

G. B. GETTY.

Head-Blocks for Saw-Mills.

No. 140,032.

Patented June 17, 1873.

Fig. 1.

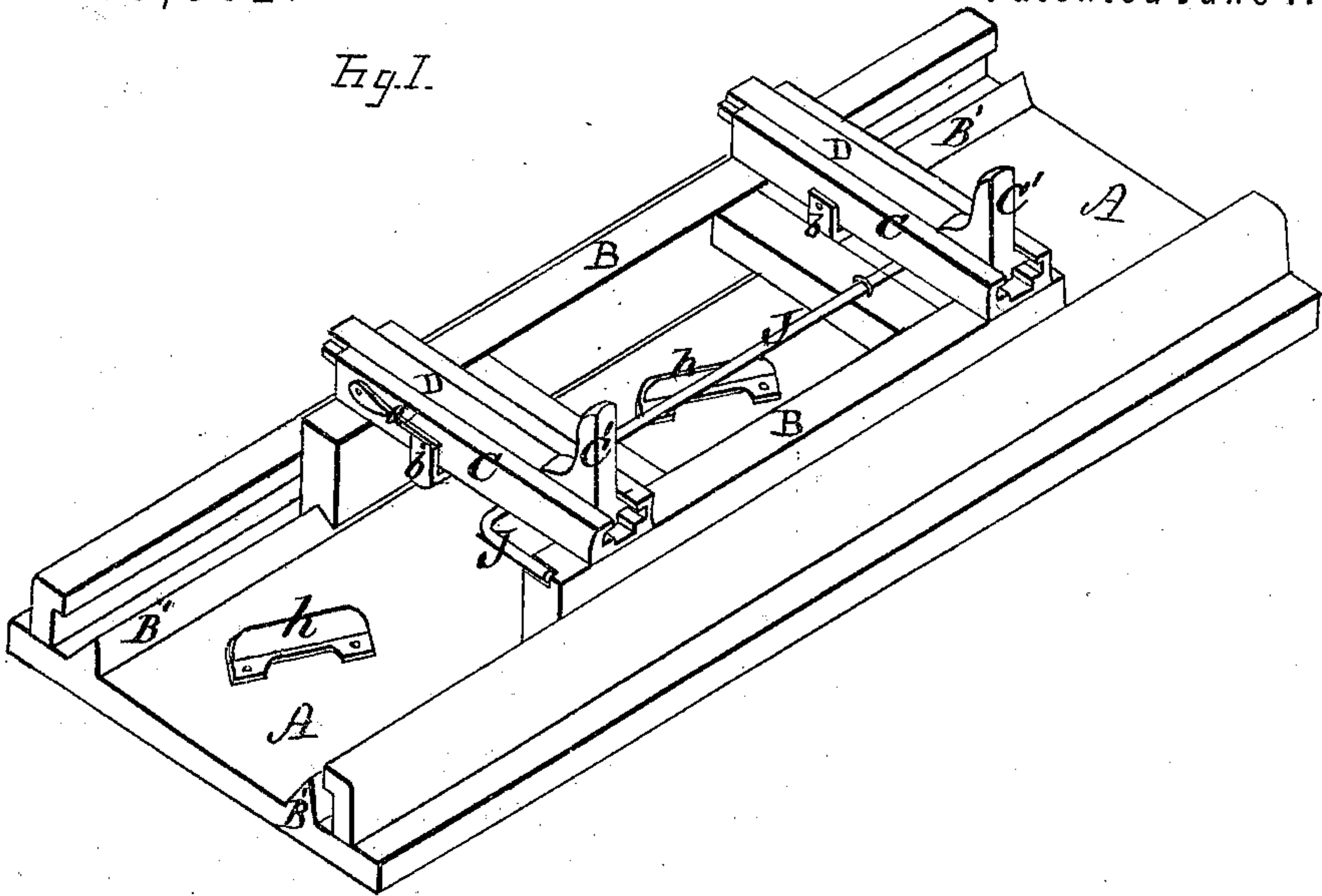


Fig. 2.

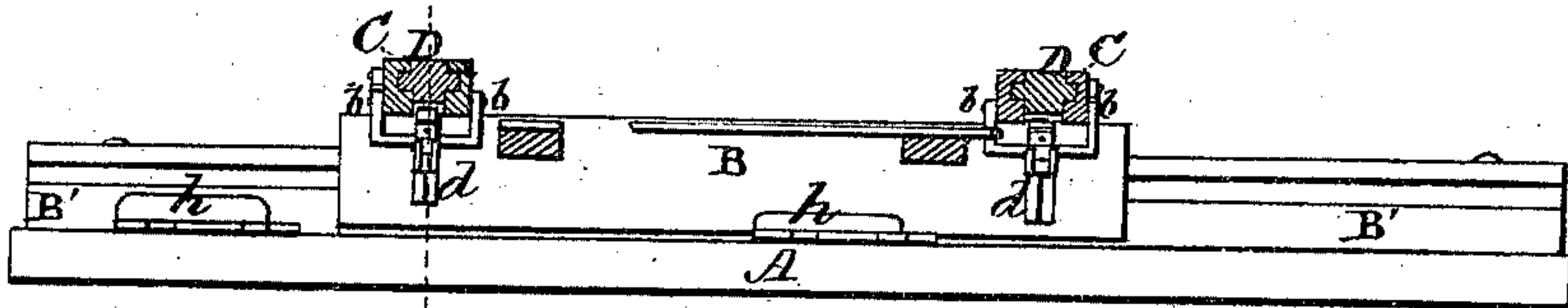


Fig. 3.

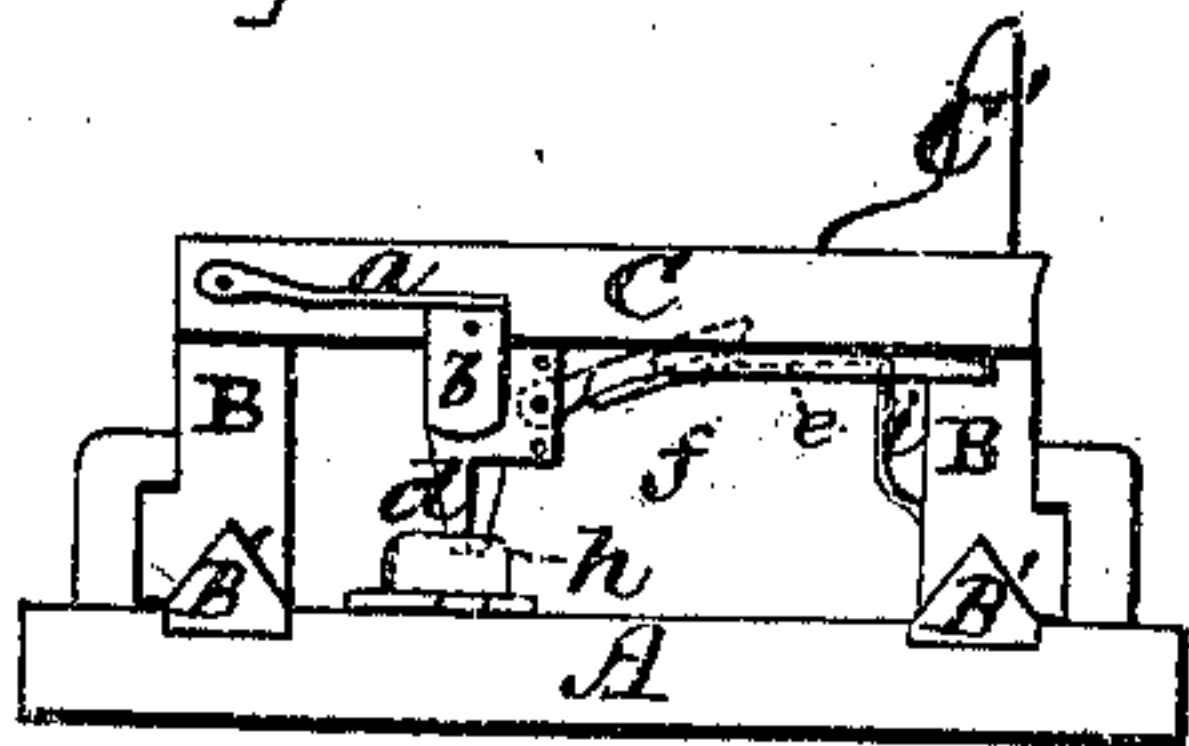
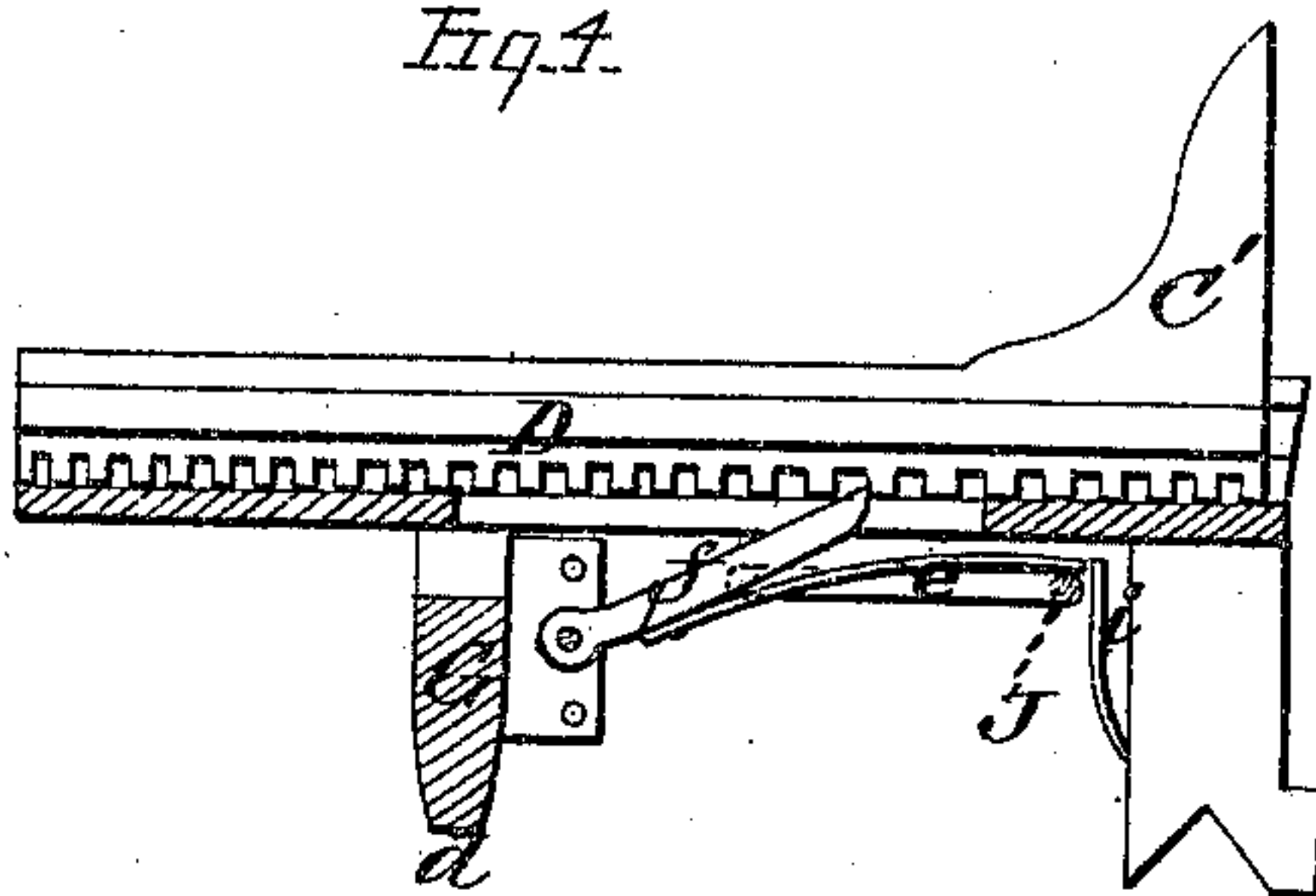


Fig. 4.



Witnesses:

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Inventor:

George B. Getty.  
By his Attorney  
T. H. Upperman.



# UNITED STATES PATENT OFFICE.

GEORGE B. GETTY, OF BLOOMSBURG, PENNSYLVANIA, ASSIGNOR TO HIMSELF, ELIAS MENDENHALL, AND ELI BARTON, OF SAME PLACE.

## IMPROVEMENT IN HEAD-BLOCKS FOR SAW-MILLS.

Specification forming part of Letters Patent No. **140,032**, dated June 17, 1873; application filed February 7, 1873.

*To all whom it may concern:*

Be it known that I, GEORGE B. GETTY, of Bloomsburg, in the county of Columbia and State of Pennsylvania, have invented certain new and useful Improvements in Head-Blocks for Circular-Saw Mills; and do declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in an automatically-operating head-block for circular-saw mills, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 represents a perspective view of my invention. Fig. 2 represents a longitudinal vertical section thereof. Fig. 3 represents a detached view of the devices for operating the head-block, and Fig. 4 a longitudinal vertical section of the same, on an enlarged scale.

A represents the floor of a saw-mill having suitable tracks B' for the carriage B to move back and forth. C C represent the head-blocks attached to the carriage B, and in each of which slides a rack-bar, D, forming part of, or attached to, the standard C', and completing the usual set for saw-mills. Under each head-block is suspended a stirrup, G, which is held in a perpendicular position by means of a spring, *a*, attached to the outside of the head-block, and bearing upon the upper side of the outer end of the stirrup. In the center of the stirrup G on the front side are two flanges *b b*, and below the same is a perpendicular cam-shaped arm, *d*, extending a suitable distance downward. Between the flanges *b b* are pivoted the pawls *f*, as many for each head-block as there are different thicknesses to be cut and pivoted at different heights. The rack-bar will be provided with as many sets of steps, as there are pawls, or different thicknesses to be cut. To each pawl is attached a spring, *e*, extending towards the front or saw

end of the head-block, and resting severally side by side in a stirrup or staple on the under side of the head-block. The pawls are thrown in and out of gear with the rack-bar by means of a crank-shaft, J, running lengthwise with the carriage. To this are attached the cranks, one under each head-block, and is so arranged that it can be shifted endwise, so that the cranks can be brought to bear against any of the springs by means of a lever on the end of the shaft, said lever being secured by means of a spring. Opposite to the front end of the springs *e*, and attached to the carriage, is another spring, *i*. This device is to be used together with the common hand device for setting the log, as the log must first be squared by the hand-set, and adjusted for the first cut on the last side. After this is done the carriage is started forward, and as it advances my device is thrown in gear by turning the crank-shaft J, which causes the desired pawls *f f* to engage with the rack-bars D D. As soon as the log has cleared or passed the saw, upon the return movement of the carriage, the arms *d d* strike the floor-irons *h h* upon the outer side, which causes the pawls *f f* to be drawn back over one cog in the rack bars D D; and as soon as the arms have passed the said irons the springs *e e* throw the pawls up behind said cogs. The movement of the carriage is at this instant reversed, and the arms *d d* strike and move along the opposite side of the floor-irons, which forces the pawls forward and moves the rack-bars D D with standards the desired distance, setting the log, which movement is completed just before the log comes in contact with the saw again. The springs *a* and *i* throw the stirrups and pawls into their proper position as soon as the arms *d d* have passed the floor-irons in this movement.

The floor-irons should be so arranged that the various movements will be effected while the carriage and log are in front of the saw and completed before the saw commences the cut. The floor-iron nearest to the saw should be lower than the other, and its arm correspondingly longer, so that the other arm will pass over said iron without touching the same.



I do not confine myself to any specific number of these floor-irons, as the same may be varied to suit the different lengths of logs.

With this device it will readily be seen there is no need, as heretofore, for stopping the carriage each time to set the log, as this is here done automatically by the movement of the carriage, thereby saving a great deal of time and labor for the sawyer, besides doing the work in a far superior manner than it can be done by the usual hand-sets.

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

1. The stirrup G, provided with the arm *d*, and carrying the pawls *f*, which latter are adjustable in said stirrup to enable the board to be sawed any desired thickness, in combina-

tion with the inclined floor-irons *h* and rack-bar D, substantially as and for the purposes herein set forth.

2. In combination with the stirrup G and pawls *f*, the springs *a*, *e*, and *i*, substantially as and for the purposes herein set forth.

3. The combination of the rack-bar D with standard C, stirrup G with flanges *b*, and arm *d*, pawls *f*, springs *a*, *e*, and *i*, crank-shaft J, and irons *h*, all constructed and arranged to operate automatically, substantially as and for the purposes herein set forth.

In testimony whereof I have hereunto signed my name.

GEORGE B. GETTY.

Witnesses:

IRAM DERR,

L. A. GERMAN.