A. RODGERS.

HEAD-BLOCKS FOR SAW-MILLS.

No. 192,015. Patented June 12, 1877.

Fig. 1.

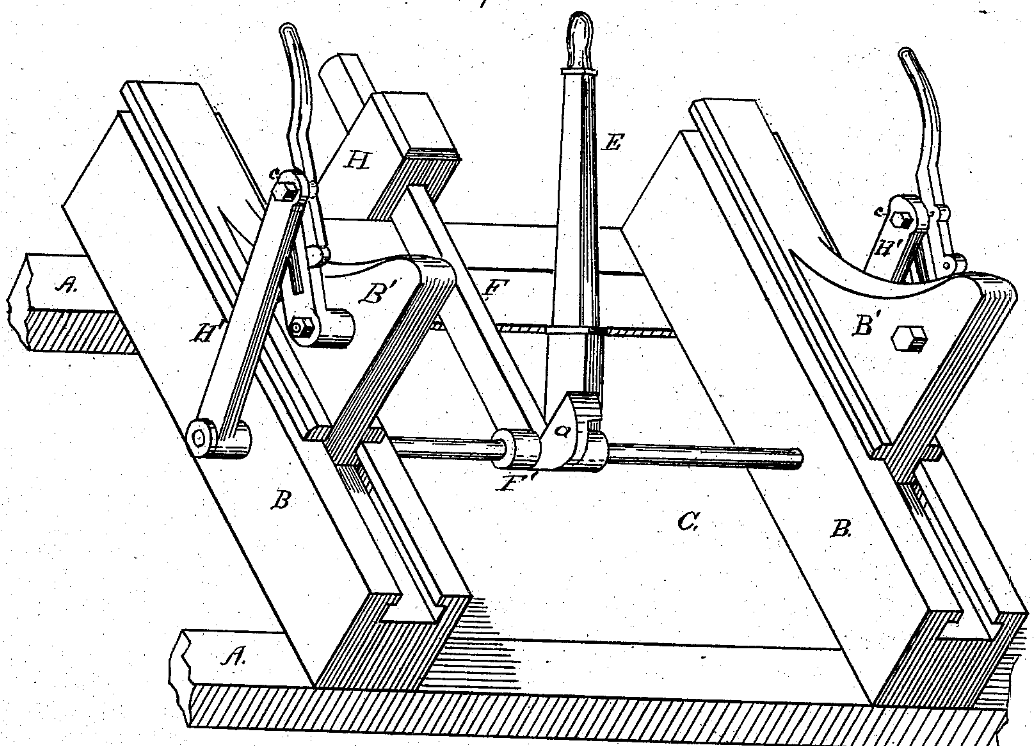


Fig. 3.

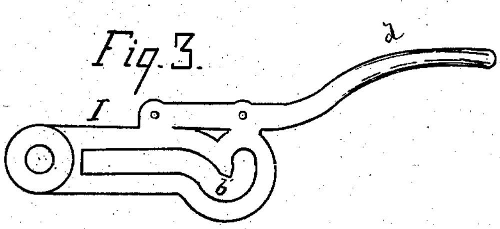
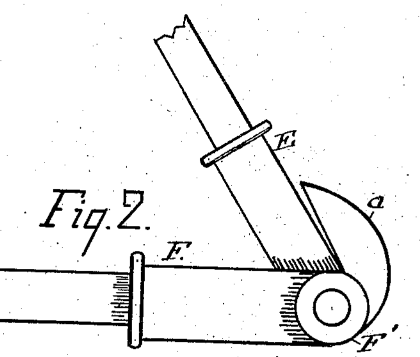
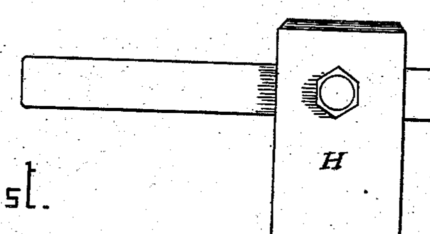


Fig. 2.

Attest.

M Tmuyck

H. H. Schott.

Inventor.

Alexander Rodgers

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ALEXANDER RODGERS, OF MUSKEGON, MICHIGAN.

IMPROVEMENT IN HEAD-BLOCKS FOR SAW-MILLS.

Specification forming part of Letters Patent No. **192,015**, dated June 12, 1877; application filed December 23, 1876.

To all whom it may concern:

Be it known that I, ALEXANDER RODGERS, of the city of Muskegon, county of Muskegon and State of Michigan, have invented certain new and useful Improvements in Head-Blocks for Saw-Mills, of which the following is such a full, clear, and exact description as will enable others skilled in the art to which it pertains to construct and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, similar letters indicating corresponding parts in the different figures.

The object of this invention is to furnish a ready means of adjusting one of the setting-jacks of the head-block in advance of the other when such adjustment is rendered necessary by the taper of the log being cut, or for other purposes. It also affords an easy means for retracting the setting-jacks after a log has been sawed into lumber, so that they shall be in proper position upon the head-blocks for the reception of the next log. And the invention consists in the construction and arrangement of certain devices connecting the setting-jacks and head-blocks, as will be hereinafter fully described and then specifically pointed out in the claims.

Figure 1 of the drawings is a perspective view of the head-blocks and setting-jacks with the retracting devices, the setting-jacks being partially drawn back. Fig. 2 is an enlarged side view of the weighted lever and operating lever. Fig. 3 shows one of the links by which the setting-jacks are connected with the operating lever through the medium of a rock-shaft and arm.

The head-blocks B, one of which is stationary and the other movable, are of any of the various styles in common use, having setting devices for adjusting the log to the desired position for cutting lumber of different thicknesses, and are placed upon a reciprocating carriage, A, moved by suitable mechanism. A platform, C, is commonly placed upon the carriage, and serves as a standing-place for the person who manipulates the different devices used in securing the logs upon the head-blocks, and for advancing and retracting the setting-jacks B′.

Passing from one head-block to the other, lengthwise of the carriage, is the rock-shaft D, provided with bearings which retain it in one position relatively to the stationary head-block, but sliding freely through its boxes in the movable one. Attached to this rock-shaft by a key or other suitable means is the hand-lever E, by means of which it is oscillated. A second lever, F, is secured to a sleeve, F′, which is loose upon the shaft and provided with a projection, *a*, against which the lever E strikes as the setting-jacks are moved forward. An adjustable weight, H, is placed upon the lever F, and serves to assist in retracting the setting-jacks when such a movement is required. It being apparent that as the setting-jacks are moved forward they will, through the agency of the links I and rock-shaft arms H′, carry the hand-lever E forward, which, striking against the projection *a* upon the sleeve F′, will raise the lever F, and with it the weight H, which, of course, when the setting-jacks are relieved from the action of the setting mechanism, tends to draw them backward from the front of the carriage. Attached to the setting-jacks by a pivotal joint are the slotted links I, the slot in which is of a peculiar form, being curved at one end so that the projection *b* forms a hook which catches the pin *c* when the setting-jacks are parallel with each other, and causes them to retain that position, but when it is desired that one jack shall be in advance of the other, one of the links is lifted by means of the handle *d*, which is attached to it, and the pin *c* allowed to pass forward into the straight part of the slot, thus enabling the operator to place this jack at any desired distance in the rear of the other, and to enable it to regain its parallelism with the other by simply advancing it until the hook drops upon the pin *c*. It will be understood that although a carriage using but two head-blocks has been described, any number may be used that the lumber to be cut requires. These devices will be found very serviceable in all mills using circular saws for cutting lumber, as well as in muley and band saw-mills using the circular-saw carriages, as by their means much time now lost in adjusting and retracting the setting-jacks may be saved.

Having thus described my invention, I claim

as new, and desire to secure by Letters Patent of the United States of America, the following:

1. In connection with the log-carriage and head-blocks of a saw-mill, the links I, constructed as and for the purpose specified.

2. The setting-jacks B′, in combination with the links I, arms H′, rock-shaft D, and hand-lever E, as and for the purpose set forth.

3. The weighted lever F, provided with the sleeve F′ and projection *a*, in combination with the lever E, rock-shaft D, and the devices by which it is connected with the setting-jacks of a saw-mill carriage, substantially as and for the purpose specified.

In testimony whereof I have hereunto affixed my signature this 28th day of November, 1876.

ALEXANDER RODGERS.

Attest:

EDWIN A. LATIMER,
JAMES DOYLE.