

(No Model.)

A. B. LANDIS.

SAW MILL DOG.

No. 363,831.

Patented May 31, 1887.

Fig. 3.

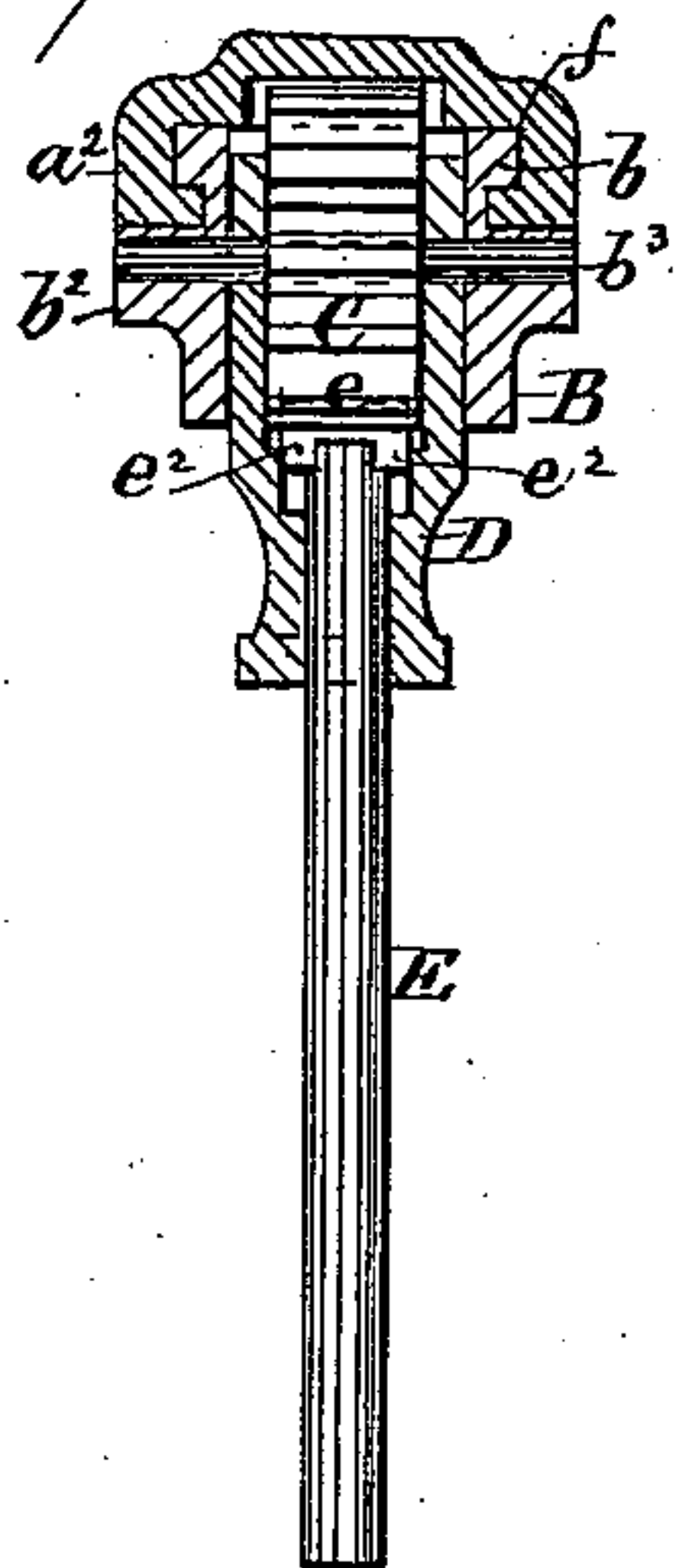


Fig. 4.

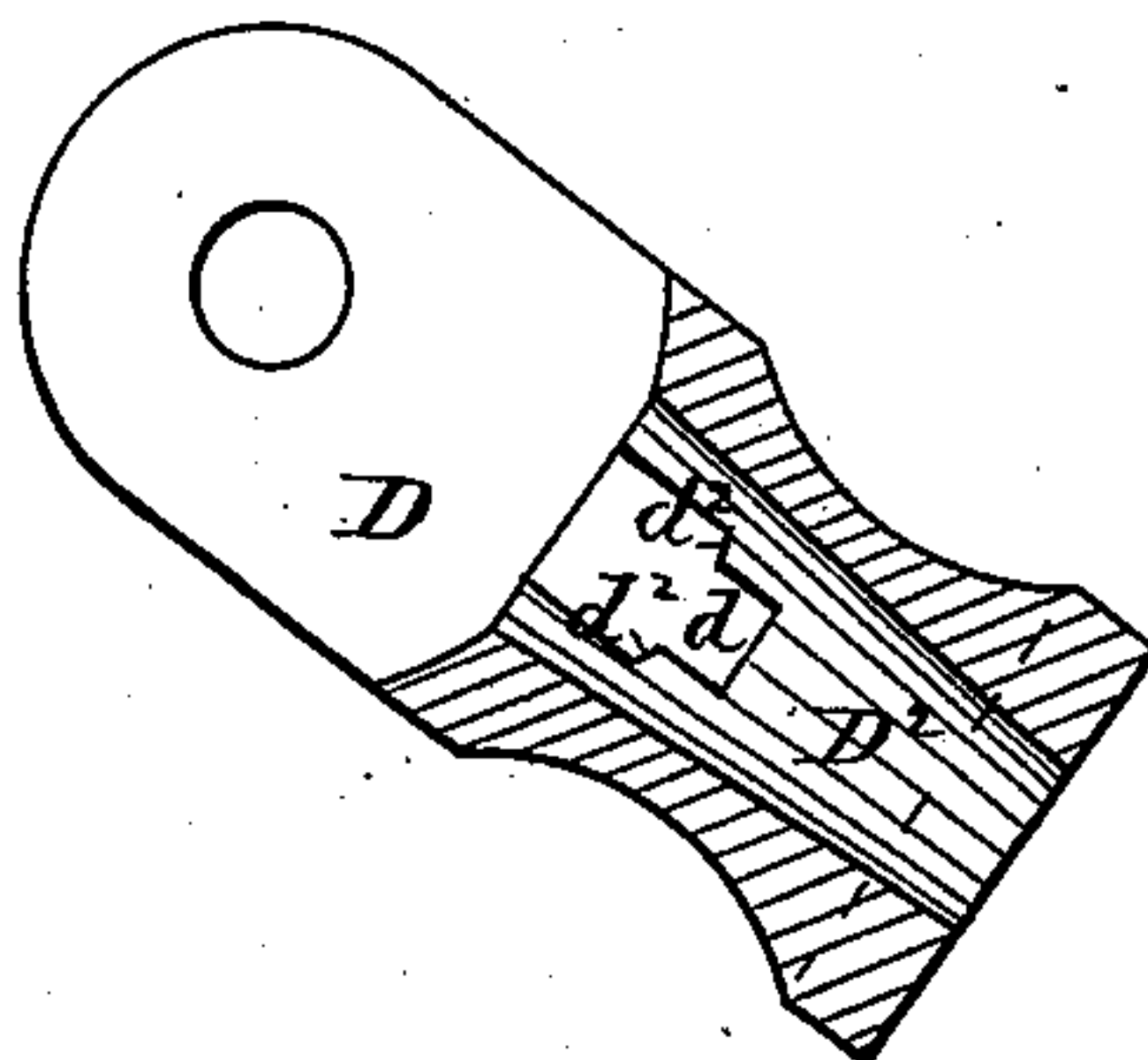


Fig. 1.

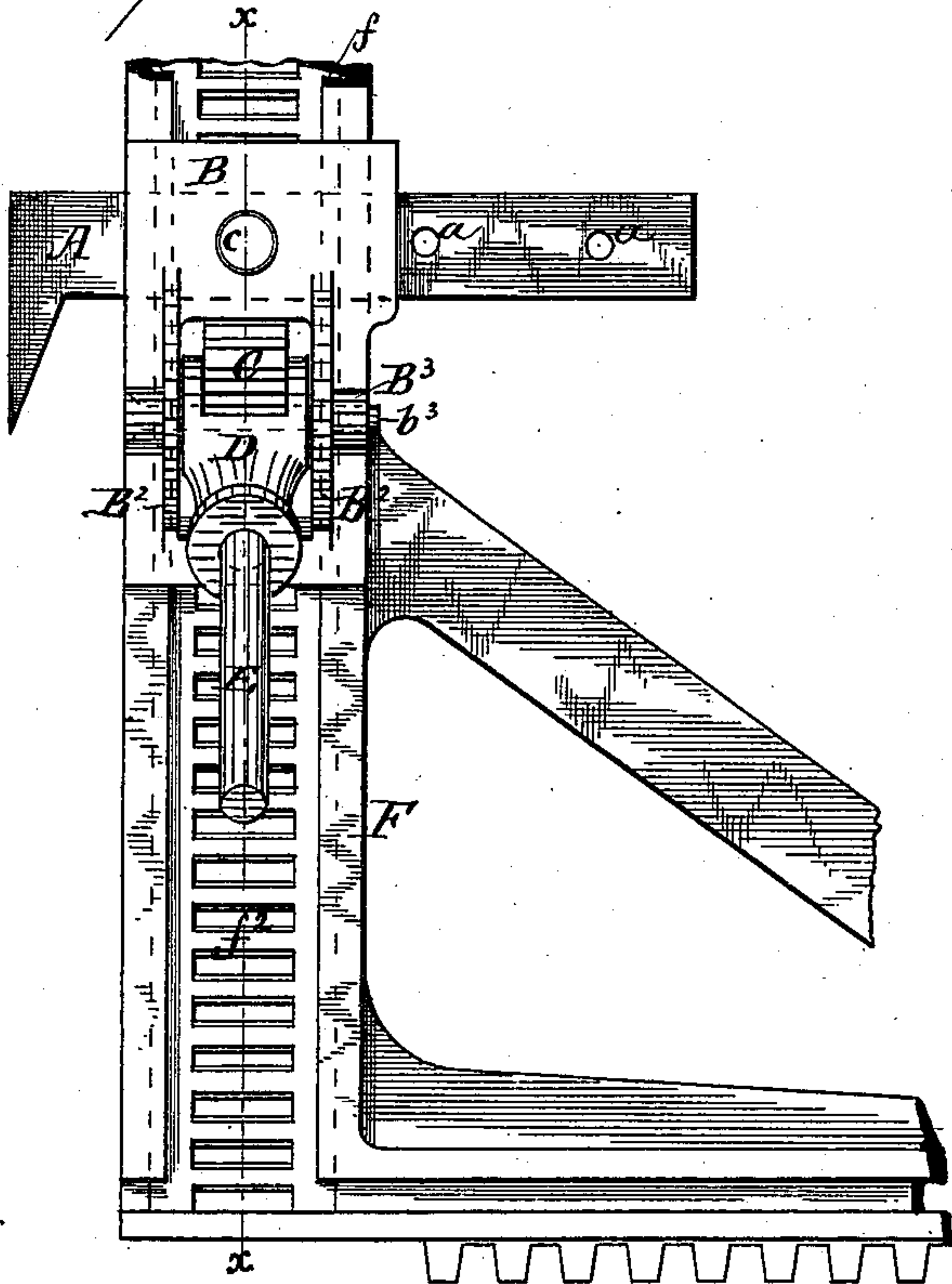
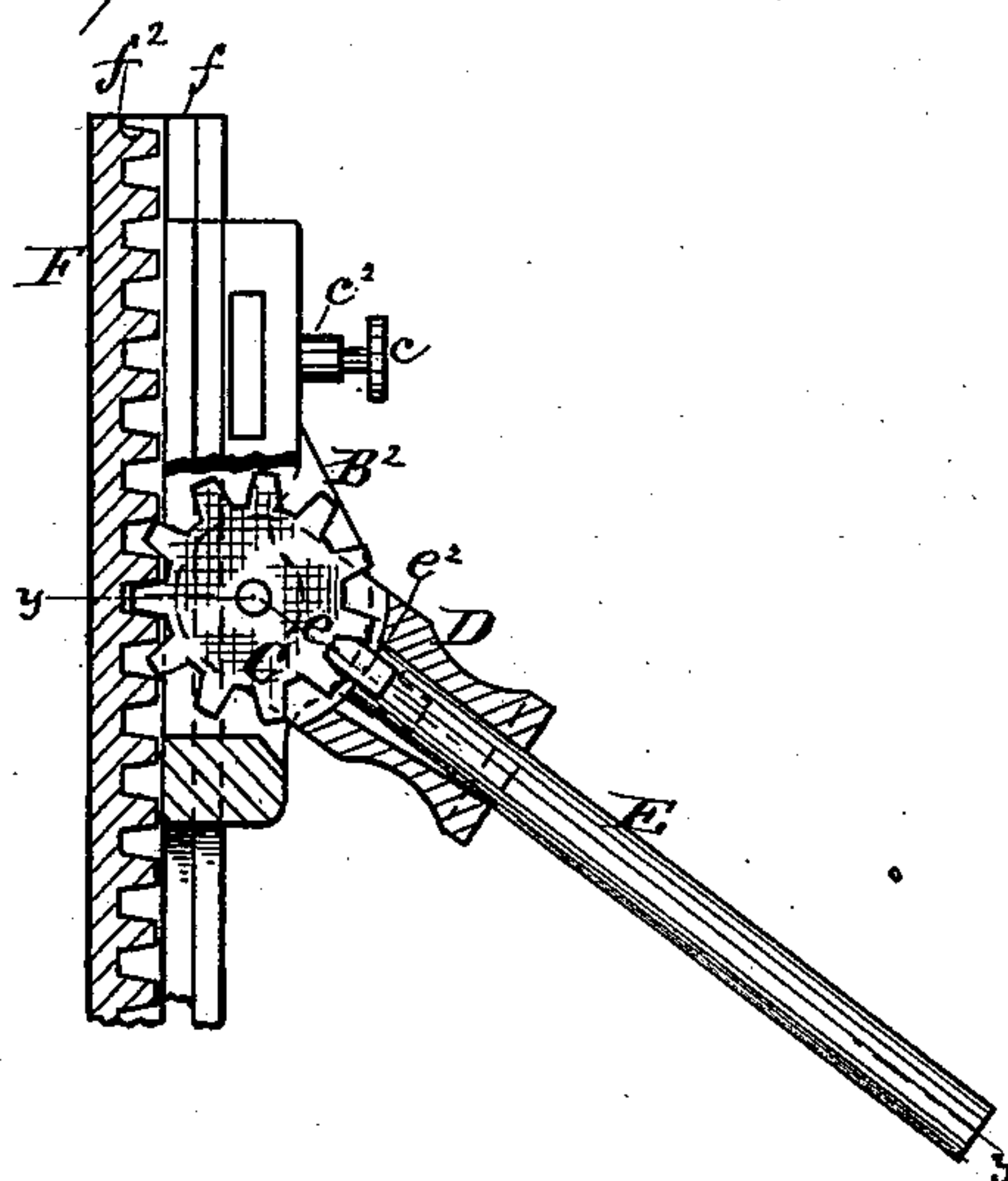


Fig. 2.



Witnesses.

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ABRAHAM B. LANDIS, OF WAYNESBOROUGH, PENNSYLVANIA.

SAW-MILL DOG.

SPECIFICATION forming part of Letters Patent No. 363,831, dated May 31, 1887.

Application filed January 22, 1887. Serial No. 225,138. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM B. LANDIS, a citizen of the United States, residing at Waynesborough, in the county of Franklin and State of Pennsylvania, have invented certain new and useful Improvements in Saw-Mill Dogs, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of saw-mill dogs in which the dog or hook is arranged in a sliding head which is adjusted by means of a lever and a pinion traveling upon a vertical rack secured to the side of the knees of a log-carriage.

The invention consists in combining with the rack, its sliding head, and pinion a lever-head firmly pivoted upon the axle of the pinion, and a hand-lever loosely retained in said lever-head, and having its extremity adapted to enter between the teeth of the pinion to turn it.

The invention will first be described in connection with the drawings, and then be specifically pointed out in the claims.

In the drawings, Figure 1 is a side view of a portion of a knee having a dog-carrying head and means to operate it constructed in accordance with my invention. Fig. 2 is a vertical section of the same, taken on line xx of Fig. 1. Fig. 3 is a horizontal section on line yy of Fig. 2. Fig. 4 is a vertical section, upon a larger scale, of the lever-head of the device.

The dog or hook A is secured, as usual, in the head B by means of the pin c entering one of the holes a in the dog, a spiral spring being placed in the boss c^2 , through which it passes. The head B is provided with lateral projections b close to its inner surface, to enter vertical grooves f in the interior of the knee F on each side of the rack f^2 , formed therein upon one side of said knee. The head B is nearly its whole length made the same width as the side of the knee, and its front edge, b^2 , is planed off so as to make an even surface with the front a^2 of the knee, so that when a board is secured by the dog it will bear squarely against the surfaces a^2 b^2 , and the springing of the board is prevented. The head B has projecting from its side two semicircular

check-pieces, B^2 , provided with bosses B^3 , that form the bearings for the pin b^3 , upon which is mounted the head D of the hand-lever E, and also the pinion C, having a circular row of teeth or cogs to engage with the teeth of the rack. The lever E is inserted in the head D from the inside, and to prevent its coming off and at the same time form broad bearing-surfaces against the pinion and against the shoulders d^2 in the interior of the lever-head D, said lever has lateral projections e^2 , of the same width as the tongue e , at its end, and said tongue is adapted to enter between the teeth of the pinion; but to permit the disconnection of the tongue from the pinion to take a new hold thereon the recesses d are extended in the rear of the shoulder d^2 within the lever-head. The opening D^2 for the passage of the hand-lever is made tapering, being wider at the inner end, to permit the projections e^2 to take lodgment upon either one of the shoulders d^2 as a fulcrum, to prevent disengagement from the pinion when said pinion is rotated to either elevate or depress the head B and the dog A, carried thereby; but when the lever E is to be disengaged from the pinion it is drawn back and its projections e enter into the bottom of the recess d .

Having now fully described my invention, I claim—

1. The combination of the knee F, having internally a rack and vertical grooves on each side thereof, the head B, having lateral projections to enter said grooves, a circular pinion, a lever-head having internal recesses, d , and shoulders d^2 on the sides thereof, with a lever, E, having a tongue and lateral projections thereon, substantially as and for the purpose described.

2. The combination of the knee F, the head B, connected therewith, as set forth, a circular pinion, a pivot-pin therefor, a lever-head having circular journal-bearings fitting upon said pin, a tapering opening in said head, recesses d , and shoulders d^2 on the sides thereof, with a lever having lateral projections adjacent its inner end, substantially as and for the purpose described.

3. The combination of the knee F, having a planed front edge, a^2 , the head B, connected

therewith, as set forth, and having its front edge, b^2 , planed even with the front edge of the knee, a pivot-pin passing through said head, a circular pinion thereon, a lever-head having circular perforations receiving the pivot-pin and having recesses d , and shoulders d^2 , with a lever having lateral projections, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

ABRAHAM B. LANDIS.

Witnesses:

C. E. BESORE,
D. M. GOOD, Jr.