2 Sheets--Sheet 1.

M. PHILLIPS.
Excavator.

No. 161,270. Patented March 23, 1875.

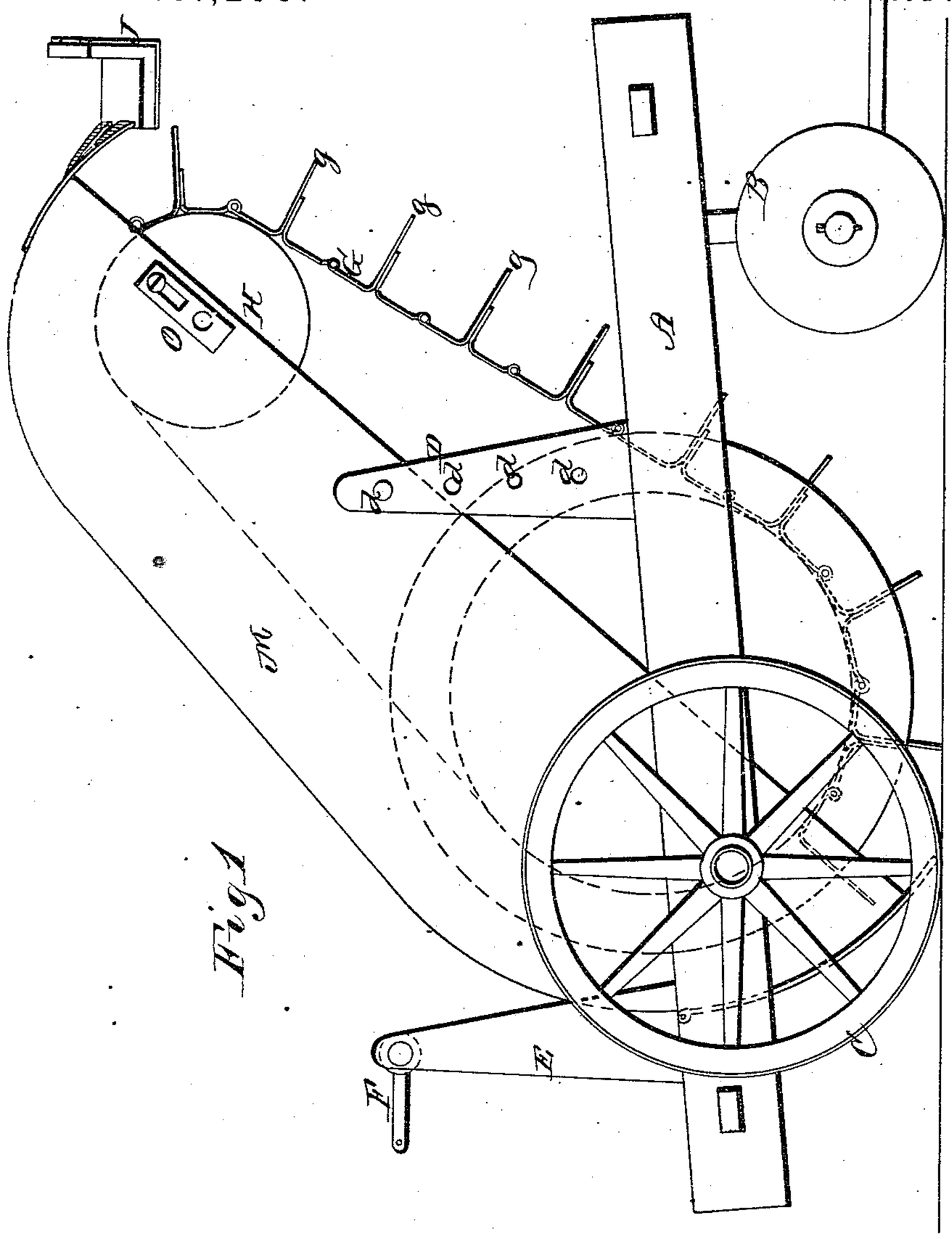

Fig. 1.

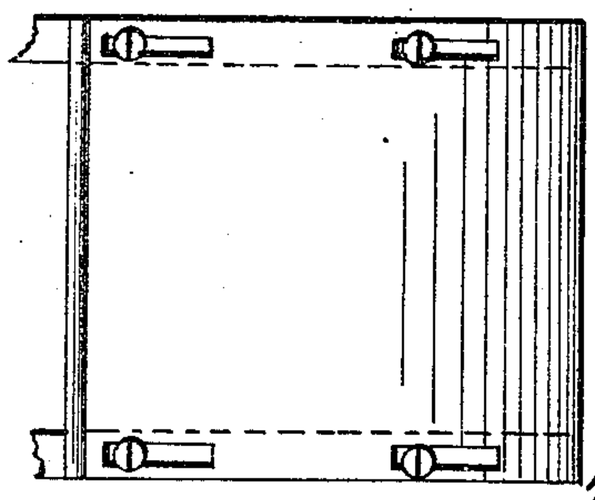

Fig. 2.

WITNESSES

Franck L. Durand

C. L. Emerson.

INVENTOR

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THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

2 Sheets--Sheet 2.

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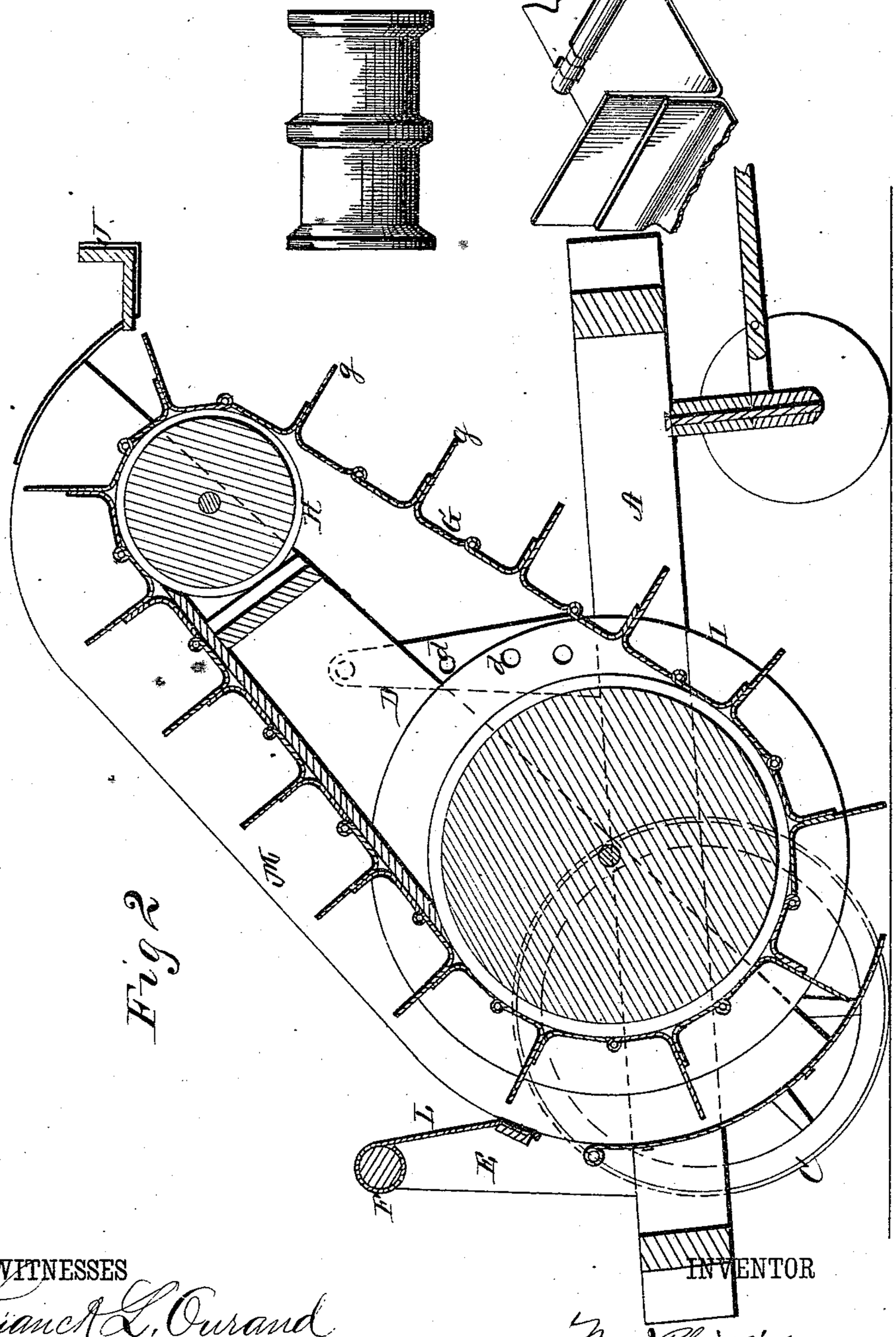

Fig 2.

WITNESSES

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UNITED STATES PATENT OFFICE.

MOREAU PHILLIPS, OF SPRINGFIELD, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO HORACE A. MORGAN, OF SAME PLACE.

IMPROVEMENT IN EXCAVATORS.

Specification forming part of Letters Patent No. **161,270**, dated March 23, 1875; application filed September 5, 1874.

To all whom it may concern:

Be it known that I, MOREAU PHILLIPS, of Springfield, in the county of Sangamon and in the State of Illinois, have invented certain new and useful Improvements in Dirt-Elevator; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a dirt-elevator, the peculiarities of which will be hereinafter set forth.

In the accompanying drawings, making part of this specification, Figure 1 represents a side view of my elevator, and Fig. 2 a longitudinal section.

In the figures, A represents a rectangular frame made of wood, and in a substantial and strong manner. The forward portion of this frame is supported and carried by a two-wheeled truck, B, and the rear portion is carried by the wheels C C. Erected upon the frame A, are two standards, (on each side,) E and D. The forward standards D D act as supports for the dirt-carrying frame, while the rear standards carry a windlass which is intended, with a cord or chain, to regulate the height and angle of said dirt-frame. M represents the dirt-carrying frame, which consists of two side-boards, which are placed a suitable distance apart to admit of the dirt-wheels to lie and work between them. This frame is pivoted to the standards D D, and said standards are provided with a series of holes, *d d*, by means of which said frame may be raised or lowered, generally toward the earth. Between the two side-boards are placed two wheels, I and H, each having axles which have their bearings in said side-boards. Around these two wheels pass an endless-chain bucket-belt, G. This belt consists of a series of metallic plates hinged together and provided with flanges or buckets *g g*, as seen, for carrying dirt. The wheel I is formed as seen in Fig. 1, with flanges, to keep the belt in place. The shaft of wheel H passes through slots in the side-boards, and fits snugly in metallic bearing-slides *o o*, on each side. These slides adjust in such a manner as to tighten to belt when necessary. The standard E supports the windlass F, and said windlass is connected to the dirt-frame by means of the cord L. This cord and windlass regulate the inclination of the frame, and its dip as to the earth. J represents a dirt-spout, which receives dirt from the buckets and empties it to one side of the machine.

In using this machine it is drawn along over the earth that has already been loosened by a plow or otherwise, and the buckets dip sufficiently into the earth for each bucket to take a portion and carry it upward. When it reaches the trough J, the buckets by their inclination as they turn over, empty said earth in the trough and it then passes off to the side of the machine. The dip being regulated by the windlass, the inclination of dirt-frame by the holes in the standard, and the belt by means of the slides *o o*, and the whole carried upon the wheeled frame, I make a machine which is easily adjusted, regulated, and governed in its general operation.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In combination with the frame A, having standards E, with windlass F, and perforated standards D, the pivoted dirt-carrying apparatus H I G, adjusted at its rear end by the windlass F, and at its forward end upon the perforated standards D, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of August, 1874.

MOREAU PHILLIPS.

Witnesses:
M. J. PHILLIPS,
A. S. MORGAN.