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DAVID A. EDIE.

Improvement in Saw Mills.

No. 122,002.

Patented Dec. 19, 1871.

Fig 1

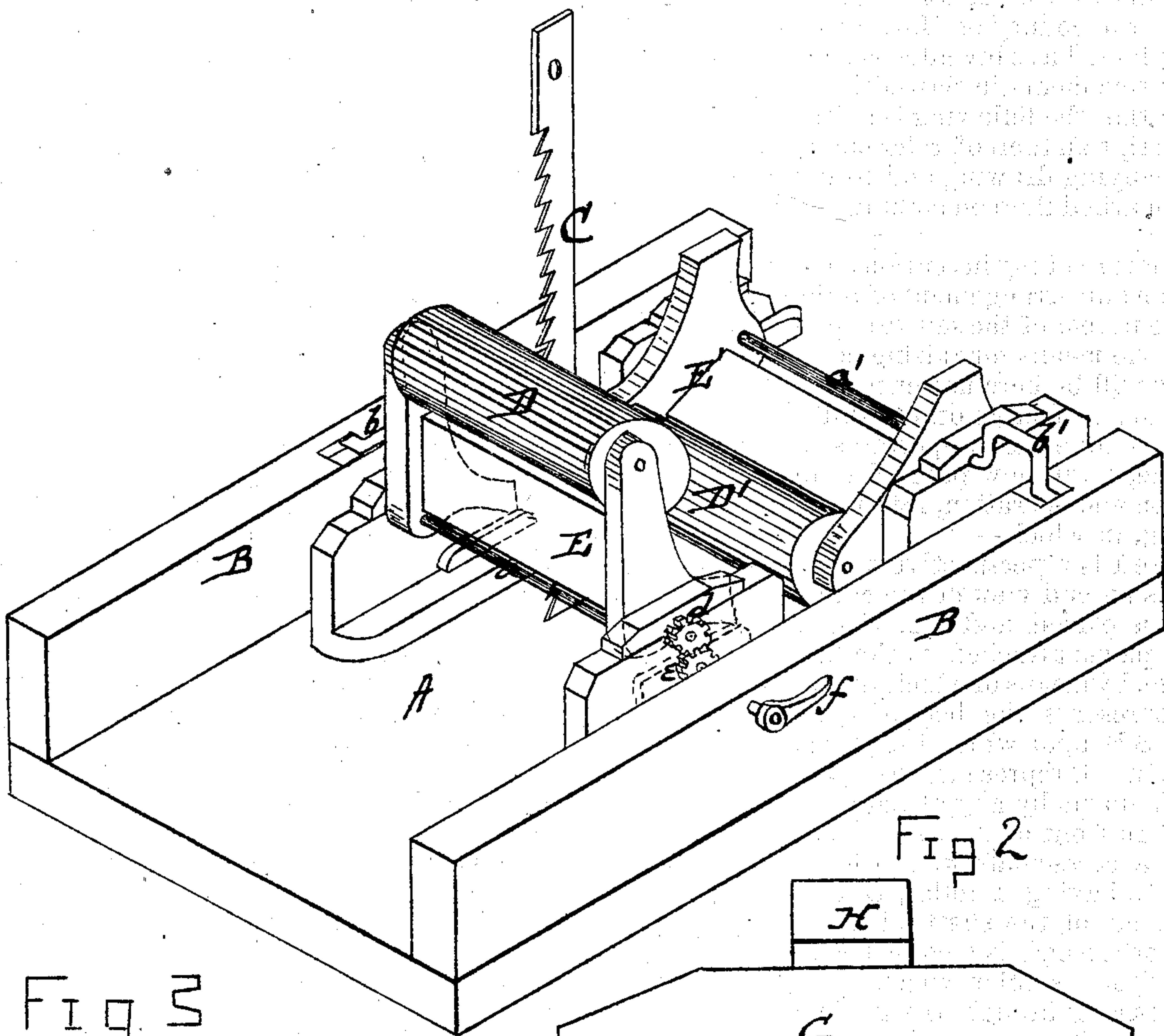


Fig 2

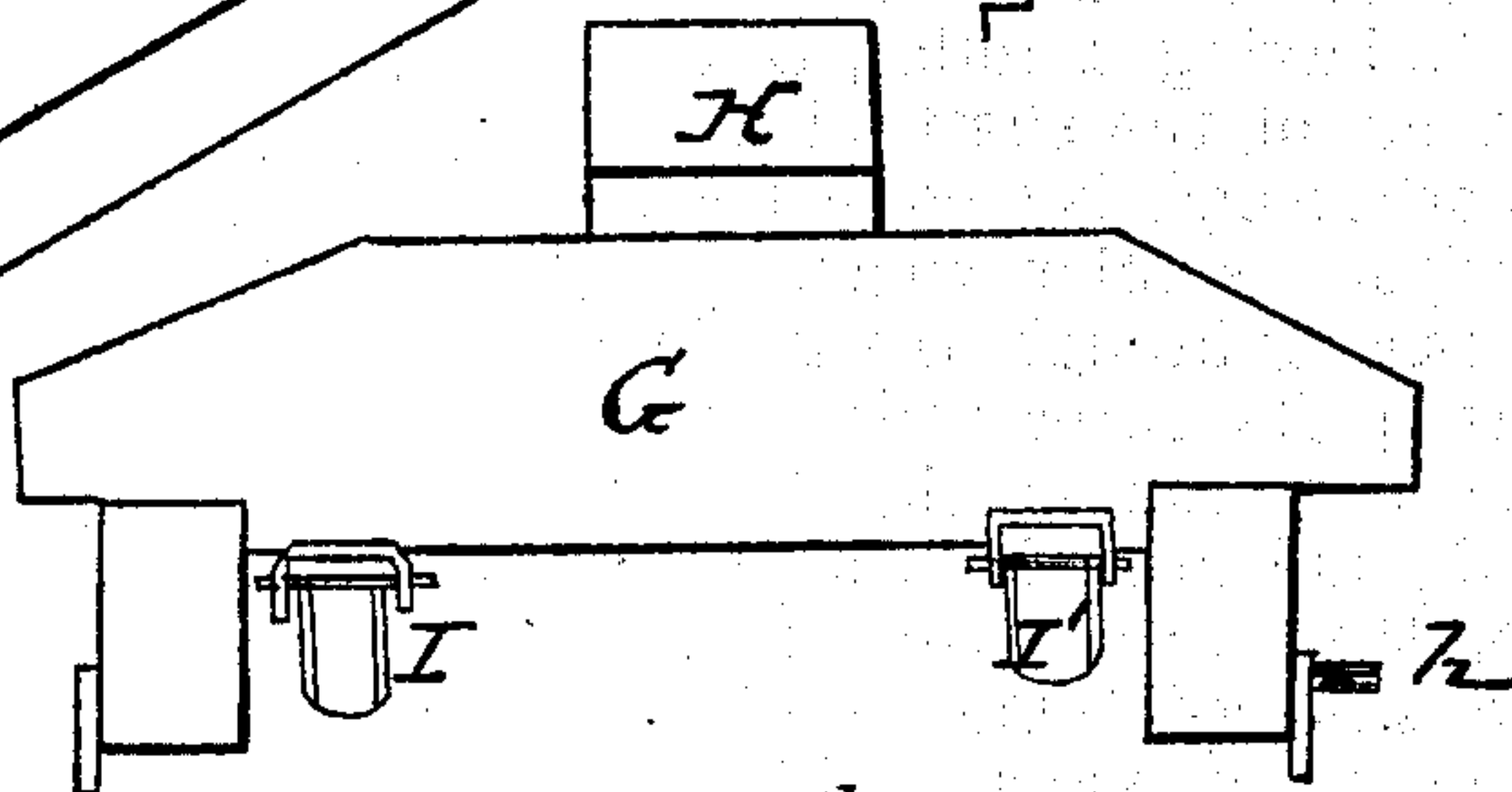
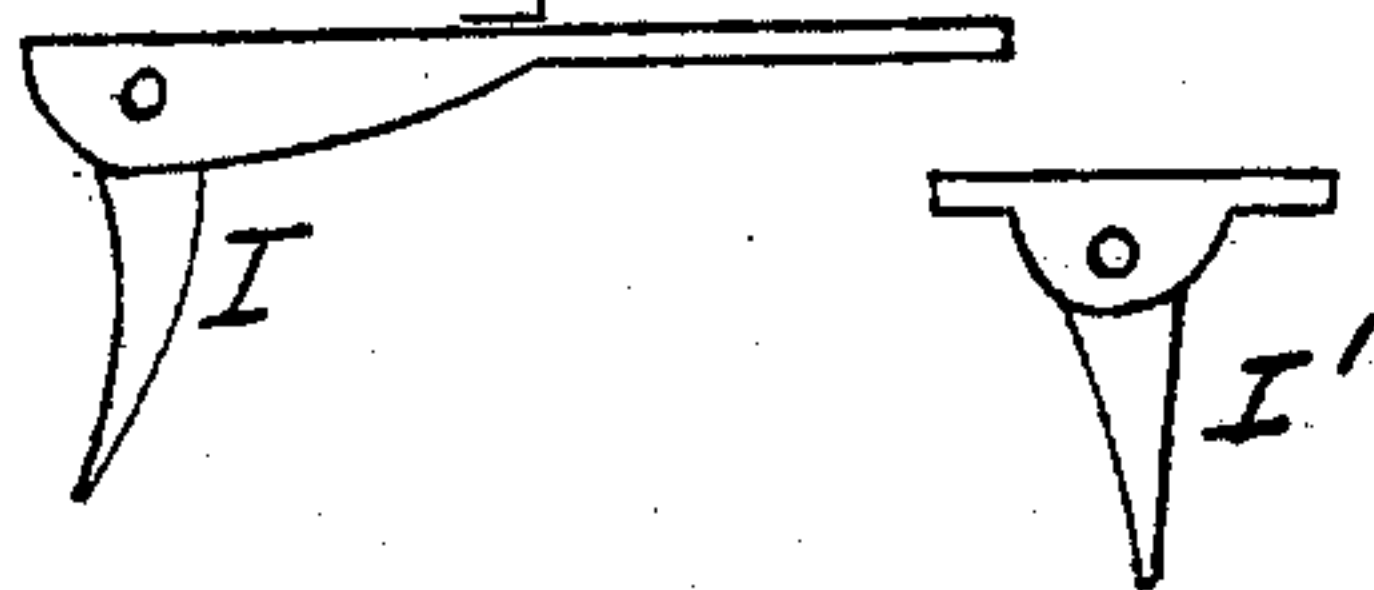


Fig 3



Witnesses:

Frank S. Ourand
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Attorneys.

UNITED STATES PATENT OFFICE.

DAVID A. EDIE, OF NORRISVILLE, MARYLAND.

IMPROVEMENT IN SAW-MILLS.

Specification forming part of Letters Patent No. 122,002, dated December 19, 1871.

To all whom it may concern:

Be it known that I, DAVID A. EDIE, of Norrisville, in the county of Harford and in the State of Maryland, have invented certain new and useful Improvements in Saw-Mills; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of rollers, one in front and one in rear of the saw to support the log; and also in the means for raising and lowering said logs, 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, in which—

Figure 1 is a perspective view of the saw-bed. Fig. 2 is an end view of the carriage upon which the log is placed, and Fig. 3 is a side view of the hinged pawls attached to the head-block of the carriage, by means of which the rollers are raised.

A represents the bed of a saw-mill having guides B B, upon which the carriage moves back and forth. C represents the saw, being operated up and down by any of the known and usual ways. In front of the saw, in suitable boxes, is placed a cross-shaft, *a*, to which is attached a frame, E, having a roller, D, at its upper end. On one end of the shaft *a* is a crank, *b*, and upon the other end is a cog-wheel, *d*. This wheel gears with a similar wheel, *e*, on a short shaft, which passes through the guide B on that side, and has on its outer end a lever, *f*. In rear of the saw is a similar shaft, *a'*, with cranks *b'*, frame E', and roller D', the crank *b'* being, however, on the side opposite to that on which the crank *b* is placed. The cranks *b b'* are, further, so arranged that when the frames with their rollers are turned down the cranks will stand upward in a perpendicular position. G represents the carriage, upon which the log H is placed.

On the under side of the head-block of the carriage are two hinged pawls, I I', which are so arranged that they can turn up one way but not the other way. The log, after it is slabbed, will rest on the rollers D D' while the saw passes through, holding it firm, which will enable the sawyer to do his work correctly and will require less power to force the saw through, as, supported by the rollers, there will be no spring to the log. When the saw starts at the end of the log, and as the carriage G moves toward the saw, the two hinged pawls I I' under the head-block will strike the cranks *b b'* and raise the rollers D D' to their places under the log, one in front and the other in rear of the saw. The one D in front must drop to let the foot-block of the carriage pass over. For this purpose I have attached a pin, *h*, to the side of the carriage, which pin comes in contact with the lever *f*, turning the same, and thereby throwing the said roller down. The roller D may be raised and lowered by hand by means of the lever *f*, and a similar lever, shaft, and cog-wheels arranged to operate the rear roller D', if so desired.

To slab a log the pawls I I' are raised and secured by pins in the sides of the carriage, so that they will pass over the cranks *b b'* without raising the rollers. When slabbed these pins are removed and the pawls will raise the rollers, as above described.

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

The combination of the rollers D D', frames E E', shafts *a a'* provided with cog-wheels *d e* and lever *f*, cranks *b b'*, and hinged pawls I I', all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of October, 1871.

DAVID A. EDIE.

Witnesses:

CALEB WRIGHT,
WILLIAM B. WRIGHT.

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