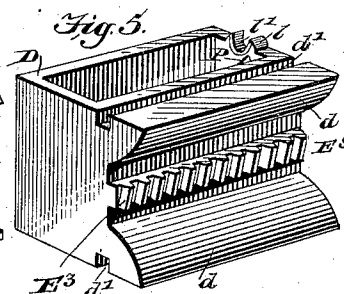
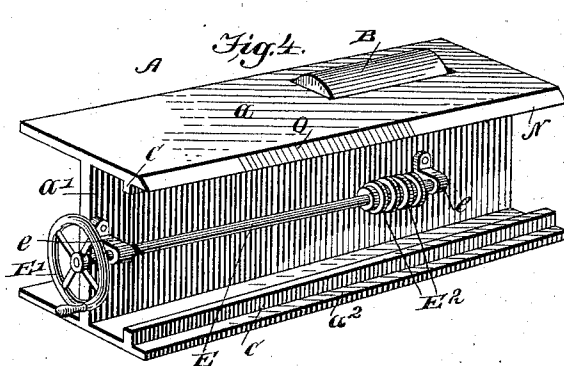
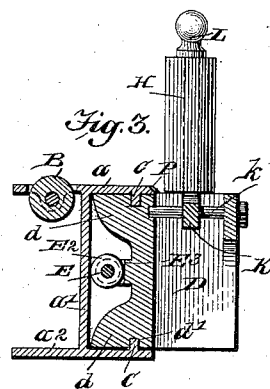
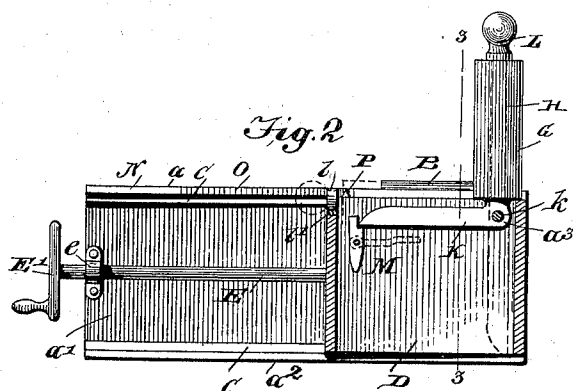
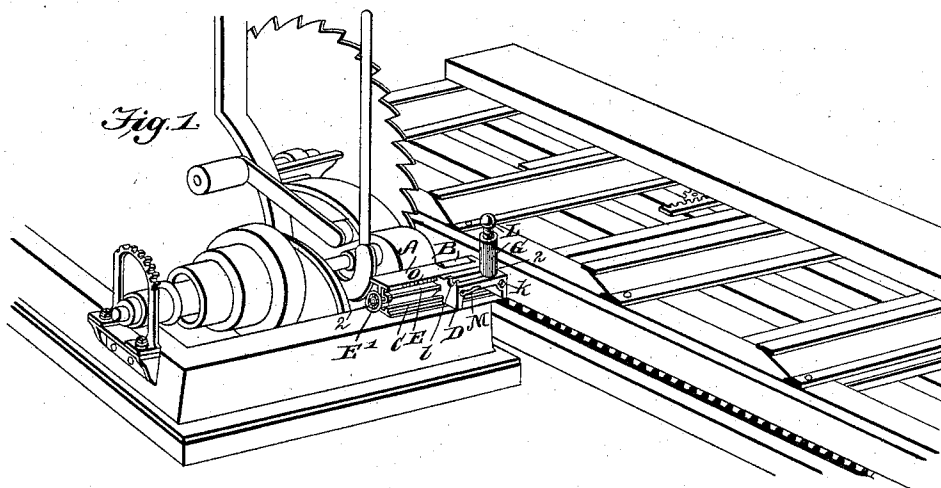


(No Model.)

H. J. THOMAS.  
GAGE ROLL FOR SAWMILLS.

No. 577,889.

Patented Mar. 2, 1897.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HOMER J. THOMAS, OF NEW MILFORD, CONNECTICUT.

## GAGE-ROLL FOR SAWMILLS.

SPECIFICATION forming part of Letters Patent No. 577,889, dated March 2, 1897.

Application filed May 9, 1896. Serial No. 590,810. (No model.)

*To all whom it may concern:*

Be it known that I, HOMER J. THOMAS, residing at New Milford, in the county of Litchfield and State of Connecticut, have invented an Improved Gage-Roll for Sawmills, of which the following is a specification.

This invention relates generally to sawmills, and particularly to an improved gage-roll for the same.

The object of the invention is to provide an adjustable gage-roll which can be quickly and easily manipulated from one side of the mill without handling the roll itself.

Another object is to provide a gage-roll which can be folded down when desired to form an ordinary carrying-roll.

Another object is to provide an index in connection with the adjustable roll, so that the adjustment can be conveniently measured.

Another object is to provide a folding gage-roll arranged in an adjustable slide connected with the body of carriage, and still another object is to provide said sliding member with suitable means for locking said roll in either position, and also providing said sliding member with a cushion to receive the roller when the same is folded down.

With these various objects in view my invention consists in the peculiar construction of the various parts and in their novel combination or arrangement, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 shows the invention in use. Fig. 2 is a section on line 2 2 of Fig. 1. Fig. 3 is a section on line 3 3 of Fig. 2, and Figs. 4 and 5 show details of construction.

In carrying out my invention I employ a body portion A, arranged transverse of the length of the carriage and connected to saw-box, said body portion being preferably constructed with a top portion  $a$ , a central vertical portion  $a'$ , and a base portion  $a^2$ . A supplemental carrying-roll B is arranged in the top  $a$ , near one end, upon one side of the central member  $a'$ , and upon the opposite side the under side of top and upper side of base are provided with longitudinal tongues or ribs C, which serve to guide a sliding member D, said member having lugs  $d$ , formed with grooves  $d'$  to receive the tongues or ribs, and

by means of which the sliding member is rendered capable of movement back and forth upon the body portion. In order to so move the sliding member, I employ a shaft E, journaled in bearings  $e$ , attached to body portion A and carrying a hand wheel or crank E' at the forward end, while the rear end is threaded at E<sup>2</sup> to engage a threaded opening E<sup>3</sup> in the end of slide, so that by turning the hand wheel or crank the slide can be moved back and forth as desired.

The sliding member D is essentially box-shaped and hollow, and between the sides thereof, at the end opposite the threaded opening, is arranged the gage-roll G, said roll being mounted upon a shaft H, which is integral with or rigidly connected to an arm K, said arm and shaft being arranged at a right angle  $a^3$ , as clearly shown.

The roll G is held upon the shaft H by means of a screw-knob L.

The combined roll and arm is pivoted at the elbow upon a bolt  $k$ , and the arm K is of such a length as to freely work in the slide member, but engages an automatic catch or latch M when said arm and roll are raised, said catch being carried at the end of the slide member and holds the arm and roll in their upper position.

The forward end of the slide member is notched at  $l$  and provided with a cushion  $l'$  to receive the screw-knob on end of roll when said roll is turned down to act as an ordinary carrying-roll, and it will be understood that said roll is so pivoted that it projects above the top of side and body A the same distance as an ordinary carrying-roll, said cushion taking up all jar and preventing the same being communicated to the slide and mechanism connected therewith.

The side of the top is cut away, as shown at N, and provided with a scale O, and a pointer or indicator P is carried by the end of the sliding member to indicate the position of the gage-roll with relation to the saw, and as the parts are now arranged shows that the saw and roll are upon a transverse line, so that a log or piece of timber fed to the saw, resting against the gage-roll, will have a piece the desired thickness or width cut therefrom.

By turning the hand wheel or crank the distance can be increased or decreased, as de-

sired, and it will be noticed that it is not necessary to handle the roll to accomplish this adjustment.

When the roll is not desired as a gage-roll, the catch is tripped, dropping the arm and roll, and in this case the roll acts as an ordinary carrying-roll, and it can also be adjusted transversely in this position as well as when in a raised position. When the roll is again needed as a gage-roll, the screw-knob is grasped and the roll and arm raised until the arm becomes locked by the automatic catch.

It will thus be seen that I provide an adjustable gage-roll capable of use in either a vertical or horizontal position, and it will also be noted that said roll is locked automatically and the relative position of said roll indicated upon an appropriate scale. It will also be noted that the parts are very few and of simple construction, easily assembled and taken apart, and in case any part becomes damaged it can be easily repaired or replaced.

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

1. The combination with the body, having a carrying-roll journaled therein near the end of the guide-ribs, arranged at the top and bottom of the said body portion, the sliding member working upon said ribs, said sliding member having a worm rack-bar, the shaft hand-wheel and worm, the gage-roll pivoted within the sliding member and adapted to

normally rest in a vertical position, said gage-roll having a right-angular arm adapted to engage a spring-catch, said roll being adapted to be turned down parallel with the carrying-roll of the body portion, substantially as shown and described.

2. The combination with the body and slide member, said slide member having a cushion at one end, a gage-roll having a screw-knob at one end, said roll being pivoted within the sliding member and adapted to fold down and rest upon the cushion, the screw-knob resting directly upon the cushion, said roll acting as a carrying-roll when turned down, substantially as shown and described.

3. The combination with the slide member, constructed as described, of the gage-roll pivoted therein and adapted to fold from a vertical to a horizontal position, the arm rigid with the roll, and the locking-catch adapted to engage the said arm, all arranged substantially as shown and described.

4. The combination with the body having ribs or tongues, of a slide member having grooves, the hand-wheel and shaft, the scale and indicator, the gage-roll and arm pivoted in the slide member, the screw-knob, and the automatic catch, all arranged substantially as shown and described.

HOMER J. THOMAS.

Witnesses:

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