(No Model.)

H. ARNDT & F. STUTZMAN.

TREADLE SAW FEEDER.

No. 402,383. Patented Apr. 30, 1889.

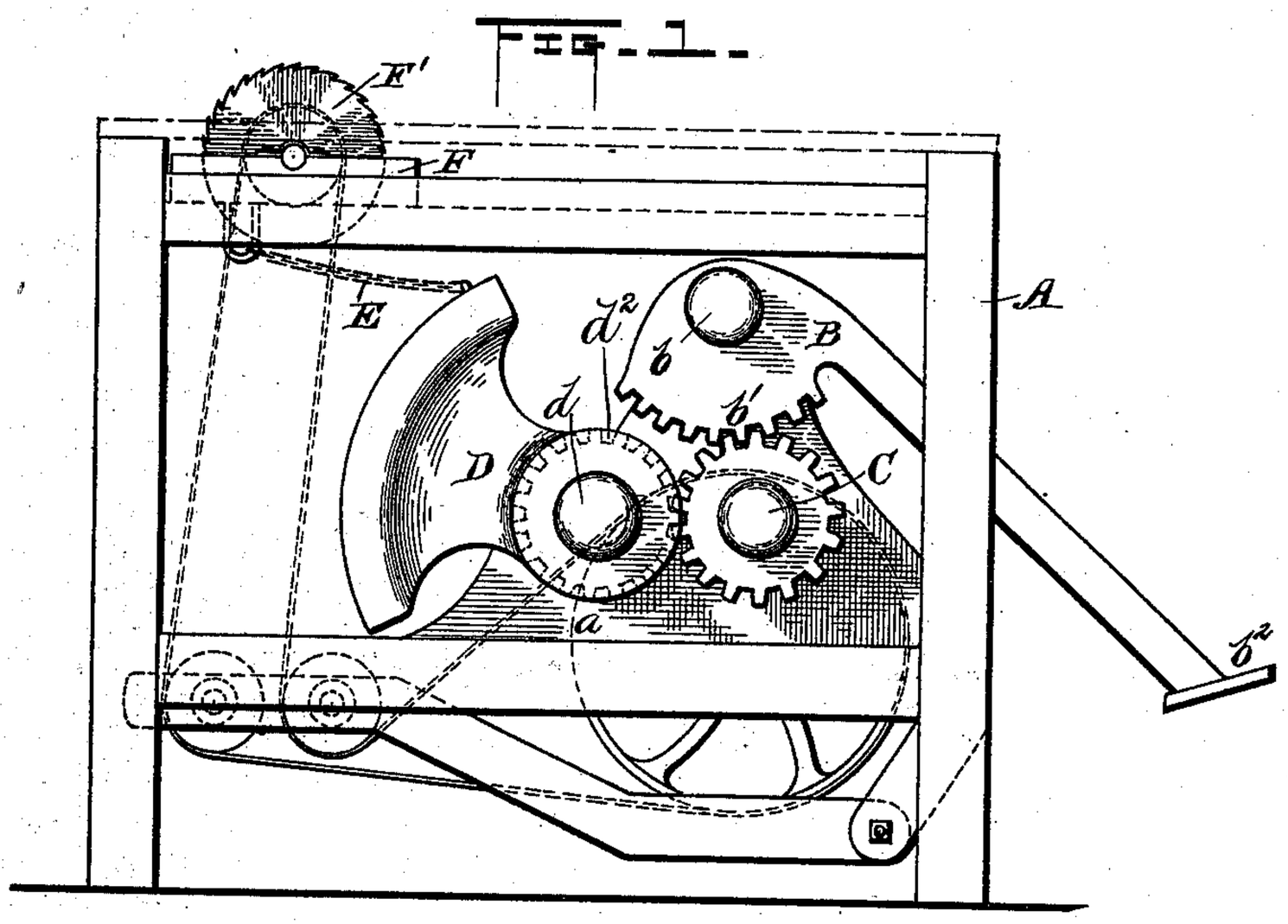


FIG. 2.

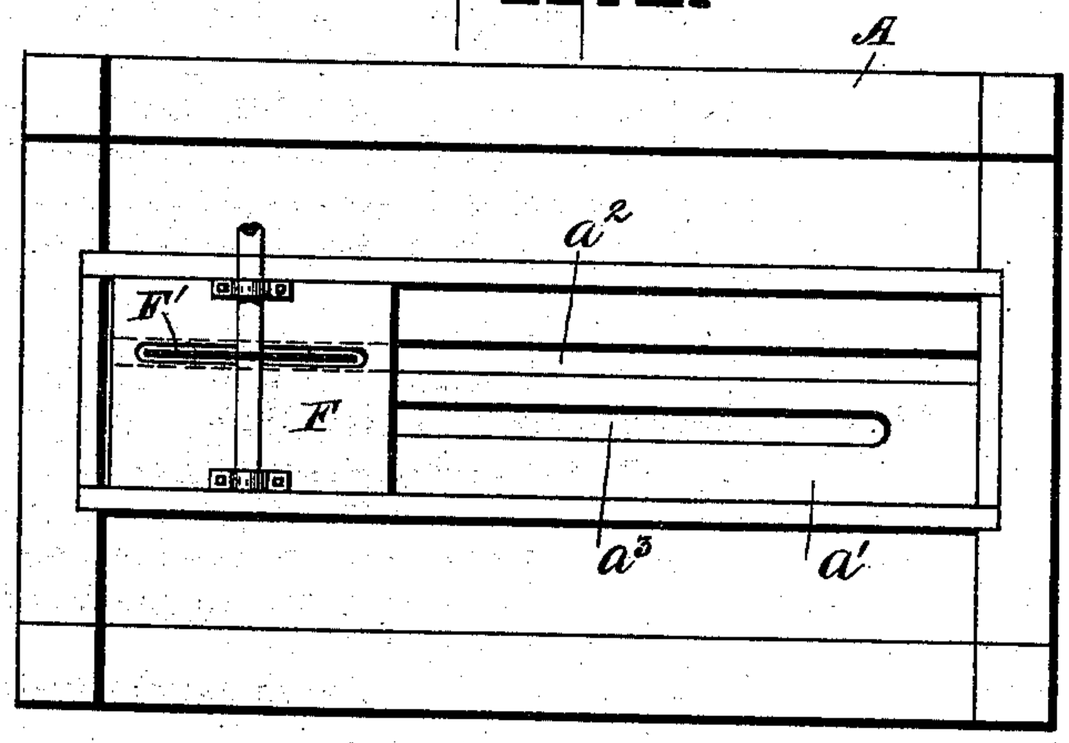
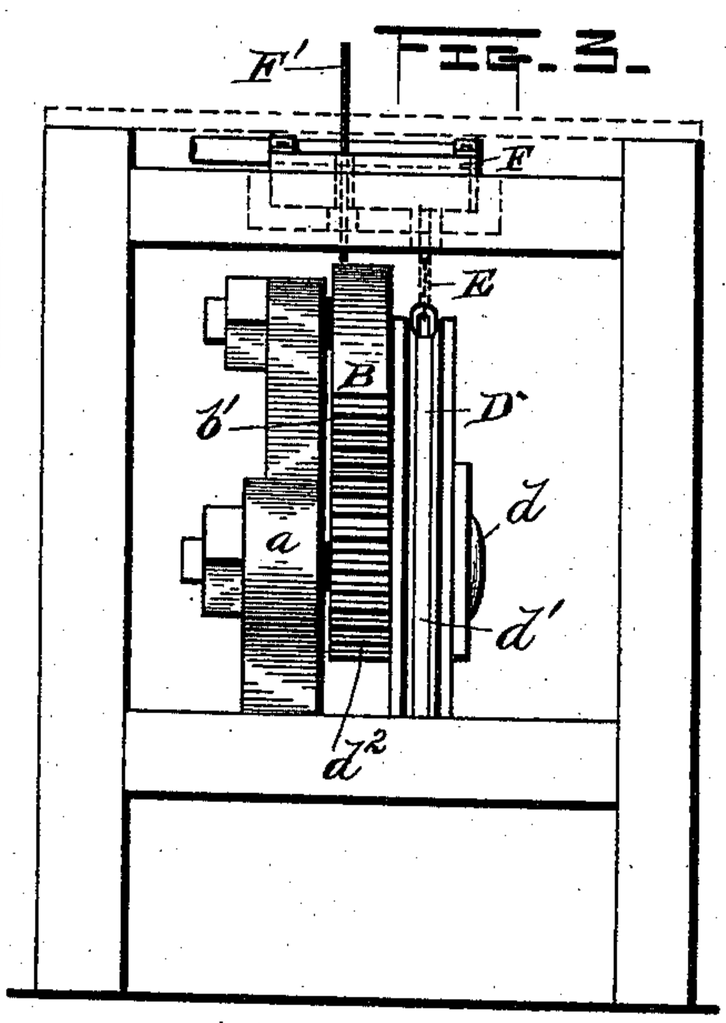


FIG. 3.



Witnesses:—

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UNITED STATES PATENT OFFICE.

HENRY ARNDT AND FRANK STUTZMAN, OF WILLIAMSPORT, PENNSYLVANIA.

TREADLE SAW-FEEDER.

SPECIFICATION forming part of Letters Patent No. 402,383, dated April 30, 1889.

Application filed December 31, 1887. Serial No. 259,497. (No model.)

To all whom it may concern:

Be it known that we, HENRY ARNDT and FRANK STUTZMAN, citizens of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Treadle Saw-Feeds; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Figure 1 is a side elevation of our invention. Fig. 2 is a top plan of our invention, showing the frame with the saw and its carriage; and Fig. 3 is an end elevation of our invention.

Our invention belongs to that class of devices known as "saw-mill feed," and the novelty consists in the construction and combination of the several parts, all as will now be fully set out and explained, reference being had to the accompanying drawings.

In the drawings, A represents the frame. At any convenient place in it—as, for instance, on the top of the central longitudinal piece, *a*—is mounted the treadle-shaft *b* in suitable bearings. The treadle B has on its depending upper end the curved rack *b'*, and at the lower end the usual foot-piece, b^2, by which it is operated. The rack on *b'* is adapted to mesh with and operate the cog-wheel C, journaled also in the longitudinal piece *a*, so as to come just below the rack. About on the same horizontal line with the wheel C the shaft *d* of cam D is journaled in the same piece, *a*, and in such relation with said wheel that the cogs d^2 on its shaft will mesh with and be operated by said wheel. The upper edge of the cam or segment D is grooved at *d'*, and at one end of this groove is secured one end of the chain or bar E. The other end of said chain is fastened to the plate F, which moves on the bed *a'* and guideways therein on the upper part of the frame. The chain is fastened by means of a staple, which moves in the slot a^3. Of course if the connection between the part D and the plate is a bar the merely mechanical details of adjusting the same would be obvious.

In the plate F the saw F' is suitably journaled, as usual, and adapted, in the back-and-forth movement of said plate, to travel and work in the saw-groove a^2 in the bed *a'*. Any usual and well-known mechanism and means for retracting the saw-plate after it has been drawn forward may be employed.

The operation of this device as above constructed will be readily understood by any one acquainted with this class of devices. The downward movement of the treadle causes the grooved end of the cam to be turned downward, and thus operating on the chain or bar connection draws the saw-plate forward to the front of the machine. When the cut has been made, the withdrawing mechanism acts, as usual, to retract the said plate to the other end of the bed.

What we claim is—

In a treadle saw-feed, a saw-plate having a saw suitably mounted in it, combined with the mechanism, as described, consisting of a treadle having a curved rack, a cog, and a cam having cogs on its shaft, and a connecting bar or chain whereby the forward movement of said plate can be obtained.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY ARNDT.
FRANK STUTZMAN.

Witnesses:
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