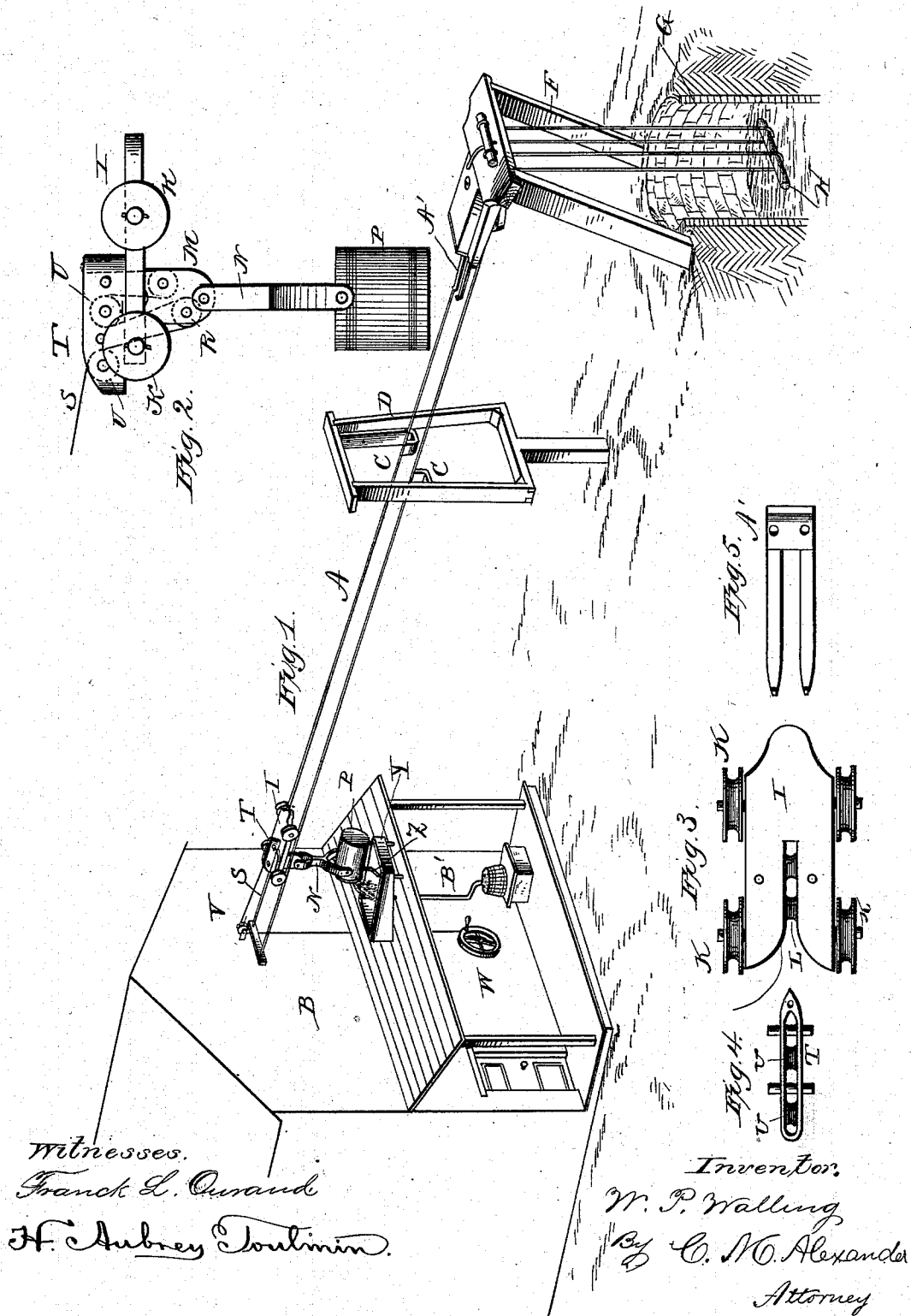


(Model.)

W. P. WALLING.
MINERAL AND WATER ELEVATOR.

No. 249,425.

Patented Nov. 8, 1881.



UNITED STATES PATENT OFFICE.

WILLIAM P. WALLING, OF ALBANY, WISCONSIN.

MINERAL AND WATER ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 249,425, dated November 8, 1881.

Application filed June 2, 1881. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM P. WALLING, of Albany, in the county of Green, and in the State of Wisconsin, have invented certain new and useful Improvements in Mineral and Water Elevators; and I 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.

This invention has for its objects to provide an improved means for raising water from wells, elevating minerals from mines, and other like purposes. These objects I attain by the apparatus and devices illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view, showing my device complete. Fig. 2 represents a detailed view of the elevating-carriage and bucket; Fig. 3, a top view of the elevating-carriage; Fig. 4, a detached view of a movable tackle-block, over the pulleys of which the elevating-rope passes; and Fig. 5, a detached view of the tackle-block support, by which it is held in position as the carriage and bucket are lowered or elevated perpendicularly.

The letter A indicates an inclined wire track, secured at one end to the wall B of a house, or to any other suitable support. The said track is supported at any desirable points by means of grooved brackets C, secured in a frame, D, mounted on a post, E, which is set in the ground or otherwise secured in an upright position.

The letter F indicates an inclined frame extending over the well G or the vertical shaft of a mine. The said frame is provided with grooved brackets similar to the brackets C, over which the wire track passes, the said track being carried vertically down into the well or shaft, where it is passed around the transverse bar H, and then vertically upward, the extremities being secured to the top of the frame F in such manner as to form a vertical guide for the traveling elevator-carriage.

The letter I indicates the elevator-carriage, which is mounted on grooved wheels K, adapted to traverse the wire track before mentioned. The said carriage is provided with an open slot, L, the end of which is beveled toward

each side to permit the elevating-rope, which passes into said slot on its way to the elevating-pulleys, to adapt itself to curves in the track. The said carriage is provided with a downward extension, M, to which is secured the bail N of the elevator-bucket P. The said carriage is provided with pulleys R, over which the elevating-rope S passes.

The letter T indicates a tackle-block, which is provided with pulleys U, over which the elevating-rope passes, as clearly indicated in Fig. 2, one end of said rope being secured to the block, and the other passing to a pulley, V, secured to the wall or support A, and thence downward to a windlass, W.

The letter Y indicates an elevated tank, which is provided with a wire frame, Z, adapted to engage the mouth of the bucket and dump it, as indicated in Fig. 1 of the drawings.

The letter A' indicates a forked support, which is secured to the forward part of the frame F, and serves to hold the tackle-block in proper position when the bucket is being lowered or elevated in the vertical guides in the well or shaft. The carriage, as it passes from the vertical guides on its upward course to the inclined track, engages the tackle-block and carries it with it for the remaining portion of its trip. On its downward course the forked support engages and retains the tackle-block while the carriage and bucket are being lowered into the well. From the tank extends a pipe, B', to a suitable receptacle for the water.

The tank Y may be hinged to its forward supports in such manner that it will be tilted when the bucket is drawn up, so as to dump the contents, if desired.

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

1. The inclined wire track secured at one end to a suitable support passing over suitable brackets, and extending vertically downward and then upward in a well or shaft, forming guides for a traveling carriage, the wheels of which operate between the guides or double track, substantially as specified.

2. The traveling carriage slotted as described, and provided with pulleys over which the ele-

vating-rope passes, and the bucket secured to said carriage, substantially as and for the purposes specified.

- 5 3. The traveling carriage having an open slot the sides of which are beveled outwardly at their forward ends to permit the rope to work properly as the carriage passes curves in the track, substantially as specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 17th day of 10 May, 1881.

WM. P. WALLING.

Witnesses:

C. J. MORGAN,
D. H. MORGAN.