

(No Model.)

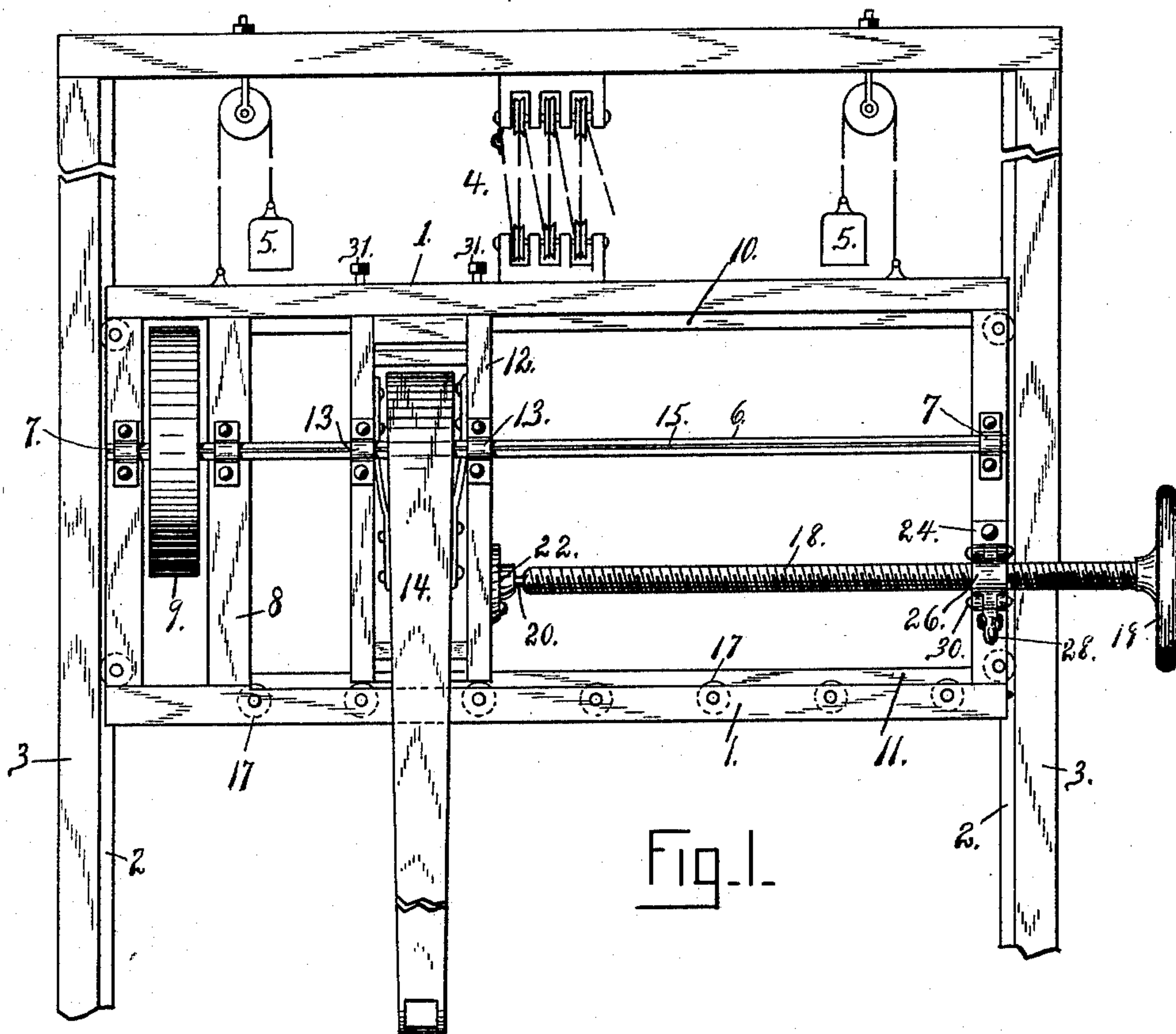
2 Sheets—Sheet 1.

J. H. FINLEY.

MEANS FOR OPERATING ELEVATOR LEGS.

No. 518,496.

Patented Apr. 17, 1894.



WITNESSES.

F. P. Kersten,
Geo. W. Wightman

INVENTOR.

James H. Finley

By *W. T. Miller*
ATTORNEY

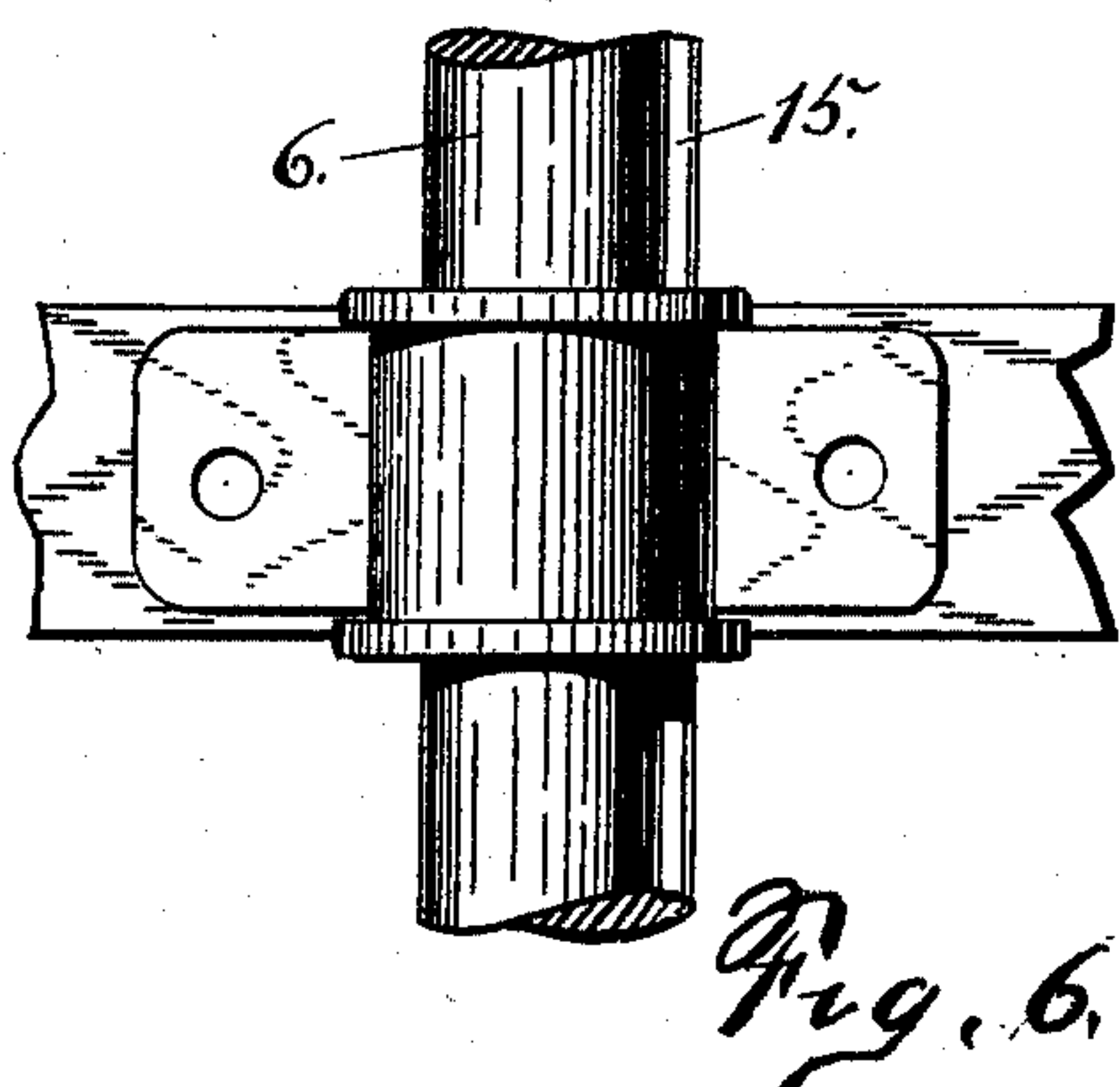
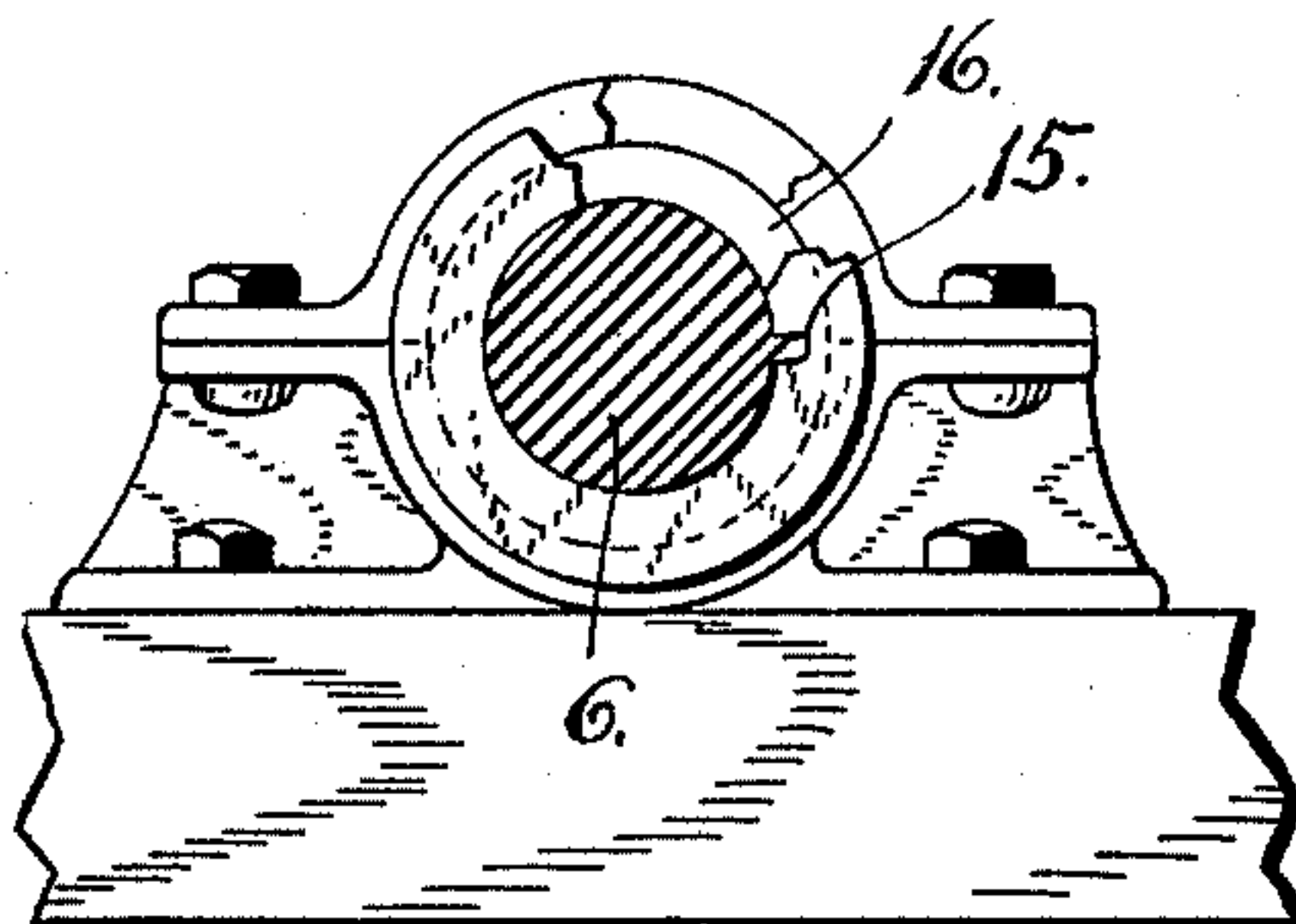
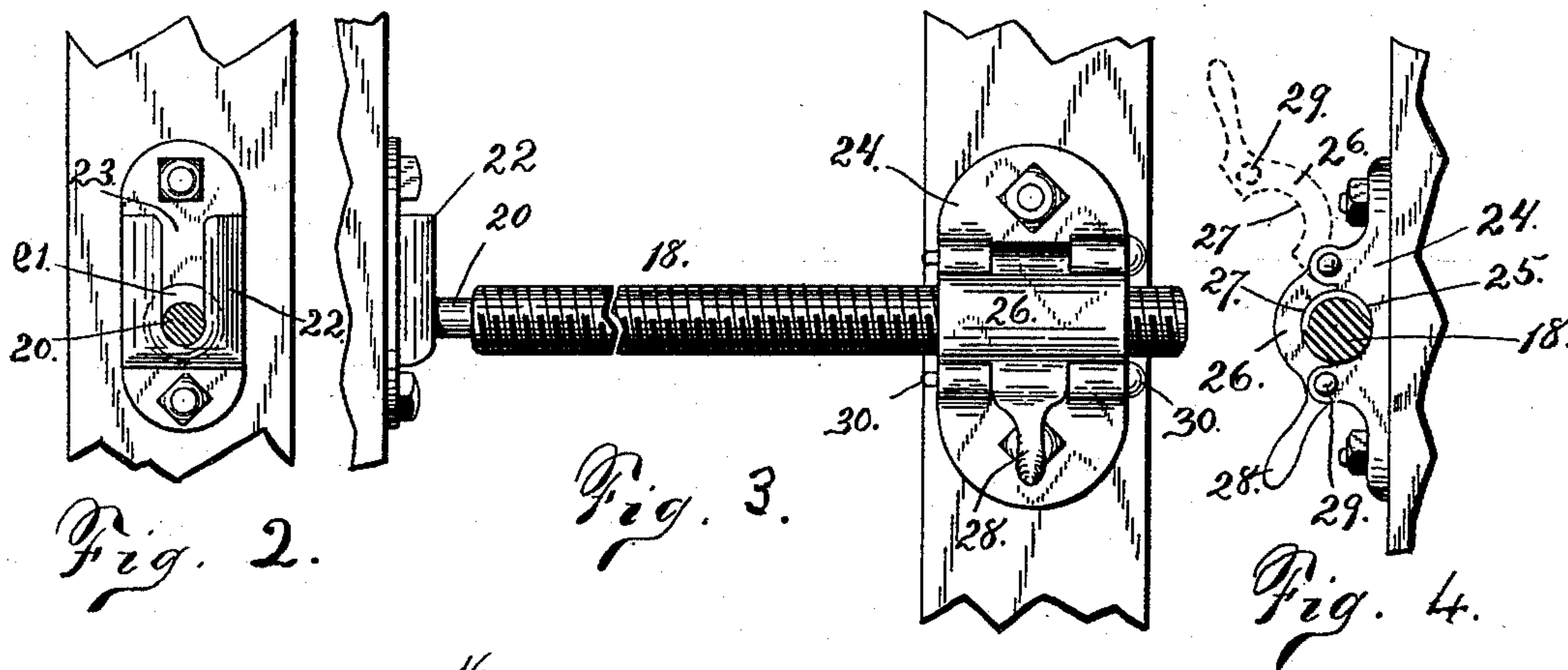
(No Model.)

2 Sheets—Sheet 2.

J. H. FINLEY.
MEANS FOR OPERATING ELEVATOR LEGS.

No. 518,496.

Patented Apr. 17, 1894.



Witnesses:

M. W. Hoddick
Chas. E. Bradshaw

Inventor
James H. Finley
By Miller & Hoddick.
Attorneys.

UNITED STATES PATENT OFFICE.

JAMES H. FINLEY, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF TO
GEORGE S. GATCHELL, OF SAME PLACE.

MEANS FOR OPERATING ELEVATOR-LEGS.

SPECIFICATION forming part of Letters Patent No. 518,496, dated April 17, 1894.

Application filed October 11, 1893. Serial No. 487,817. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. FINLEY, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Means for Operating Elevator-Legs; and I 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, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

My invention relates to elevator legs employed in removing grain from vessels. An elevator is generally supplied with two of these legs adapted to be raised or lowered in the hatches at each end of the vessel. The distance between these hatches is not uniform in vessels, and it is often impossible to operate both legs at the same time owing to this variation.

The object of my invention therefore is to provide the vertically adjustable frame now employed in carrying the upper end of the elevator-leg, with improved means by which it is adjusted in a horizontal direction for the purpose desired; and to that end it consists in the combination with the outer frame carrying the operative shafting, of an auxiliary frame adjustably seated within the outer frame and carrying the upper end of the elevator-leg, and improved means for moving the auxiliary frame horizontally within the outer frame as will be substantially herein-after described.

I will now proceed to minutely describe the manner in which I have carried out my invention and then claim what I believe to be novel.

In the drawings, Figure 1 is an elevation of my improved construction as applied to an elevator-leg. Figs. 2, 3, 4, 5, and 6 are enlarged detached details of Fig. 1.

Referring to the drawings, 1 is the outer frame (see Fig. 1) which is movable vertically in the ways 2 2 of the permanent frame-work 3 located in the upper part of the front of the elevator building. This frame 1 is raised or lowered by the system of ropes and pulleys 4,

and 5 5 are counter weights attached to the top of frame 1 on either side to assist in its manipulation.

6 is a shaft, its end resting in bearings 7 7 in the sides of movable frame 1. Between the left side of the frame 1 and intermediate brace 8 is the pulley 9 mounted upon the shaft 6 and operated by a belt (not shown) to revolve the shaft.

Within the frame 1 and mounted in the upper and lower ways 10 and 11 is the auxiliary frame 12 to which the shaft 6 is secured in the bearings 13, 13. Upon this shaft 6 is mounted the upper end of the elevator leg 14 of usual construction having within it the endless bucket carrier (not shown). The feather or rib 15 upon the shaft 6 which keys the pulley 9 and the pulley (not shown) within the elevator leg to the shaft, rests in a groove in the sleeve 16 surrounding the shaft 6 and revolving in the bearings 13 see Fig. 5. The auxiliary frame 12 is adapted to travel horizontally within the outer frame 1, its lower side riding upon the friction wheels 17. To move this frame 12 in order to adjust the position of the elevator leg with relation to the hatch I have provided means as follows:

18 is a screw-threaded rod (see Figs. 1, 3 and 4) its outer end being provided with a hand-wheel 19 for turning the same, and its inner end 20, of smaller diameter, has the end annular flange 21 (see Fig. 2) which rests loosely in the socket 22 with the vertical slot 23 open at the top for the insertion and removal of the annular flange 21. Upon the right side of the outer frame 1 and just below the bearing 7 I have arranged a bearing for the screw-threaded rod 18, said bearing consisting of the inner portion 24 bolted to the frame 1 and having the semi-circular screw-threaded groove 25 (see Fig. 4), and the outer portion 26 (having the semi-circular screw-threaded groove 27) hinged at its top to the portion 24 and having its lower end provided with the handle 28 and orifice 29 (shown in dotted lines in Fig. 5) for the reception of a pin 30 which locks it in position over the screw-threaded rod 18. When the rod 18 is in operative position as shown, by turning the hand wheel 19, the rod is turned in its screw-threaded socket, thereby causing it to move

in the direction of its length and with it the auxiliary frame 12, which can thus be adjusted horizontally as desired to fix the proper position of the elevator leg carried thereby.
5 If it becomes necessary to move the outer frame past a floor or other object against which the projecting rod 18 and its wheel 19 might strike, the hinged portion 26 of the bearing is released and thrown up, when the
10 rod can be raised out of engagement with its bearing and the socket 22 upon the frame 12 until the obstruction is passed and its further use required. When the auxiliary frame 12 is shifted to its proper position it is se-
15 cured in such position by one or more of the tightening bolts 31.

I claim—

1. An apparatus for operating elevator legs comprising an outer frame having guide-
20 ways, an inner frame seated in said ways and carrying the leg, an operating shaft mounted in said outer frame and passing through the upper part of the elevator leg and through the inner frame, a driving pulley on one end
25 of said shaft, means for vertically adjusting said outer and inner frames, and means for laterally adjusting the inner frame and the leg carried thereby.

2. Means for operating an elevator-leg comprising a stationary frame work, an outer
30 frame adapted to move on guides in said stationary frame, an inner frame slidable on ways on the last named frame and carrying the leg, a drive-shaft mounted in the outer frame, passing through the upper portion of
35 the leg, and adapted to drive the conveyer in the leg, and means connected with one side of the inner frame for adjusting said frame laterally.

3. Means for operating an elevator-leg comprising an outer frame, an inner frame in
40 which is mounted the leg, means for vertically adjusting the said frames and the leg carried thereby, a slotted socket mounted on one side of the inner frame, a screw-threaded bearing
45 having a hinged portion and mounted on the outer frame, and a screw-threaded rod having a flanged end seated in said socket and its outer portion in the screw-threaded bearing.

In testimony whereof I have signed my
50 name to this specification in the presence of two subscribing witnesses.

JAMES H. FINLEY.

Witnesses:

W. T. MILLER,
O. E. HODDICK.