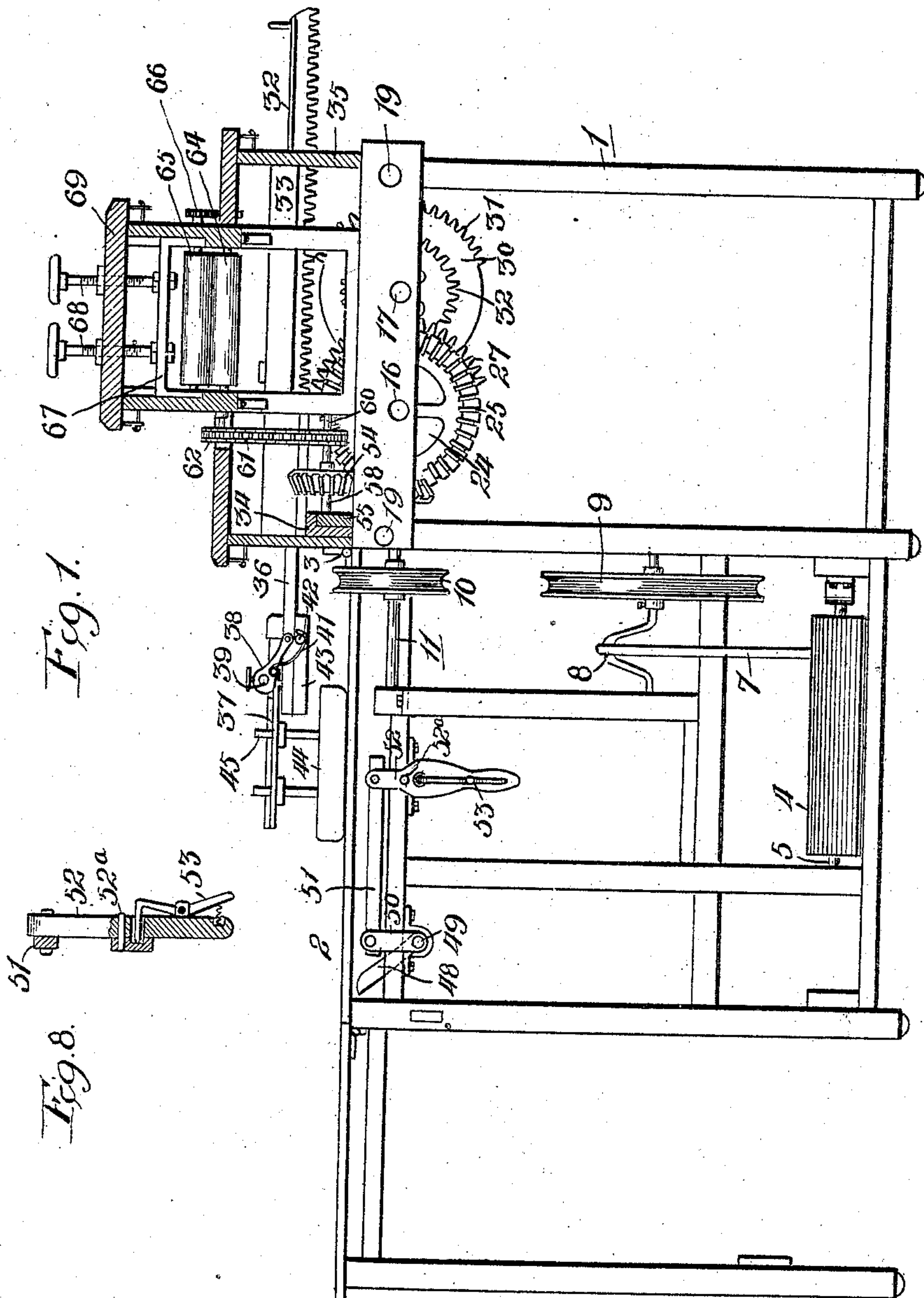


No. 850,608.

PATENTED APR. 16, 1907.

S. J. TOBIASZ.
IRONING MACHINE.
APPLICATION FILED AUG. 22, 1906.

3 SHEETS—SHEET 1.



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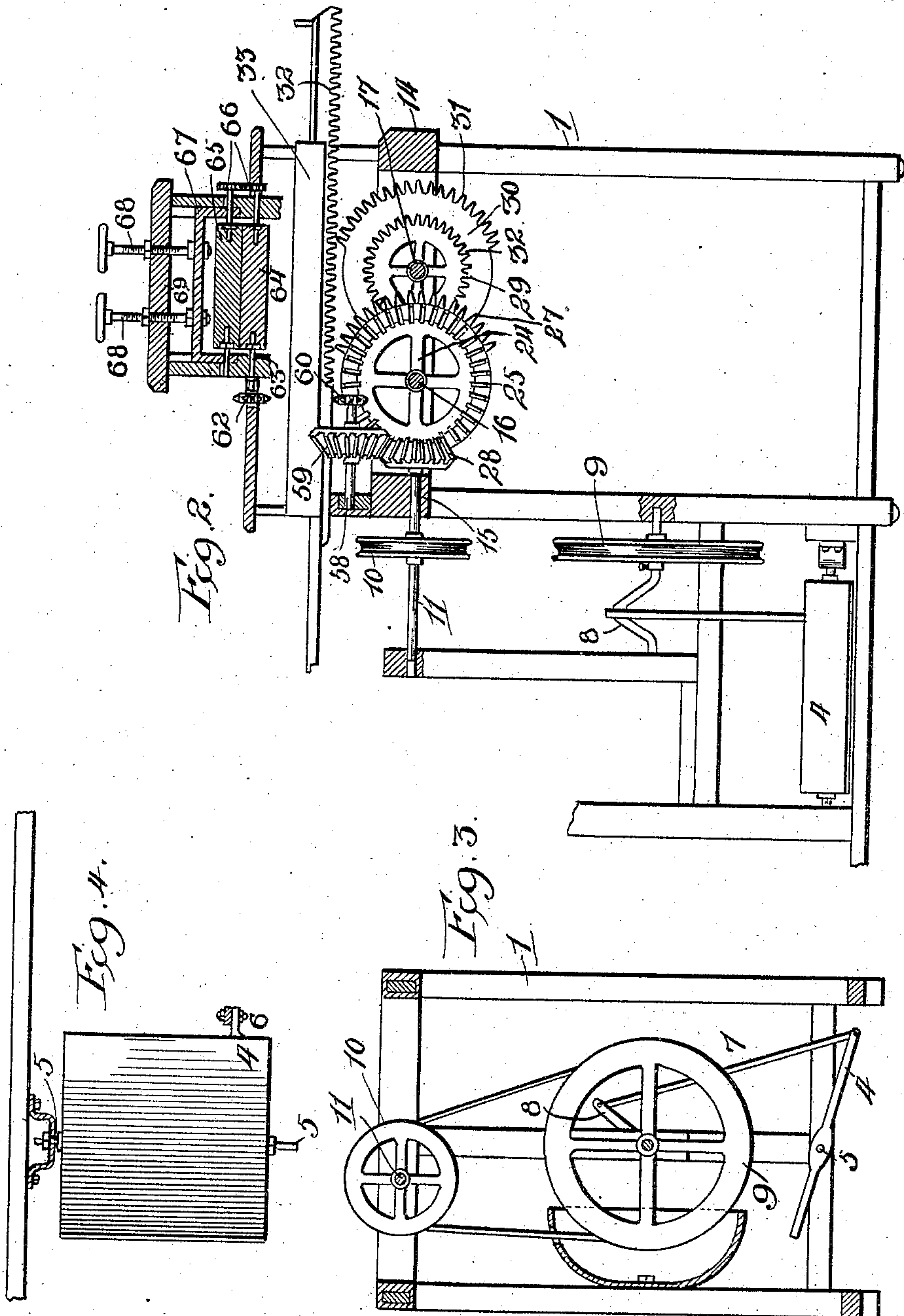
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3 SHEETS—SHEET 2.



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3 SHEETS—SHEET 3.

Fig. 9.

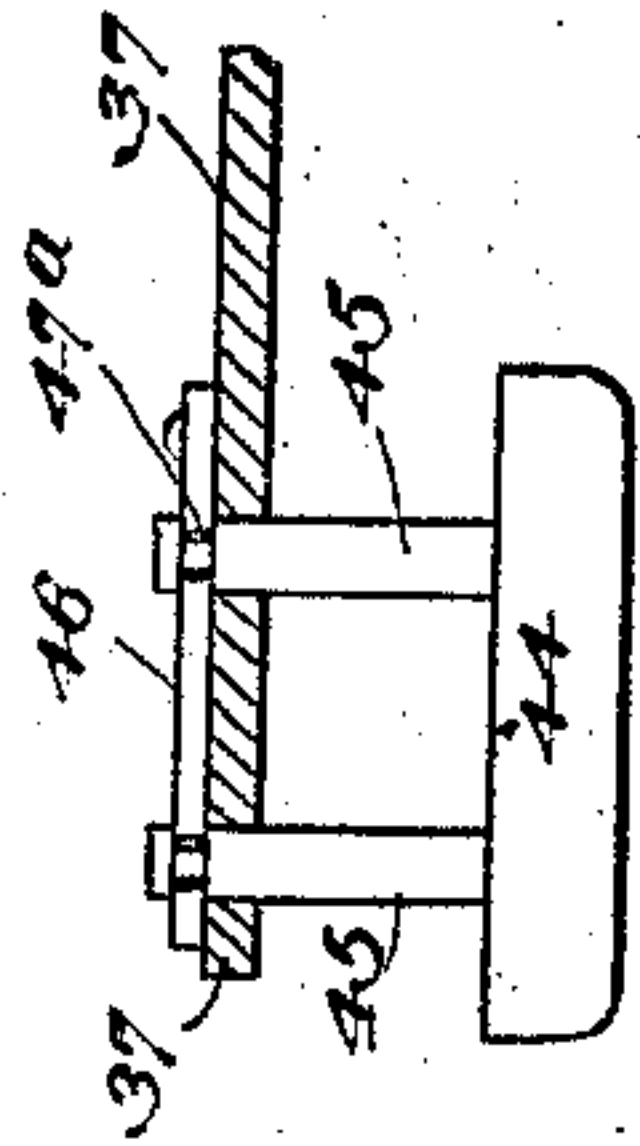


Fig. 5.

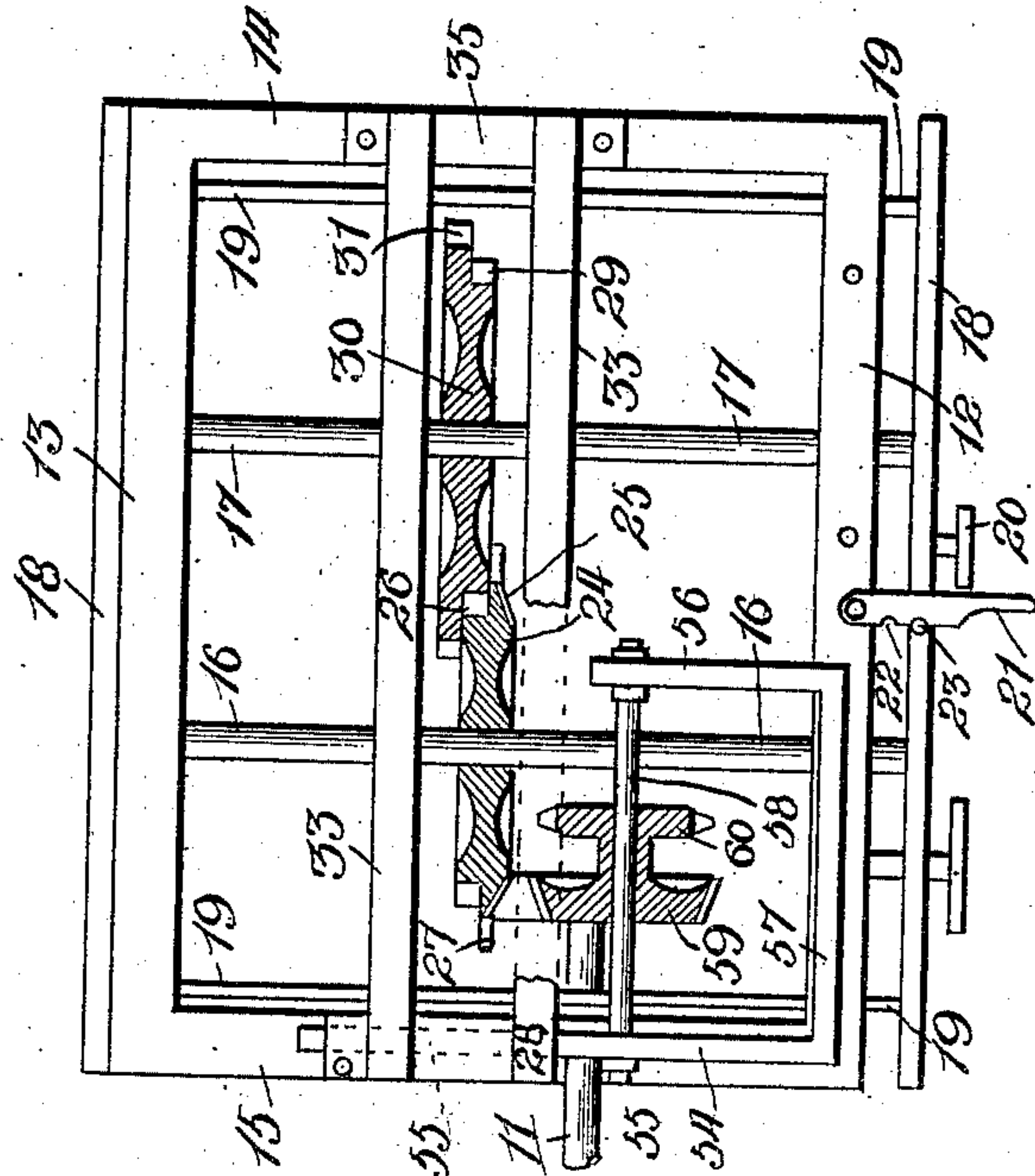


Fig. 6.

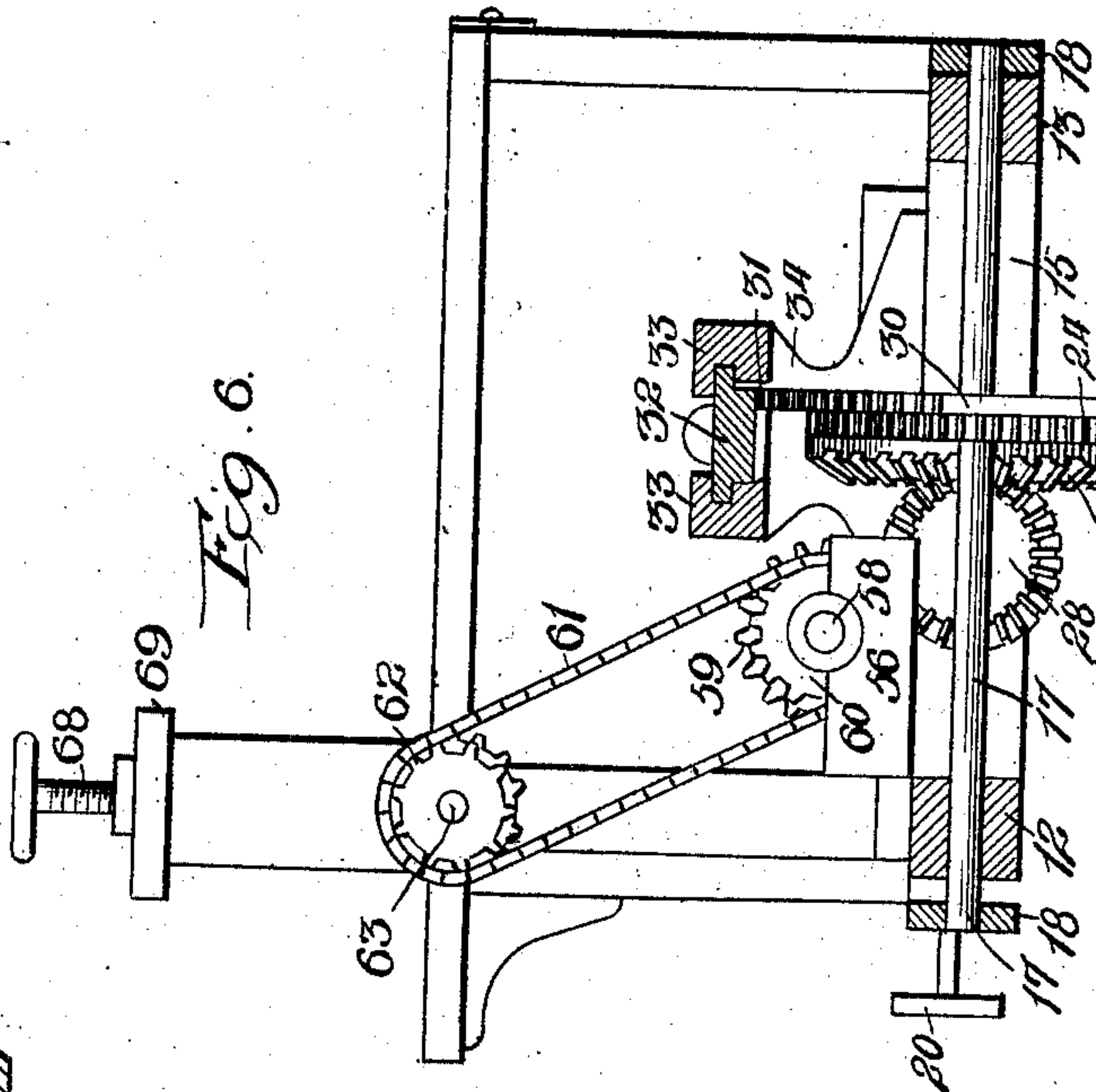
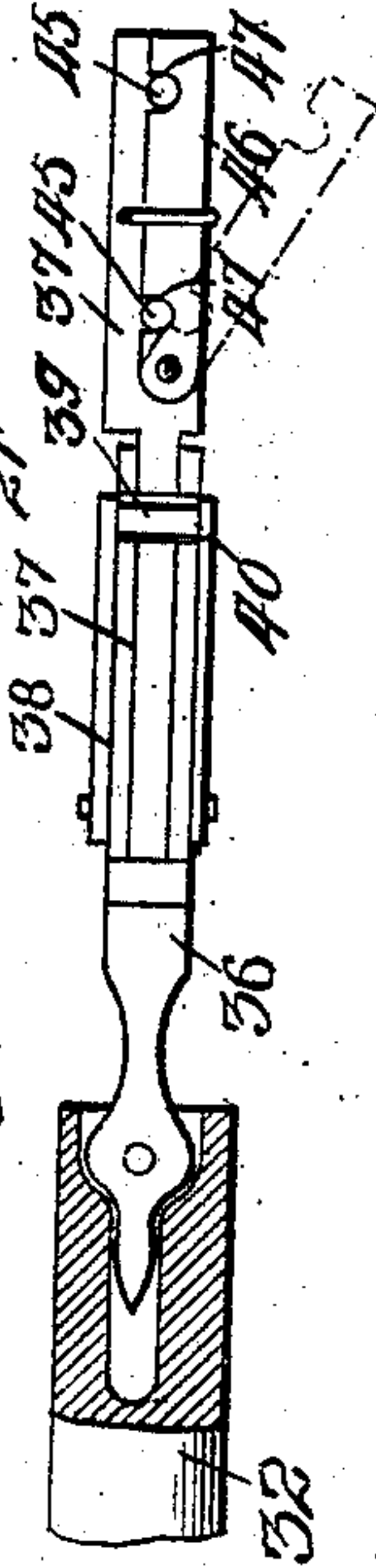


Fig. 7.



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UNITED STATES PATENT OFFICE.

STANLEY J. TOBIASZ, OF CHICAGO, ILLINOIS.

IRONING-MACHINE.

No. 850,608.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed August 22, 1905. Serial No. 275,330.

To all whom it may concern:

Be it known that I, STANLEY J. TOBIASZ, a subject of the Emperor of Austria, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Ironing-Machines, of which the following is a specification.

The object of the invention is to provide mechanism for moving a flat-iron by means of foot-power and at the same time enabling the operator to guide or manipulate the iron by the use of the hands during the ironing operation.

Another object of the invention is to provide rollers for the purpose of pressing clothes or similar fabrics which may likewise be actuated by the foot-power of the operator, and the operation of the flat-iron and rollers may be carried on either simultaneously or independently, as may be desired.

The invention consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of the device, showing the housing partly broken away to reveal the interior mechanism; Fig. 2, a similar view showing more in detail certain features of the invention; Fig. 3, a detail showing the treadle or foot operative mechanism; Fig. 4, a face view of the foot-treadle; Fig. 5, a top or plan view of the supporting-table with the housing removed, and Fig. 6 a sectional detail showing the principal gear-wheels and other operating mechanism; Fig. 7, a plan view of the iron-holding bracket; Fig. 8, a view, partly in section, of the locking mechanism for the ironing-table; and Fig. 9 an enlarged detail showing the iron and method of securing the same to the actuating mechanism.

The device as a whole comprises a stand 1, to one end of which is hinged an ironing-table 2 by means of a hinge 3, which arrangement permits the ironing-table to be raised and lowered, as occasion may require, for the purpose of inserting in place a trouser-leg, coat-sleeve, or similar portion of a garment.

The ironing mechanism is actuated by means of a foot-treadle 4, provided with journals 5 and an arm 6, to which is pivoted a pitman 7, which actuates a crank 8, connected with a belt-wheel 9, which serves to actuate a driving-wheel 10, mounted upon a shaft 11, journaled to the standard or support 1 of the mechanism. On the standard or support are mounted front and rear side rails 12

and 13, respectively, and outer and inner end rails 14 and 15, respectively, forming an open framework for supporting the mechanism to be hereinafter described.

Slidably mounted within the front and rear rails 12 and 13 are a pair of rack-operating shafts 16 and 17, the ends of which are journaled into bars 18, which are located exterior of the front and rear rails and are rigidly connected together by means of rods 19, slidably mounted within the front and rear rails. The rods and bars form, in effect, a framework which is slidable with respect to the stationary framework and is movable by means of a handle 20. The movable frame is locked in adjusted position by means of a lever 21, pivoted to the stationary frame and provided with two notches 22 in its face, either of which is adapted to engage with a stud 23 for the purpose of holding the parts in adjusted position.

The shaft 16 has mounted thereon a pinion 24, having a toothed bevel-face 25 and, furthermore, having outwardly-extending teeth 26 around the periphery of its rear face and provided around a segment of its periphery with rack-teeth 27, as best shown in Figs. 2 and 5. The toothed bevel-face 25 is adapted to mesh with a bevel driving-pinion 28, mounted on the shaft 11, and the teeth 26 mesh with similar teeth 29 of a companion gear-wheel 30, mounted on the shaft 17. The gear-wheel 30 likewise is provided with rack-teeth 31, similar to the rack-teeth 27 on the wheel 24, and both sets of rack-teeth are adapted to engage a slidable rack 32 at alternate times in order to reciprocate the rack. The rack, as shown in Figs. 2, 5, and 6, is slidably mounted between guide-bars 33, which bridge the space between the rails 14 and 15 and are mounted at their ends upon inner and outer standards 34 and 35, respectively, which are rigidly secured to the inner and outer rails of the stationary framework. The rack has pivoted to its inner end an arm 36, which is recessed to provide a socket for holding a removable arm 37, which latter is held in place by means of a swinging bracket 38, pivoted to the arm 36 and provided with a cross-head 39, which is adapted to enter a recess 40 in the removable arm and prevent its displacement. The swinging bracket is provided with a hook 41, which is adapted to engage a pin 42, outwardly projecting from a plate 43, secured to the underside of the arm 36, which hook may be re-

leased when desired and the swinging bracket raised, thereby allowing a pivoted arm 37, carrying the iron 44, to be raised and lowered. The iron 44 is provided with vertically-extending studs or posts 45, which pass through holes in the pivoted arm 37 and are adapted when entered therethrough to be held in place by means of a finger 46, (best shown in Fig. 7,) which is pivoted on top of the arm 37 and is adapted to swing laterally, as shown in dotted lines. The pivoted finger is provided in its edge with notches 47, which are adapted to enter cooperating grooves 47^a in the upwardly-projecting ends of the studs or posts for the purpose of locking the posts against withdrawal.

The ironing-table 2 can be raised and lowered by means of a finger 48, mounted on a rock-shaft 49, having a crank-arm 50, to which is pivoted a reciprocating link 51, which latter is adapted to be moved by means of a lever 52, pivoted at the point 52^a, having a suitable lock 53 for holding it in adjusted position, as indicated in Fig. 8.

Slidably mounted within the upright 34 is an L-shaped bracket 54, having a long arm 55, a short arm 56, and a cross-arm 57, as best shown in Fig. 5. The slidable bracket serves as a mounting for a shaft 58, which carries a bevel-pinion 59, normally meshing with the driving bevel-pinion 28, and the shaft has further mounted thereon a sprocket-wheel 60, which carries a sprocket-chain 61, which serves to drive a sprocket-wheel 62, mounted on a shaft 63, which shaft carries a roller 64, which coöperates with a companion roller 65. Rotation is imparted to the upper roller 65 through the medium of a pair of gear-wheels 66, and the relative position of the upper roller with respect to the lower roller can be regulated by moving a journal-bracket 67, to which the roller is journaled, which adjustment is effected by means of adjusting-screws 68, which pass through the top of a housing 69.

When it is desirable to actuate both the flat-iron and the pressing-rollers, the movable framework carrying the shafts 16 and 17 is thrown and locked in the position shown in Fig. 5, which brings the bevel-face of the gear-wheel 24 into mesh with the driving gear-wheel 28, and the slidable L-shaped bracket is pushed inward to bring the bevel-pinion 59 likewise into engagement with the driving gear-wheel, and with the parts in these positions the revolution of the driving gear-wheel will be imparted, through the bevel-pinion 59, sprocket-wheel 60, and sprocket-chain 61, to the gear-wheels which actuate the rollers. At the same time a continuous rotation will be imparted to the gear-wheel 24, which in turn meshes with the gear-wheel 30, so that the gear-wheels 24 and 30 will have a reverse rotation with respect to one another. As the gear-wheels 24 and 30 are

continuously revolved the reversely-rotating rack-teeth 27 and 31 will be alternately brought into mesh with the teeth of the rack-bar 32, thereby reciprocating the rack-bar back and forth and moving the iron over the surface of the ironing-board. When it is desirable to actuate either the iron or the rollers without actuating the two simultaneously, the parts can be adjusted to disengage either the gear-wheel 24 or the gear-wheel 59 from the driving gear-wheel 28, so that either of the mechanisms can be operated independently of the other.

The iron can be positioned and held in place by passing the studs or posts 45 up through the removable arm 37 and moving the swinging finger 46 to engage the projecting ends of the posts and prevent the displacement of the iron. The removable arm and iron connected therewith can be taken out by throwing back the swinging bracket 38 and removing the arm 37 from the pivoted arm 36.

What I regard as new, and desire to secure by Letters Patent, is—

1. In a device of the class described, the combination of a reciprocating rack-bar, a flat-iron secured to and movable with the rack-bar, gear-wheels meshing with each other and adapted to rotate continuously in opposite directions, each of the gear-wheels being provided with rack-teeth around a portion of its periphery, the two sets of rack-teeth being adapted to alternately engage the teeth of the rack-bar, a driving gear-wheel meshing with one of the rack-actuating gear-wheels, and a slidable frame within which the rack-actuating gear-wheels are journaled for engaging and disengaging one of said gear-wheels from the driving gear-wheel, substantially as described.

2. In a device of the class described, the combination of a stationary frame consisting of side rails and end rails, a movable frame slidably mounted with respect to the stationary frame, two rack-actuating shafts carried by the movable frame, intermeshing gear-wheels mounted on the shafts, one of said gear-wheels being provided with a toothed bevel-face and each of the gear-wheels being provided around a portion of its periphery with rack-teeth, a rack-bar slidably mounted on the stationary frame and adapted to be alternately engaged by the teeth of the intermeshing gear-wheels, a bevel driving gear-wheel adapted to engage the bevel-faced gear-wheel, an ironing-table connected with the stationary frame, and a flat-iron connected with the rack-bar and movable thereby, substantially as described.

3. In a device of the class described, the combination of a reciprocating member, an arm pivoted to the reciprocating member and provided at one end with a socket, a removable arm adapted to have its inner end

entered into the socket, a swinging bracket
pivoted to the pivot-arm and provided with
a cross-head adapted to embrace the remov-
able arm and hold it within its socket, a flat-
5 iron provided with upwardly-extending studs
or posts passing through the removable arm,
and a swinging finger pivoted to the remov-

able arm, and provided with notches on its
inner edge adapted to engage the projecting
studs or posts, substantially as described.

STANLEY J. TOBIASZ.

Witnesses:

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EPHRAIM BANNING, Jr.