hinged sections of the gutters to be raised, carrying with them the feed-chains, and thus elevating said chains above the line of the upper surface of the rollers, which movement will result when stock is being fed along on

said rollers in transferring it entirely onto the feed-chains.

It will be seen by inspection of the drawings that the rollers n have their outer journals provided with sprocket or chain wheels where the chains may be connected which actuate the rollers, and in Fig. 1 an angular platform b is also shown onto which the stock will fall after being cut by the saws.

In operating this machine the stock will be carried on the rollers down toward the stop n' , which we have described above, and then the operator will place his foot upon the stirrup y' , depressing it, which in turn will lift up those portions of the gutter which lie below the upper line of the rollers, so that the line of the chains may be elevated above the top of the rollers. This lifts the stock from the rollers to the feed-chains, after which the operator releases his foot, when the chain returns to its original position. The stock, however, is fed across the table by said chains and brought under the saws, which cut it to the proper length, and the material is then deposited on the angular platform.

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

In a machine for cutting up slabs, edgings, and the like, the combination, with the main frame, consisting of the upright posts B , the beam C , the posts G , G' , and G'' , the stringers H , H' , and H'' , and the girders I and K , of the saw-arbor d , mounted in brackets D , said saw-arbor carrying a series of saws F , the pulley f for operating said saw-arbor, the gutters L , which carry the feed-chains hinged at m , the feed-chains running on sprocket-wheels journaled on shafts secured to the main frame, the series of rollers n , which serve to carry the stock into the machine, journaled to the main frame and operated by suitable chain-wheels, as shown, stop n' , the table b , the foot-lever mechanism for raising the hinged sections of the gutters, and suitable gearing for operating the shaft R , all arranged substantially in the manner and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

SAMUEL MAFFETT.
ROBERT WEIR.

Witnesses:

D. J. MORIARTY,
A. MELLISH.