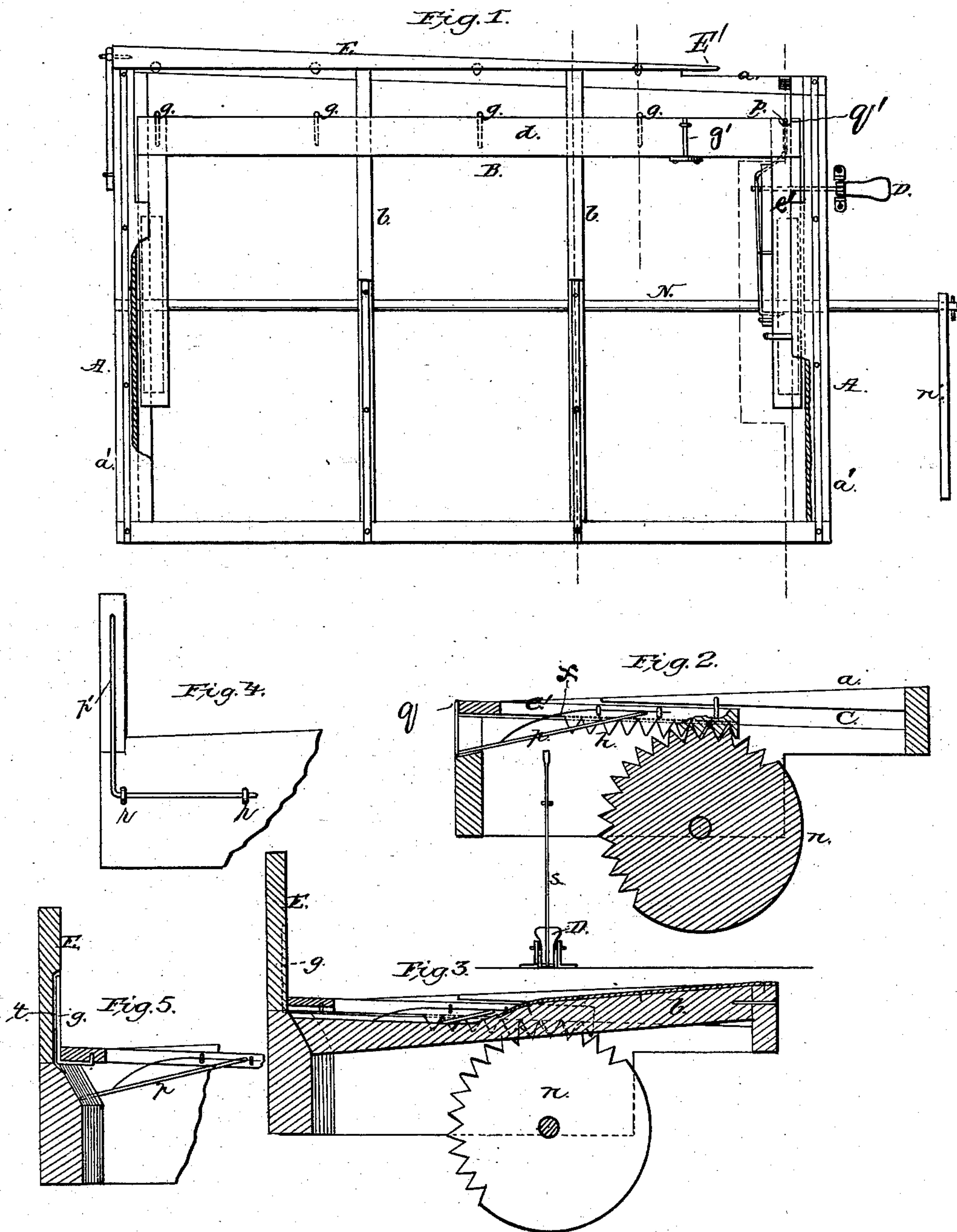


(No Model.)

N. HUTCHERSON.
Attachment to Saw Mills.

No. 239,502.

Patented March 29, 1881.



WITNESSES
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Philip LeMassi.

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UNITED STATES PATENT OFFICE.

NATHANIEL HUTCHERSON, OF SANDY RIDGE, NORTH CAROLINA.

ATTACHMENT TO SAW-MILLS.

SPECIFICATION forming part of Letters Patent No. 239,502, dated March 29, 1881.

Application filed November 20, 1880. (No model.)

To all whom it may concern:

Be it known that I, NATHANIEL HUTCHERSON, of Sandy Ridge, in the county of Stokes and State of North Carolina, have invented a new and valuable Improvement in Attachments to Saw-Mills; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a plan view. Figs. 2 and 3 are transverse sections. Figs. 4 and 5 are details.

This invention has relation to attachments for saw-mill carriages, the object of the invention being to take off and remove each plank as it is sawed from the log; and the novelty consists in a frame provided with a sliding frame operated by a rock-shaft, and having arms to hold the sawed plank on said sliding frame; also, in a spring-hook operated by a treadle, and in a guide and kerf-opener connected with the stationary frame, as will be hereinafter fully described, and particularly pointed out in the claims.

Referring by letter to the accompanying drawings, A designates the stationary frame of the attachment, which is to be connected to the saw-mill frame in such a manner as to permit the saw to occupy the recess *a* in the frame A. The end pieces, *a' a'*, of the frame A are provided with grooves C, inclined, as shown in Fig. 2, in which the end bars, *e e'*, of a sliding frame, B, work when the attachment is in operation. The under faces of the end pieces, *e e'*, are provided with racks *h*, which engage mutilated-gear wheels *nn* on the rock-shaft N, having a hand-lever, *n'*.

The cross-beam *d* of the frame B is provided with standards *g*, which enter vertical recesses *t* in the inner face of the guide and kerf-opener E when the sliding frame B is in its normal position. The kerf-opener E is wedge-shaped, as shown, and is of wood, except an upper projecting portion, *E'*, which is of metal. The kerf-opener is removably connected to the rear beam of the frame A by ordinary dowel-pins, and by a pivot hook-arm, *p'*, working in staples *r r*, and having a dog at its upper end,

which enters a hole in the end of the kerf-opener, as shown.

The arm *e'* of the sliding frame B is provided with an arm, *p*, having a dog, *q*, working in a notch, *q'*, in the rear edge of the bar *d* of the frame B, said arm *p* being held down in a normal position by a spring, *x*. A treadle, D, having an upwardly-extending arm, *s*, passed through a staple in the end piece, *a'*, of the frame and within reach of the foot of operator at the lever *n'*, is used to push the arm *p* upward to cause the dog *q* to project above the top of the sliding frame B when necessary in cutting short plank. The kerf-opener is made removable, in order that it may be taken off when very heavy timber is being cut.

The operation of the attachment is as follows: The attachment is put in place and connected, in any suitable manner, to the saw-mill frame, or otherwise made rigid, permitting the saw to occupy the recess *a*. As the carriage moves the log forward the saw cuts the kerf, and the wedge *E'* enters the kerf and opens it and guides the plank. When the butt or stump-shot is reached the plank will be broken off, and will fall upon the bars *b b* of the frame A. These bars *b* are curved, as shown, to accommodate the sliding frame B in its movements. Rollers, as at *g'*, may be employed to lessen the friction of the plank upon the frame B. When the plank has dropped upon the frame the lever *n'* is operated to slide the frame B and carry the plank up onto the horizontal portion of the bars *b b* and end pieces, *a'*. The curve in said bars *b* and the inclines C permit the frame to be receded from beneath the plank and returned to its normal position. The plank may be then removed from the attachment.

The guide and kerf-opener prevents the planks from falling on the saw.

The arm *p*, with its dog *q*, is used only in removing short timber, and is raised up by the treadle D and arm *s* to grasp the short plank at that end, to prevent it from being turned off at the end of the attachment when the sliding frame is operated to remove the plank.

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

1. In an attachment for saw-mill carriages,

the frame A, having grooves *c c* and cross-bars *b b*, in combination with the sliding frame B, having standards *g*, rock-shaft N, and gears and rack *n n h h*, and kerf-opener E, substantially as set forth.

5 2. In an attachment for saw-mill carriages, the treadle D, having arm *s*, in combination with the spring-arm *p x*, having the dog *q*, and the sliding frame B, substantially as set forth.

10 3. In an attachment for saw-mill carriages, the combination, with a stationary frame, A,

and a sliding frame, B, of the removable guide and kerf-opener E E', secured to the frame A by dowel-pins, and the hook-arm *p'*, working in staples *r r*, substantially as set forth. 15

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

NATHANIEL HUTCHERSON.

Witnesses:

JOHN STADLER ZIGLER,
WILLIAM PASLEY ALLEY.