(No Model.)

H. GAWLEY.

SET WORKS FOR SAWMILLS.

No. 484,360. Patented Oct. 11, 1892.

Fig. 1.

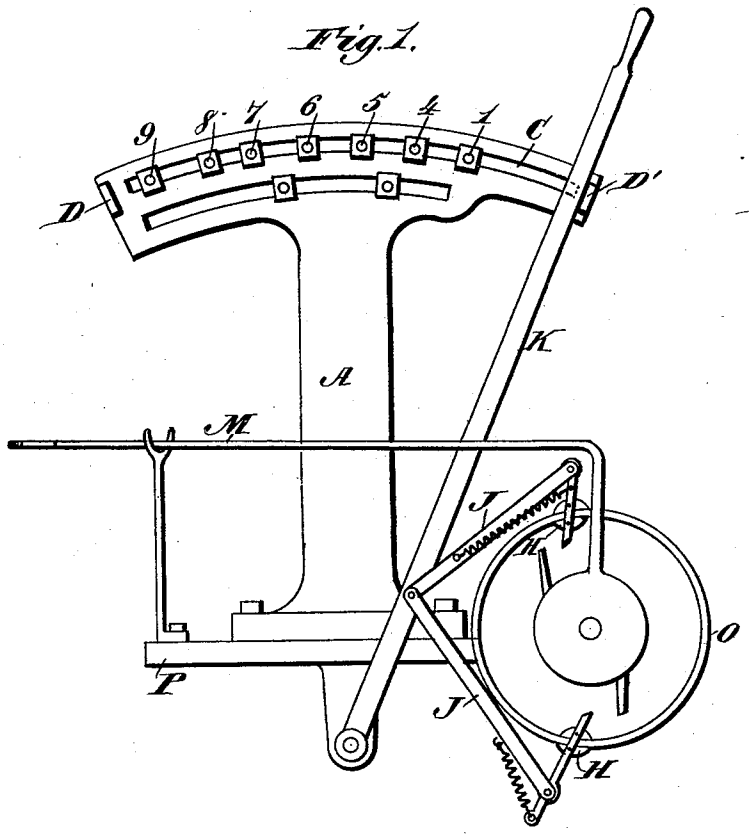
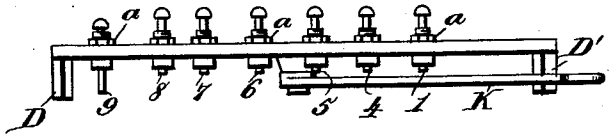


Fig. 2.



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SET-WORKS FOR SAWMILLS.

SPECIFICATION forming part of Letters Patent No. 484,360, dated October 11, 1892.

Application filed November 25, 1891. Serial No. 413,095. (No model.)

To all whom it may concern:

Be it known that I, HECTOR GAWLEY, a citizen of the United States, residing at the village of Le Roy, in the county of Osceola and State of Michigan, have invented certain new and useful Improvements in Set-Works for Sawmills, of which the following is a specification.

My invention relates particularly to an improvement in set-works for sawmills, patented to me May 5, 1891, No. 451,476; and its object is to form by means of a series of stops an accurate gage or adjustment for the set-works, which object I accomplish by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of the set-works constructed in accordance with my invention, and Fig. 2 shows a plan view of the gages and gage-support.

Similar letters and numerals refer to similar parts throughout the several views.

P represents a bed, having connected to it by means of a pivot the lever K. The lever K is attached by means of arms J J to the friction-dogs H H, springs being used to hold the dogs in contact with the disk O, from which disk is operated the feed-slide or any other device which is desired to be used in connection with a friction-feed.

M represents a lever used to release the disk O from the operation of the dogs.

So far I have shown what is already described in my patent above referred to. Rising from the bed and rigidly connected thereto is the standard A, having at its upper end, preferably, two rows of adjustable gages. These gages I prefer to arrange in the arc of a circle, and, if found desirable, to arrange two arcs, one above the other, as shown in the drawings, the arcs being composed of curved slots adapted to receive and retain in position blocks in which are placed gage-pins. The upper slot is shown by C, and contains the gage-pins 1 4 5 6 7 8 9, each pin passing through a block which fits closely into the slot, and each provided with a set or adjusting screw. (Shown in Fig. 2 by *a a*, &c.) These pins are also provided with a shoulder, stop, or other means to prevent them from being dropped out of the slot, and also each pin is provided, preferably, with a head in order to more readily be operated or withdrawn by the user.

In using my invention the stops are adjusted to any required position, and then the blocks containing the stop-pins are secured there by means of the nut. The arc, if found desirable, may be graduated so as to indicate the exact length of stroke or throw of the lever, and also to indicate the exact forward movement of the sliding feed. At either end of the arc I provide permanent stops D' D.

I have referred to the gage-frame as attached to the bed of the machine. It is evident, however, that it might be supported in any suitable manner, provided it was placed in the required position to allow the stops to be used in measuring the throw of the lever, and thereby the thickness of the board to be cut. The number of stops may be varied, but there must be one socket-block for each stop. Each pin when set as a stop projects far enough to come in contact with the lever, thereby measuring the length of the stroke of the lever. These socket-blocks and pins may be so adjusted as to enable the operator to cut to any required thickness, such adjustment reaching even to the one-hundredth part of an inch. The stop-pins in the lower arc are placed intermediate those in the upper arc or slot. The stop-pins should be set rigidly for every different thickness of lumber required to be sawed, and if the thickness is to be varied even to the one-hundredth part of an inch it can be easily accomplished by changing one of the stops with a wrench or other tool. The stops in the lower slot are intended to be used only in cutting lumber as thick or thicker than two inches, and then with a double, triple, or more movement of the lever. These stops when once set in their proper places in the slots need no further change unless the lumber is required to be made a shade thicker or thinner. It is sometimes necessary to saw lumber so that it will dress to a certain thickness, in which case the stops will be set so that when the lumber is sawed it will come forth from the saw of such thickness that when dressed it will be of the thickness required—that is, if lumber is required which will be an exact inch in thickness after dressing the gage will be set so that the sawed lumber will be a trifle thicker

than an inch. It will also be observed that the fractions of an inch can be used, and the thickness of a board to be sawed may be varied by more than one movement of the lever—that is, if the movement of the lever from D′ to D would move forward the stock one inch, then the movement of the lever from D′ to stop 1 would move it one-quarter of an inch. A double movement would make half an inch, so that these stops can be set to any position, so that a single or double movement of the lever will cut the required thickness of lumber.

Instead of using two rows of stops more can be used, if desired.

The value of my invention consists in this, that the thickness of the lumber can be varied to any fraction of an inch desired by the use of the adjustable stop-blocks, which may be set rigidly, and the stop-pins operated by the finger of the user, there being a sufficient number of these socket-blocks and stops to cut the different thicknesses required by the market, and without material loss of time in adjusting the gage.

I have referred to my invention as being particularly adapted for use in connection with set-works constructed in accordance with my patent, dated May 5, 1891, No. 451,476; but it will be understood that the invention above set forth may be used in connection with any style of set-works to which the same is adapted, and I do not wish to limit my invention to a device which can only be used in connection with my patented invention above referred to.

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

1. In set-works for sawmills, in combination with the operating-lever, an upright support containing a series of adjustable stop-pins and a series of blocks supporting said stop-pins, adjustable in a slot in said upright frame, substantially as described.

2. In set-works, in combination with an operating-lever, an upright frame containing one or more slots, socket-blocks adjustable in said slots, and pins, one in each socket-block, having a longitudinal motion therein, and said blocks adjustable to any required point in said slots for the purpose of measuring the throw of the lever, substantially as described.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

HECTOR GAWLEY. [L. S.]

Witnesses:

EDWARD TAGGART,

HARRY P. VAN WAGNER.