

No. 669,121.

Patented Mar. 5, 1901.

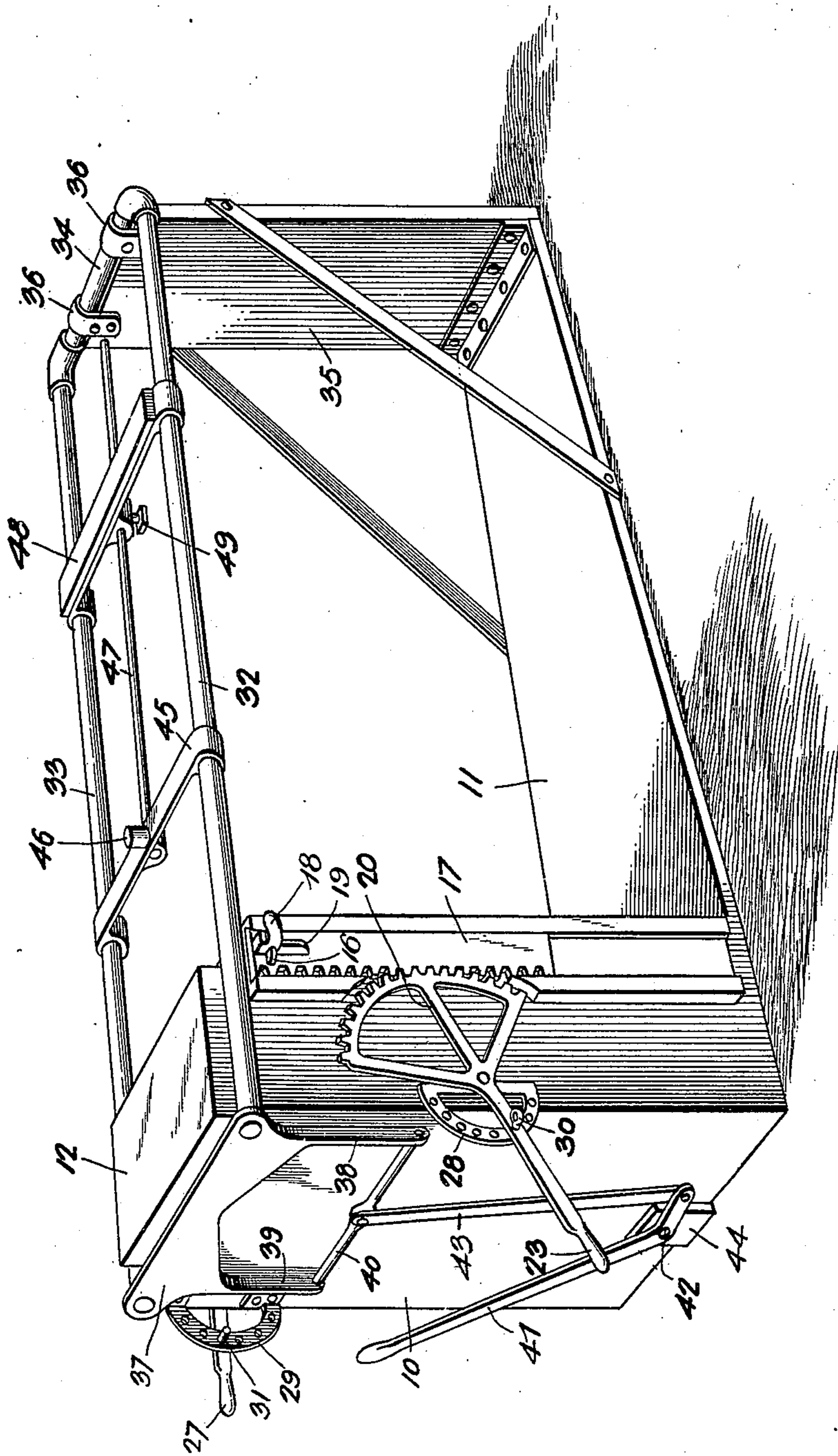
S. F. LEGETT.
SAW HAMMERING MACHINE.

(Application filed Nov. 28, 1900.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.



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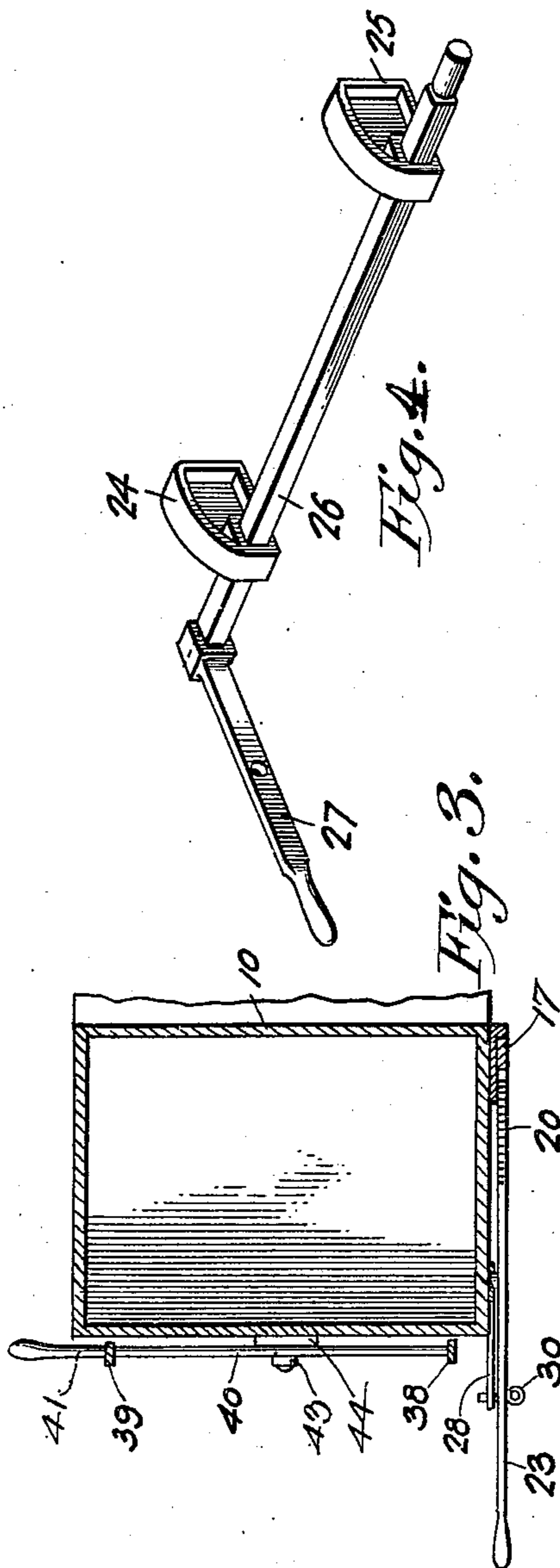
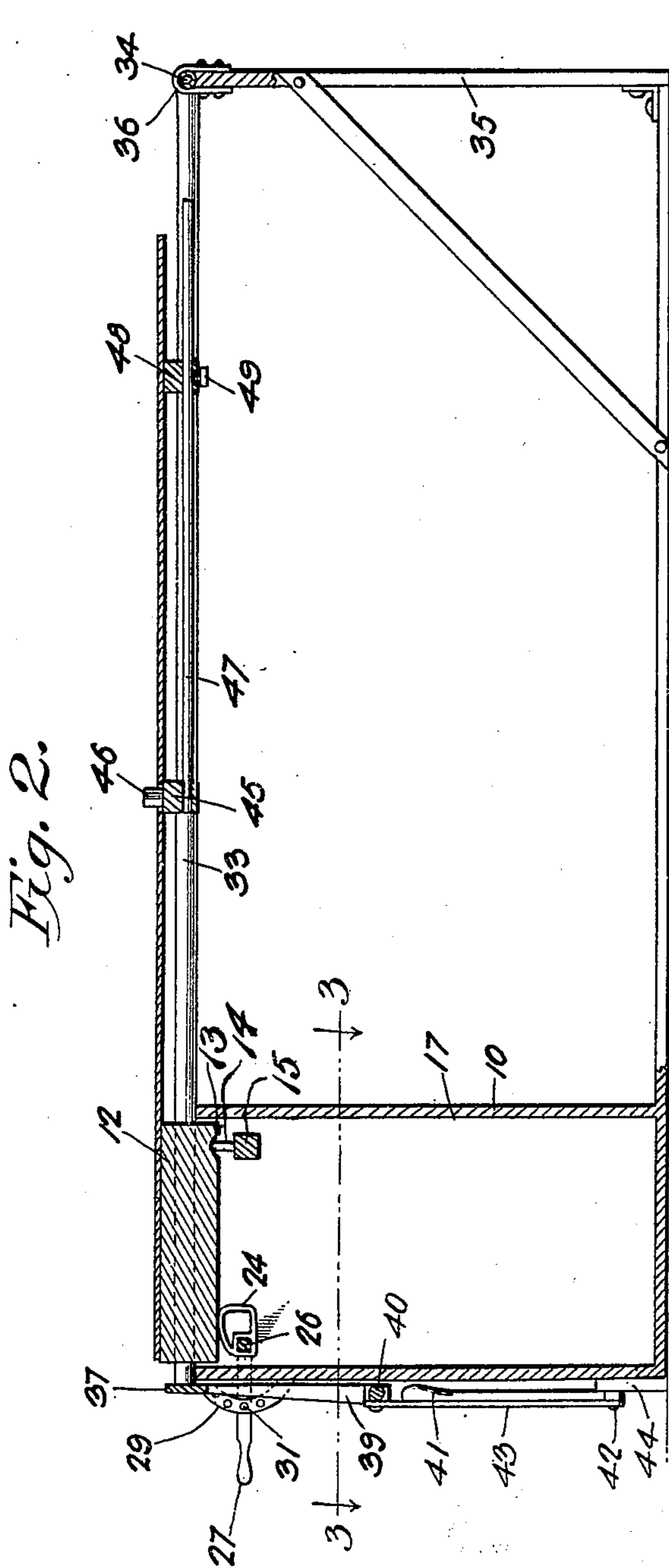
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SAW HAMMERING MACHINE.

(Application filed Nov. 28, 1900.)

(No Model.)

2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

SHERED F. LEGETT, OF ORA, MISSISSIPPI.

SAW-HAMMERING MACHINE.

SPECIFICATION forming part of Letters Patent No. 669,121, dated March 5, 1901

Application filed November 28, 1900. Serial No. 38,027. (No model.)

To all whom it may concern:

Be it known that I, SHERED F. LEGETT, a citizen of the United States, residing at Ora, in the county of Covington and State of Mississippi, have invented a new and useful Saw-Hammering Machine, of which the following is a specification.

The invention relates to saw-hammering machines; and it has for one object to provide a construction adapted to hold a circular saw in proper relation to an anvil during the operation of hammering and wherein the saw may be raised from the anvil and spun upon its support to test it, a further object of the invention being to provide means for tilting the anvil to the proper angle to conform to the position of the saw during the hammering operation.

An additional object of the invention is to provide a machine which will hold saws of various diameters within certain limits and wherein the saw may be easily raised to the bench.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing the complete machine. Fig. 2 is a central longitudinal section taken through the machine and showing the position of a saw during the hammering operation. Fig. 3 is a section on line 3 3 of Fig. 2. Fig. 4 is a detail perspective view showing the cam-shaft and its operating-lever for tilting the anvil.

Referring now to the drawings, the present device consists of a casing 10, mounted at one end upon a base-plate 11 and within the upper end of which is disposed a tilting anvil 12, adapted for movement to lie at various angles, as hereinafter described.

The anvil 12 has recesses 13 in its under face, and in these recesses are engaged supporting-pins 14, mounted upon a cross-bar 15 or other portion of the frame, as may be preferred, this bar and its pins forming the pivotal support for the anvil. The pivotal mounting of the anvil is at the rear side thereof, and the front side of the anvil is raised and lowered through the medium of cams 24 and 25, which are fixed upon a cam-shaft 26, journaled in the sides of the casing 10 and provided with an operating-lever 27,

both levers 27 and 23 having coöperating segments 28 and 29 to hold the levers in their adjusted positions, the lever 23 being adapted to operate the saw-raising apparatus, hereinafter described. The cam-shaft is disposed in such manner that its cams may support the forward portion of the anvil, and when said shaft is rocked the forward portion of the anvil is raised or lowered, depending upon the initial position of the cams and the direction of movement thereof.

The saw to be hammered is supported upon a frame in position to rest upon the anvil. This frame comprises parallel arms 32 and 33, which are connected at one end by a cross-piece 34, this cross-piece being hinged to the upper end of a support 35, which is erected at the outer end of the base-plate 11, through the medium of straps 36, which are passed around the cross-piece and have their ends disposed against and secured to the faces of the upright.

The arms 32 and 33 are of such length and are so separated as to lie with their free ends at opposite sides of and slightly beyond the frame or casing in which the anvil is disposed, and connecting these projecting arms is a plate 37, having depending legs 38 and 39, connected by a cross-bar 40.

An angular lever 41 is pivoted at its angle to a plate 44 on the front of the casing and at the lower edge thereof, and a connecting-rod 43 connects the work end of this lever with the cross-bar 40. When the lever 41 is in raised position, its work end is lowered to lower the saw-supporting frame, and when the lever is in its lowered position the said frame is raised to lift the saw from the anvil. The work end of the lever 41 is adapted to pass slightly over the fulcrum of the lever, so that the frame will be lowered slightly after having been raised to its highest point and the weight of the frame and the saw thereon will hold the lever against upward movement, thus preventing return movement of the frame. When the frame is to be lowered, the lever is raised to swing its work end over the center, when the weight of the frame will cause it to sink.

To hold a saw upon the frame, a cross-head 45 is slidably engaged with the arms 32 and 33, this cross-head having a stud 46, which is

adapted to enter the central opening of the saw and hold it pivotally. To permit of adjustment of the cross-head and also to hold it in fixed position at proper times, a rod 47 is connected with said head, the said rod being passed through a perforation in a second and fixed cross-head 48, near to the hinged end of the frame. A set-screw 49 is provided for clamping the rod to hold it motionless and correspondingly hold the cross-head, which receives the saw.

To raise the saw to the anvil, the lever 23 above referred to is provided. This lever has a segmental rack or gear 20 at its work end, which engages a reciprocatory rack 17, mounted in guides upon the side of the anvil-casing, so that as the lever 23 is operated this rack will be raised and lowered. Upon the outer face of the rack 17 and at the upper end thereof is formed an upwardly-directed hooked stud 18, which when the rack is lowered is adapted to engage with the central opening of the saw. The lever 23 may be then operated to raise the rack and therewith the saw, after which the lower edge of the saw is swung outwardly, bringing the upper edge upon the anvil and supporting-frame, and the saw may be readily raised from the stud and then moved into place upon the stud of the supporting-frame. Also, when the saw is to be tested in a vertical position, the rack 17 may be raised to position to receive the saw upon its stud 18, said rack having ears 16 and 19 at the base of the stud, against which the saw may be brought to bear to hold it steady.

After the saw has been placed on the stud 46 the cross-head 45 is adjusted to bring the saw to proper position over the anvil, after which the lever 27 is manipulated to bring the anvil to lie closely against the saw, the frame being of course lowered to permit the saw to rest on the anvil. During the hammering operation it is of course necessary to test the saw at times, and for this purpose the vertically-shiftable saw-frame is provided, it being possible to raise the frame to raise the saw from the anvil at any time, so that it may be turned on the stud to give it the test, as usual, after which the saw may be lowered again to the anvil.

It will be seen that with the present construction the cross-head may be shifted to operatively hold saws of different diameters and that the anvil may be adjusted to proper position for most effective work.

In practice various modifications of the specific construction shown may be made and any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

It will be noted that the levers 23 and 27 have pins 30 and 31, respectively, for engage-

ment with the perforations of their respective racks or segments to hold the levers in adjusted positions.

What is claimed is—

1. A saw-hammering machine comprising an anvil, a saw-supporting frame pivotally mounted to present a saw to and remove it from the anvil, said anvil being pivotally mounted independently of the frame for movement to conform to the position of the frame and the saw thereon.

2. A saw-hammering machine comprising a casing, an anvil pivotally mounted in the casing and projecting therefrom, a supporting-frame pivoted independently of the anvil, a cross-head slidably mounted upon the frame to hold the saw in operative relation to the anvil, and means for tilting the anvil to conform to the position of the frame.

3. A saw-hammering machine comprising a pivoted saw-supporting frame, an anvil pivotally mounted independently of the supporting-frame for tilting movement with respect to the frame and adapted to receive a saw, and means for tilting the anvil to conform to the inclination of the saw upon the frame.

4. A saw-hammering machine comprising a casing, an anvil pivotally mounted in the casing and projecting therefrom, a cam-shaft mounted in the casing and having cams for engagement with the anvil to tilt it, means for operating the cam-shaft to operatively engage the cams with the anvil, a pivoted saw-frame, and means for moving the frame with a saw thereon into and out of operative relation to the anvil.

5. A saw-hammering machine comprising an anvil, a pivoted frame and an adjustable saw-support upon the frame adapted to hold a saw in position to rest upon the anvil, said anvil being adjustable independently of the frame to conform to the inclination of the frame.

6. A saw-hammering machine comprising a casing, an anvil pivoted in the casing and projecting therefrom, a shaft having cams disposed in operative relation to the anvil to move it pivotally, means for operating the shaft, a pivoted saw-supporting frame having a saw-rest mounted adjustably thereon for movement toward and away from the anvil, and a lever pivoted to the casing and connected with the supporting-frame for raising and lowering the latter with respect to the anvil.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

SHERED F. LEGETT.

Witnesses:

J. T. MATHISON,
V. F. DUSE.