

(No Model.)

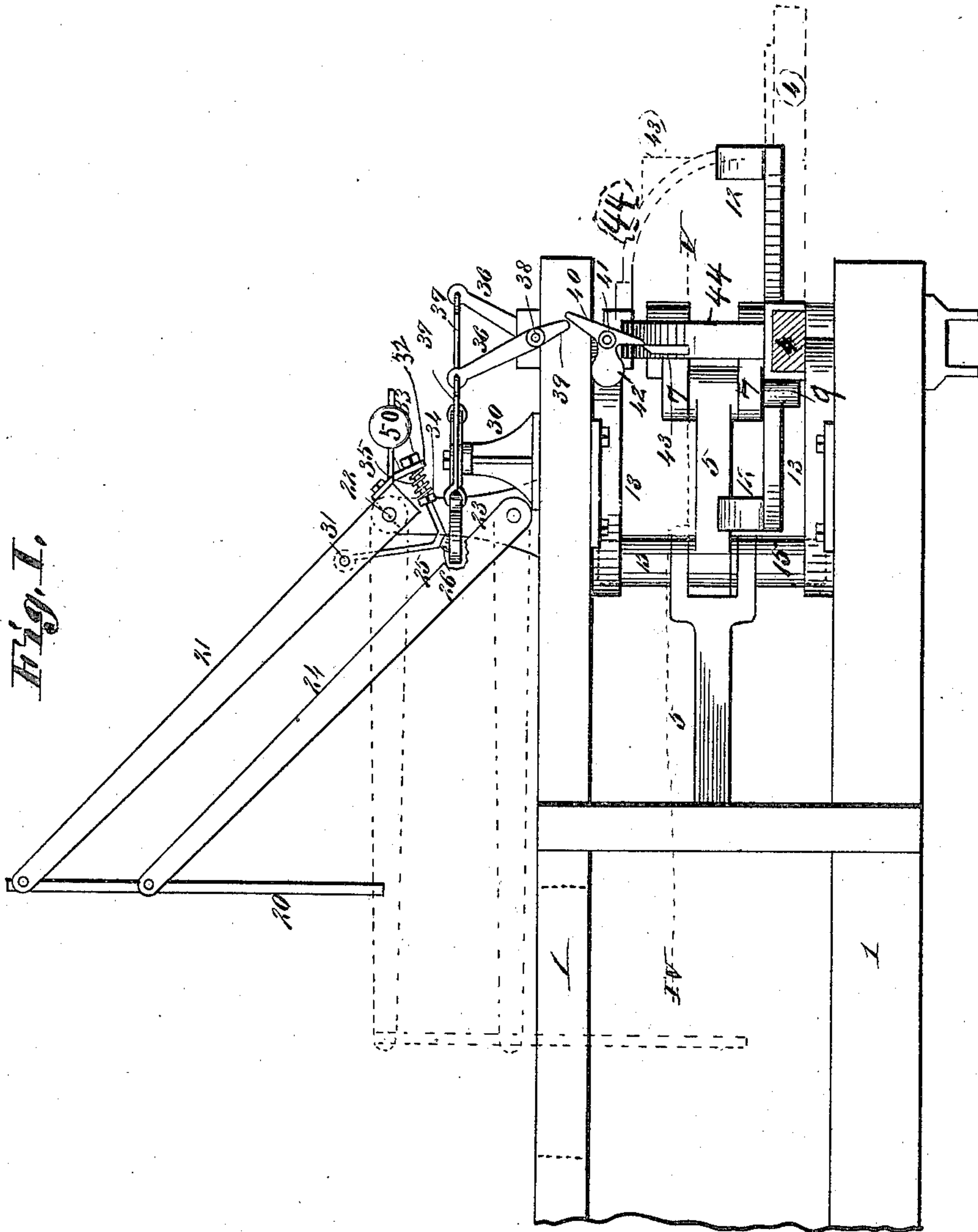
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C. E. WHITMAN.

BALING PRESS.

No. 369,573.

Patented Sept. 6, 1887.



Attest!
Charles Pickles,
E. Arthur.

Fig. II.

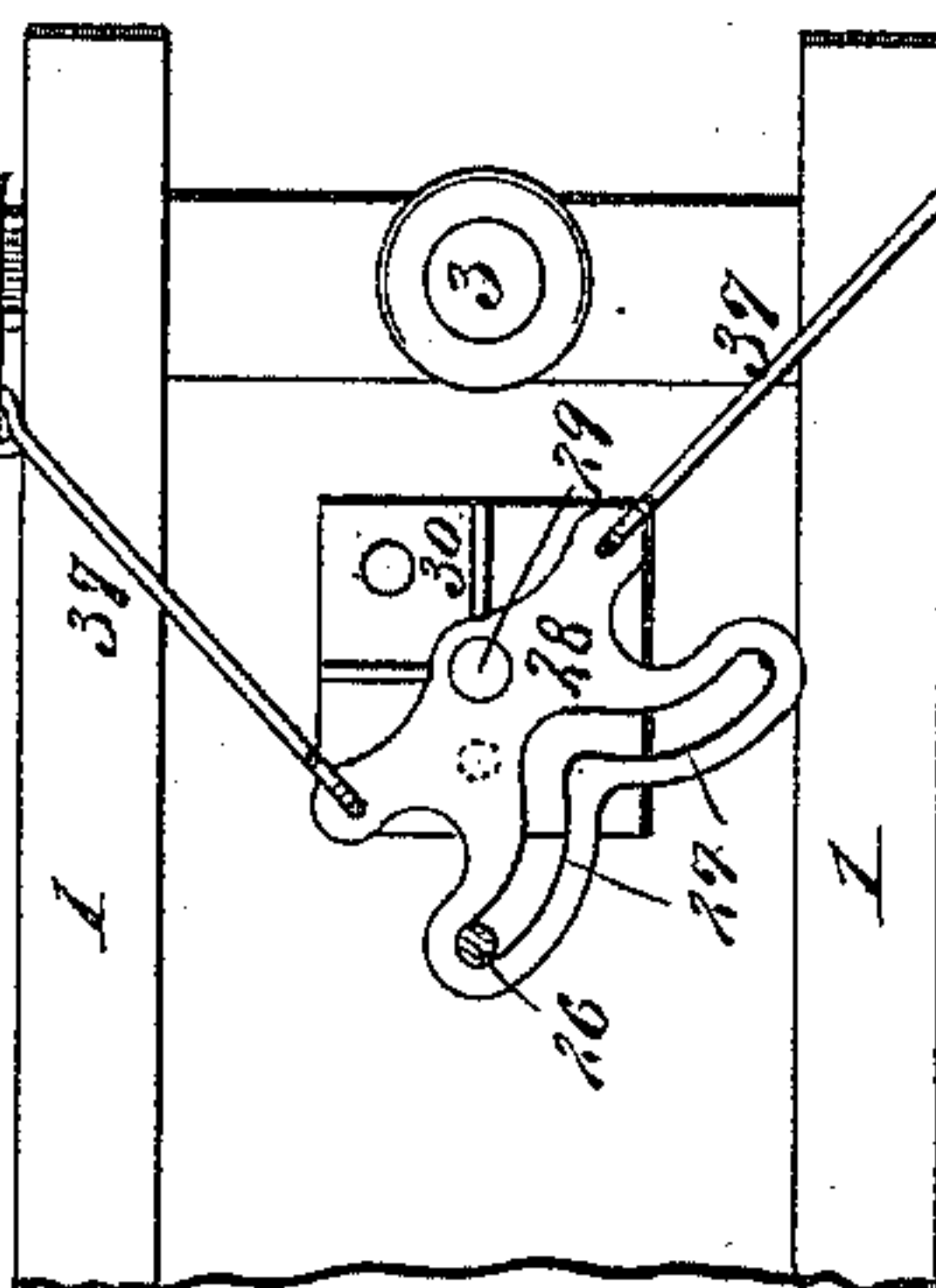
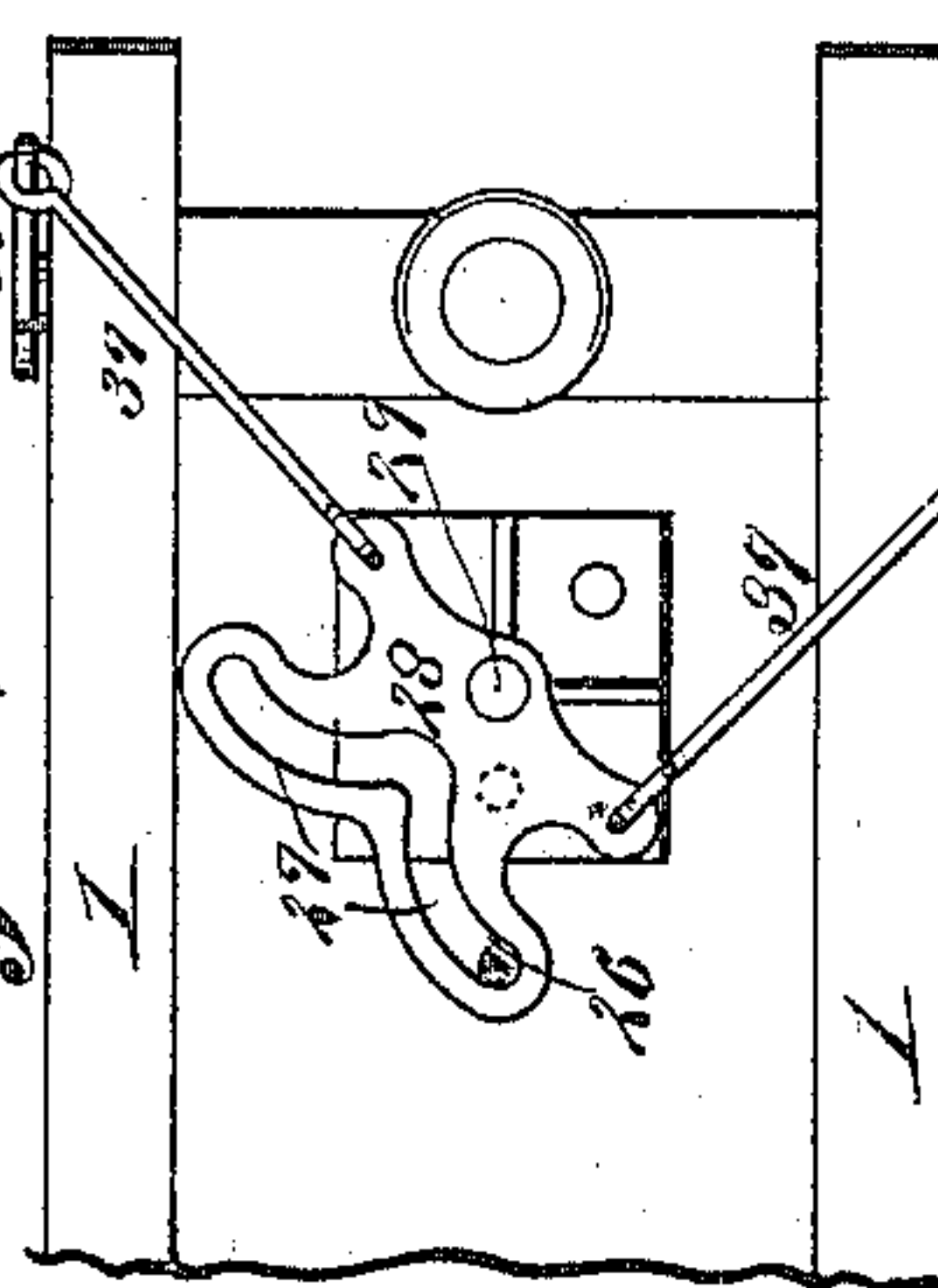


Fig. III.



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(No Model.)

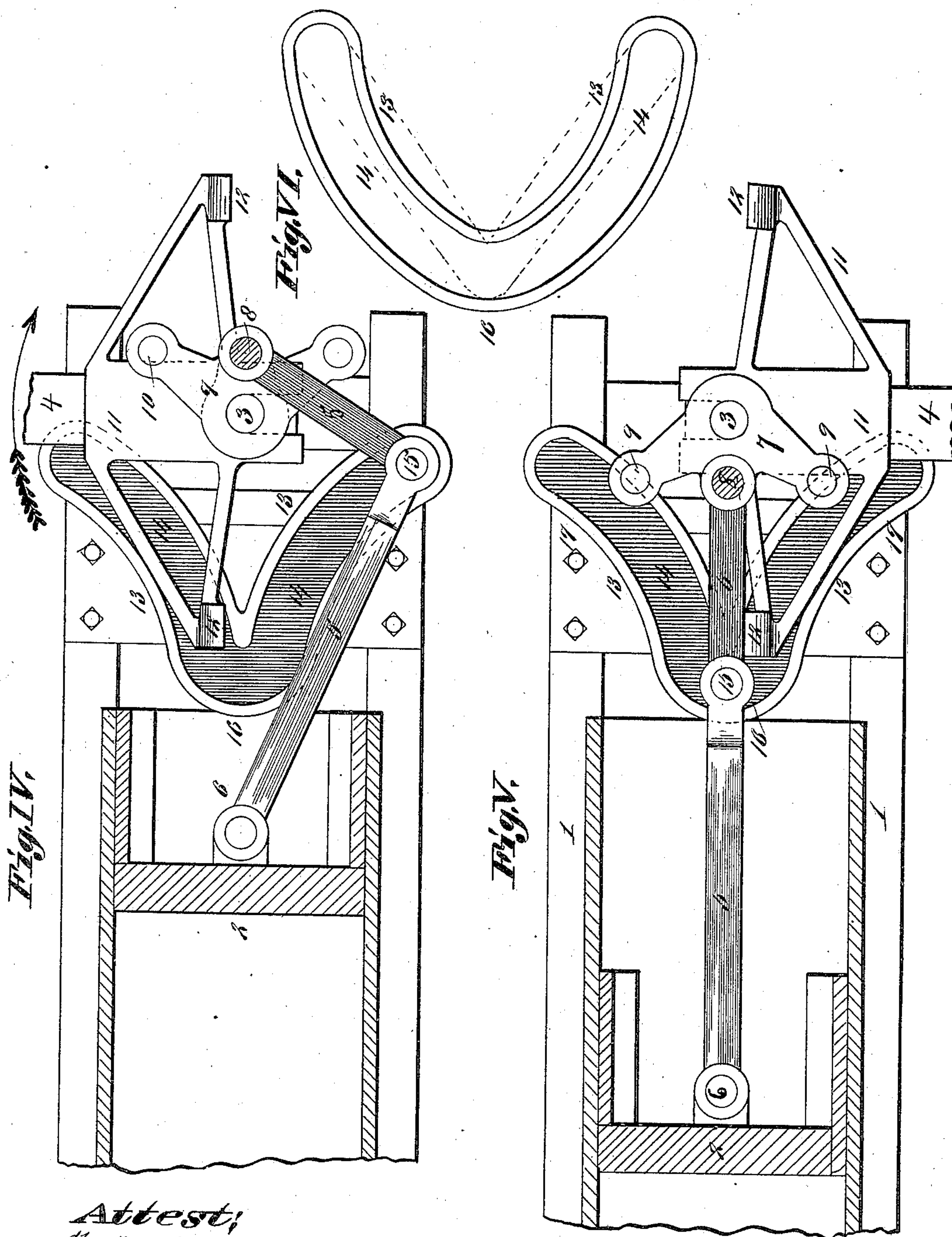
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No. 369,573.

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Fig. VII.

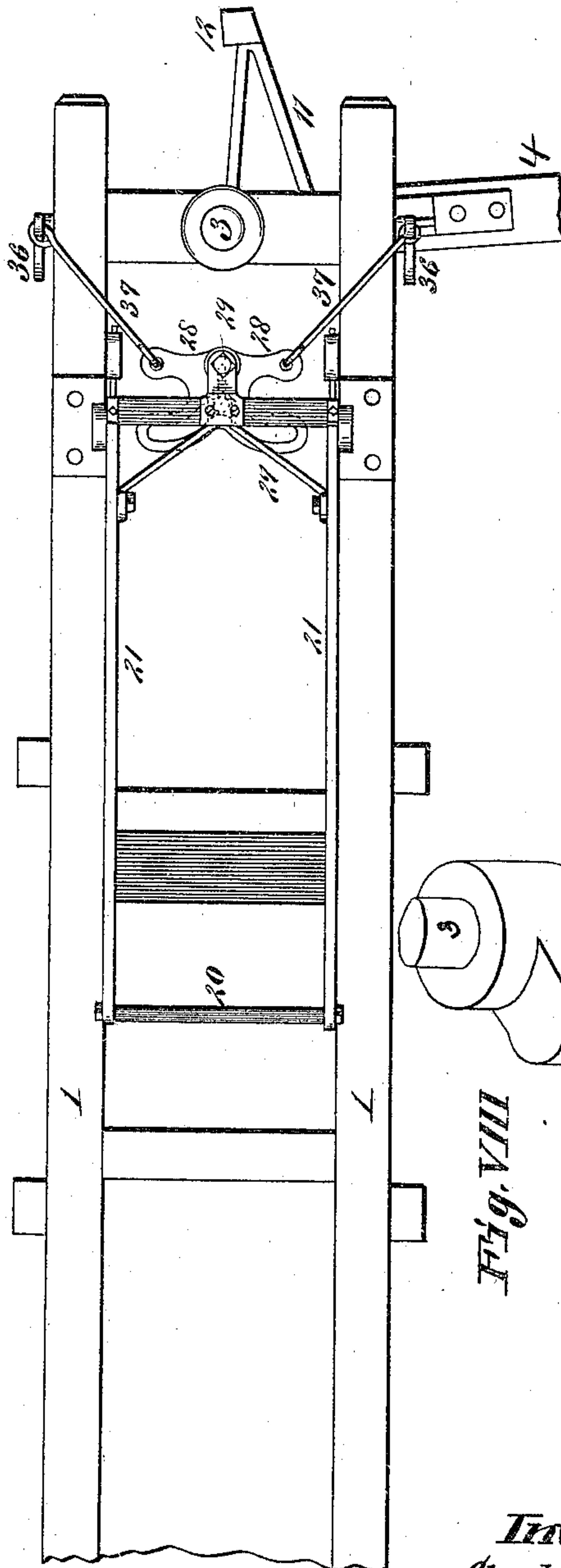
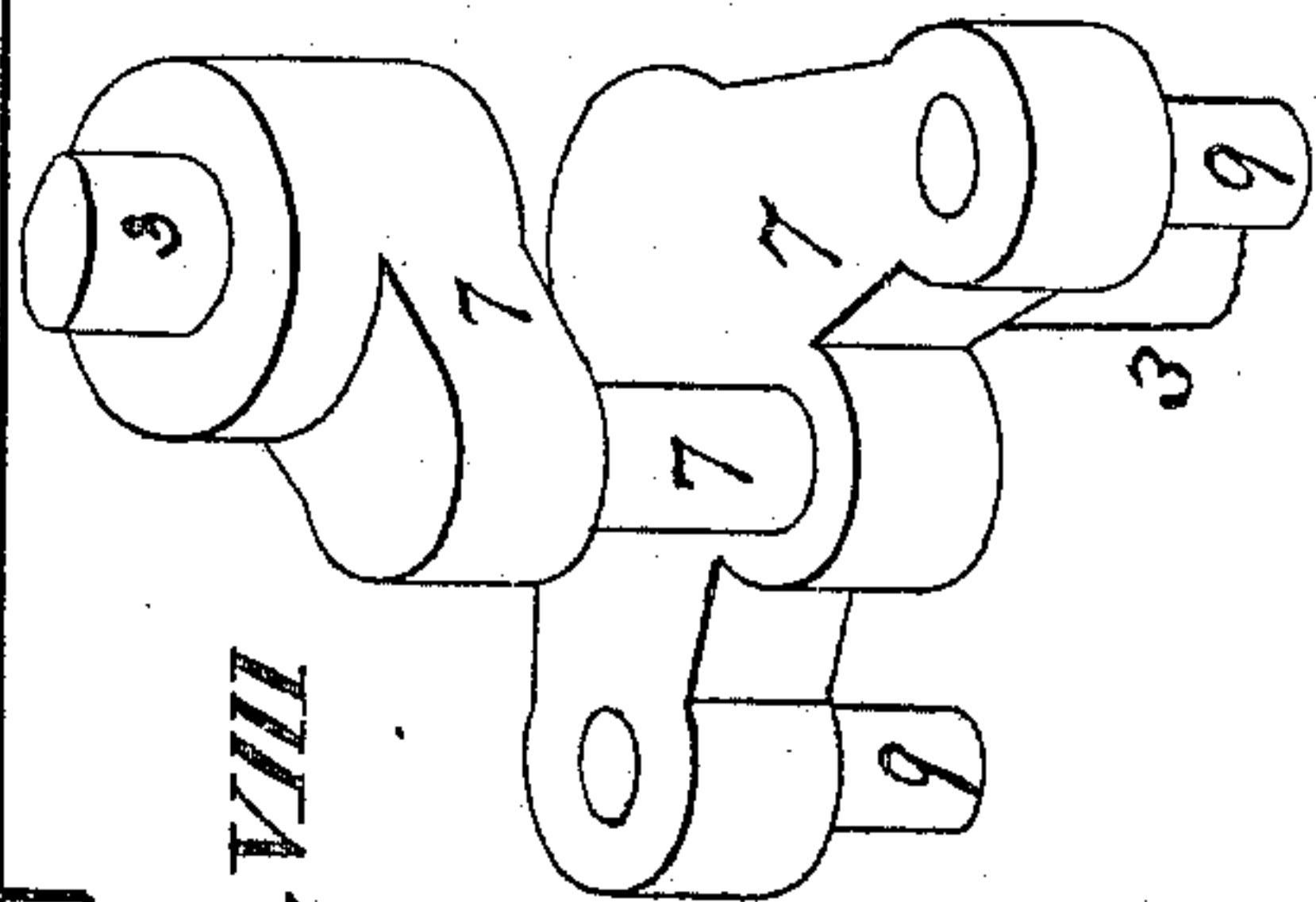


Fig. VIII.



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UNITED STATES PATENT OFFICE.

CHARLES E. WHITMAN, OF ST. LOUIS, MISSOURI.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 369,573, dated September 6, 1887.

Application filed May 3, 1887. Serial No. 236,989. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. WHITMAN, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Baling-Presses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure I is a side elevation showing part of a baling-press provided with my invention. Figs. II and III are detail top views with the packer removed, showing the mechanism for operating the packer in different positions. Fig. IV is a detail longitudinal section through the press, taken on line IV V, Fig. I, showing the mechanism for operating and accelerating the movement of the traverser. Fig. V is a similar view showing the parts in different positions. Fig. VI illustrates a slight modification of the cam-guides. Fig. VII is a top view. Fig. VIII is a perspective view of the crank and its shaft.

My invention relates to certain improvements in baling-presses; and my invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, 1 represents part of the frame of the press; 2, the traverser; 3, the shafts, to which a sweep or other power, 4, is secured; 5, a jointed pitman connected at one end to the traverser at 6, and connected at the other end, at 8, to a crank, 7, on the shafts 3, the crank 7 having projections 9, against which the sweep comes, as shown at 10, for the purpose of turning the crank and through it operating the pitman.

11 represents the head of the sweep, which is provided with projections 12 for coming against the pitman, as shown in Fig. V, for the purpose of shoving it past the center, as also shown in the application filed by me January 15, 1887, No. 224,448.

In the parts thus far described there is no invention, *per se*, claimed in this application.

13 represents a cam secured, preferably, to the frame of the machine, and which has a groove, 14, to receive a pin or roller, 15, that connects the two parts of the pitman. The shape of the cam is substantially that shown in Figs. IV and V, having a central portion,

16, and wings 17. As the traverser recedes the pin or roller 15, remaining in the groove 14 of the cam, carries the joint of the pitman a considerable distance to one side of a straight line between the points 6 and 8, thus accelerating the movement of the traverser, the object being in this application to increase the movement of the traverser, as in the application filed by me December 30, 1886, No. 223,024.

I do not wish to confine myself to the exact shape of the cam shown in Figs. IV and V, as the same may be changed, and I have shown a somewhat different form in Fig. VI, where the wings are not curved outwardly, as in the other figures. By dotted lines in Fig. VI, I have shown a V-shaped cam. I may use either one or two of these cams. In Fig. I, I have shown two—an upper and a lower one.

As a means for packing the hay into the baling-chamber at each operation of the sweep, I provide a plate or board, 20, connected to levers 21, pivoted at 22 on a fulcrum, 23, and which may have counter-balances 50. To prevent the plate from swinging out of a vertical line, I also connect it to the standards by means of arms or links 24. There are two of the levers 21, as shown in Fig. VII. This packer is operated by means of a strap, 25, provided with a friction-roller, 26, fitting in a cam groove or slot, 27, of a cam, 28, pivoted at 29 on a standard, 30, secured to the frame of the machine. This strap 25 is connected at 31 to the lever 21 at one end, and at the other end is connected directly to the lever or to a plate, 32, by means of nuts 33 and 34, having a spring, 35, between the nut 34 and the plate 32, to allow a yielding of the parts in case a larger charge of material should be in the baling-chamber than usual. The plate 28 is operated to move the packer by being connected to levers 36 by means of rods 37, pivoted at 38 to the frame of the machine, and having lower extensions, 39, against which bear arms 40, pivoted at 41 to the frame and provided with counter-balances 42. The arms 40 are operated to move the levers 36, and through the levers the plates 28, by means of a projection, 43, on a bow, 44, on the sweep-head. As the sweep is moved, this projection comes against these arms, as shown in Fig. I, and by moving

it operates the packer through the described connection.

I claim as my invention--

1. In a baling-press, in combination with the traverser and means for imparting movement to the traverser, a jointed pitman connecting the traverser to said means, cams, and a connection between the cams and pitman, whereby the latter is carried out of line for the purpose of accelerating the movement of the traverser, substantially as set forth.

2. In a baling-press, the combination of the traverser and means for imparting movement to the traverser, a jointed pitman forming a connection between the traverser and said means, a cam having flaring wings extending toward opposite sides of the press, and connection between the pitman and cam, whereby the former is carried out of line to accelerate the movement of the traverser, substantially as and for the purpose set forth.

3. In a baling-press, in combination with a traverser and means for imparting movement thereto, a jointed pitman connecting the traverser to said means, and a grooved cam having wings extending toward the opposite sides of the press, and a projection on the pitman fitting in the groove of the cam, whereby the pitman is carried out of line to accelerate the movement of the traverser, substantially as and for the purpose set forth.

4. In a baling-press, in combination with the traverser and means for imparting movement thereto, a jointed pitman forming a connection between the traverser and the means for imparting the movement, grooved cams having wings extending toward opposite sides of the press, and pins or projections on the pitman, fitting in the grooves of the cams, said cams being located above and below the pitman, respectively, whereby the pitman is carried out of line to accelerate the movement of the traverser, substantially as set forth.

5. In a baling-press, the combination of the traverser, swinging crank 7, jointed pitman connecting the crank to the traverser, sweep having lugs or projections 12 and engaging

the crank, cam 13, having wings extending toward the opposite sides of the press and having a groove, 14, and pin 15, fitting in the groove of the cam, substantially as and for the purpose set forth.

6. In a baling-press, in combination with a traverser and means for imparting movement thereto, packer 20 21 and means for operating the packer, consisting, essentially, of a slotted cam-plate, connection between the cam-plate and packer, levers 36, connected to the plate, and pivoted arms 40, engaging the levers and operated by the sweep, substantially as and for the purpose set forth.

7. In a baling-press, the combination of the traverser, means for operating the traverser, packer, horizontal cam-plate, connection between the packer and cam-plate, and connection between the cam-plate and the means for operating the traverser, substantially as set forth.

8. In a baling-press, in combination with a traverser and means for imparting movement thereto, a packer, 20 21, a pivoted plate, 28, having a slot, 27, connection 25 26 between the packer and plate, rods 37, levers 36, and projections 43 on the means for operating the traverser, substantially as and for the purpose set forth.

9. In a baling-press, the combination of the traverser, sweep-head, connection between the traverser and sweep-head, packer, lever 36, connection between the lever and packer, and projection 43, located on the sweep-head to operate said lever, as specified.

10. In a baling-press, in combination with the traverser and means for imparting movement thereto, the packer 20 21, strap 25, spring 35, slotted plates 28, rods 37, levers 36, pivoted arms 40, counter-balances 42 on the arms, and projections 43 on the means for operating the traverser, substantially as and for the purpose set forth.

CHAS. E. WHITMAN.

In presence of—

GEO. H. KNIGHT,
EDW. S. KNIGHT.