

W. MULLEN.
Hod-Elevators.

No. 156,742.

Patented Nov. 10, 1874.

Fig: 1.

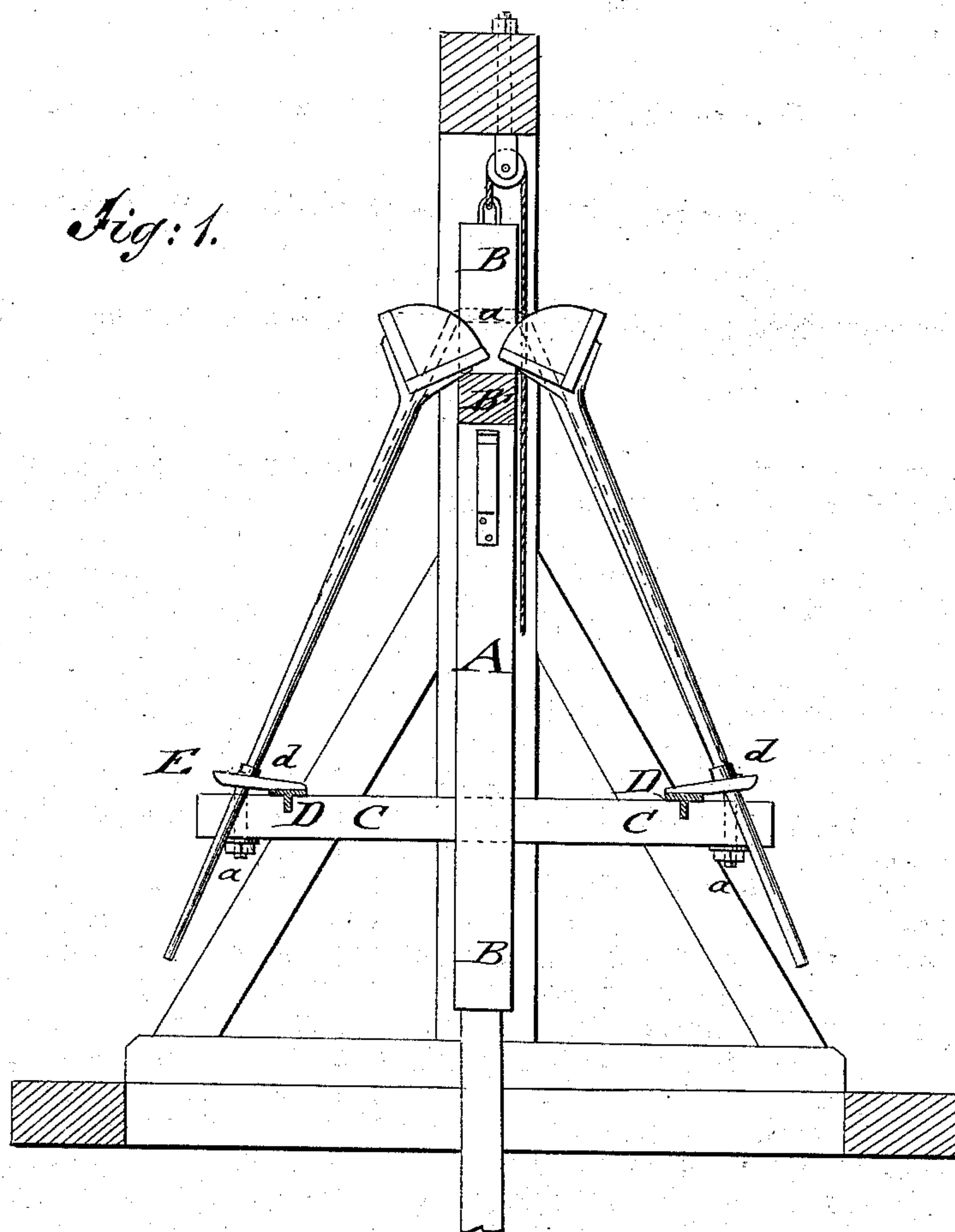


Fig: 2.

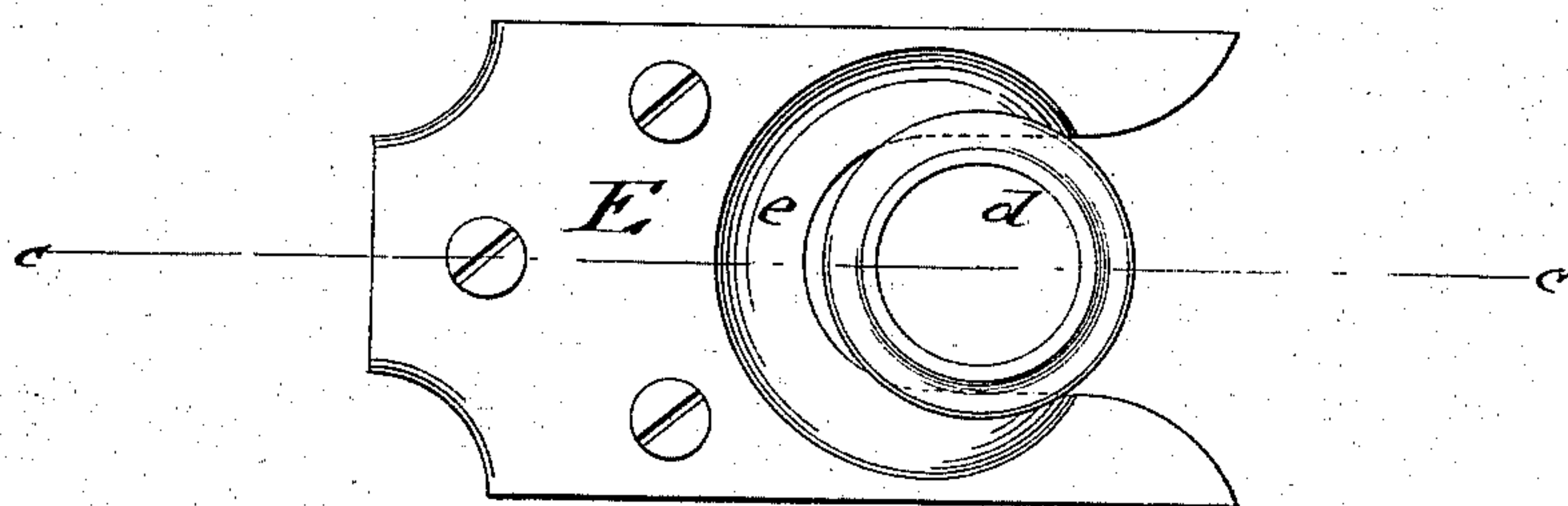
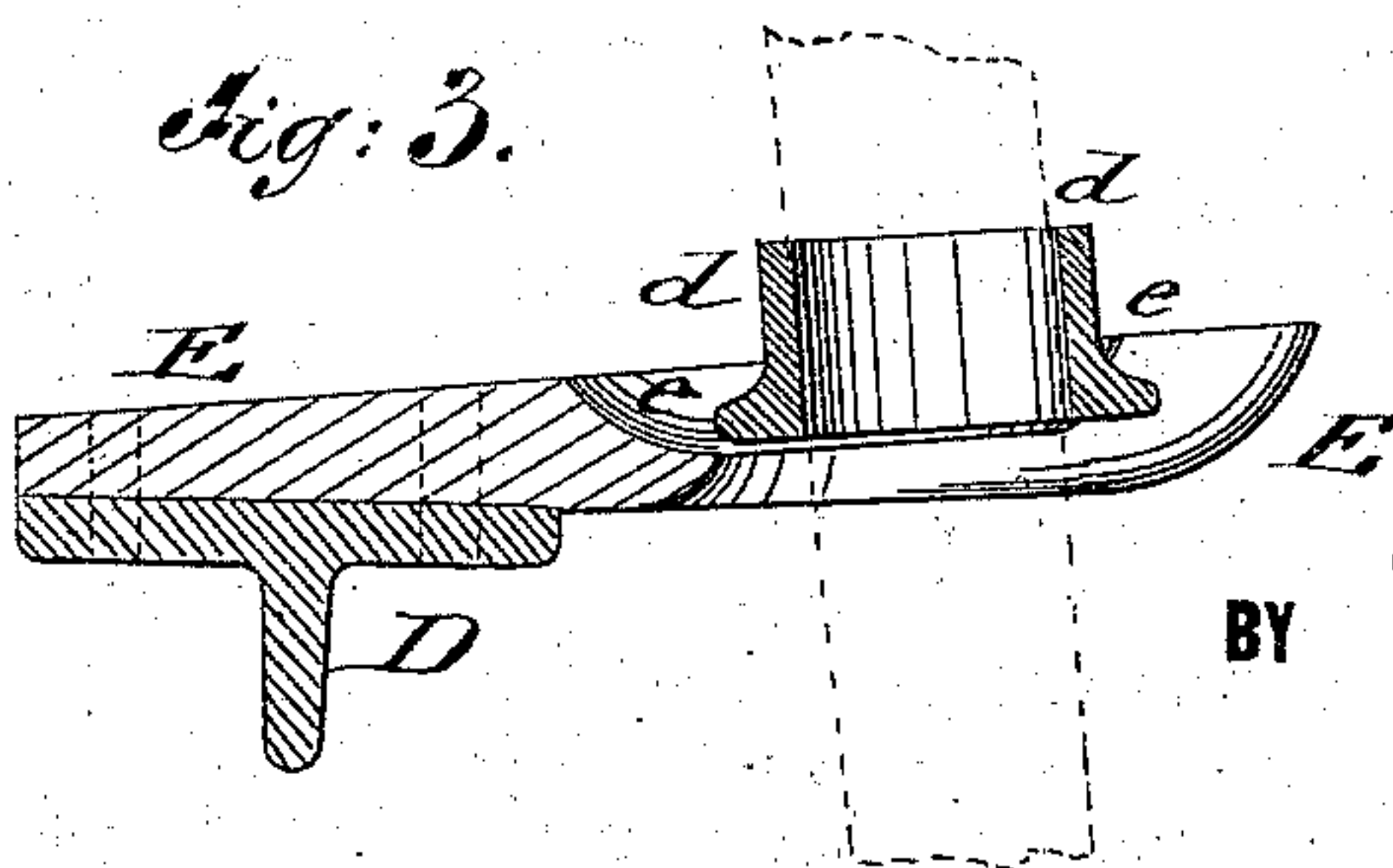


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM MULLEN, OF NEW YORK, N. Y.

IMPROVEMENT IN HOD-ELEVATORS.

Specification forming part of Letters Patent No. **156,742**, dated November 10, 1874; application filed October 24, 1874.

To all whom it may concern:

Be it known that I, WILLIAM MULLEN, of the city, county, and State of New York, have invented a new and Improved Hod-Elevator, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical transverse section of my improved hod-elevator, and Figs. 2 and 3 detail top view and vertical longitudinal section on line *c c*, Fig. 2, of the hod-shank supporting fork-piece.

Similar letters of reference indicate corresponding parts.

My invention relates to improvements in hod-elevators, by which the workmen may be enabled to take off and replace the full and empty hods with great facility and dispatch without any danger, and without the use of traps or similar protective devices.

The invention consists of a sliding elevator-frame with top cross-bar and lateral side arms, supporting at suitable height above the lower end of the sliding side bars longitudinal connecting-bars with forked and inclined hod-supporting pieces or carriers, which are suitably concaved along the forked or recessed part for bearing the collars or shoulders attached to the hod-shanks, and admitting the ready swinging of the hods away from or on to the elevator-frame.

In the drawing, A represents my improved elevator-frame, which slides by suitable sleeves along T guide-rails or in other approved manner, being raised or lowered in the customary manner by an engine of suitable power. The sliding uprights or side beams B are connected by a braced top bar, B', and provided at some distance above their lower ends with side arms C, which are attached crosswise thereto, and braced by additional rods *a*. The side arms C serve to support symmetrically, at both sides of the side beams B, the connecting-bars D, which rest midway on a lateral bearing-piece, parallel to the supporting-arms C, and connected to the top piece by a vertical brace-rod, so that thus the whole elevator-frame is firmly and strongly connected. The connecting-bars D are provided with as many forked hod-carriers E as hods may be placed side-wise of each other across the width of the ele-

vator-frame, the forked pieces or carriers E being firmly screwed or otherwise attached thereto, and also inclined slightly in upward direction for the steadier support of the hods when placed in inclined position on the frame, so as to bear sidewise against the top piece and rest with the shanks, provided with the collars or shoulders *d* attached thereto in the carriers E. The collars *d* are attached at suitable distance from the lower end of the shanks, so that the lower parts of the same extend below the connecting-bars D, which are arranged at such height above the lower ends of the side beams that when the latter rest on the floor none of the hod-shanks come in contact therewith, while the upper parts of the shanks above the collars *d* are all of equal length, so that the hods themselves bear in symmetrical positions against the top piece. Thus, hods with shanks of different lengths may be placed with equal facility on the frame, each workman using his own hod with longer or shorter shank, corresponding to his height. This forms a main advantage not found in other elevators, in which all the hods have shanks of equal length without regard to the convenience of the workmen.

Each forked hod-carrier E has a concave recess or groove, *e*, around the interior part of the slot, the concavity being more indented near the outer part of the prongs than at the rear part, for the purpose of forming a secure seat for the rounded flange of collar *d*, and also for producing, on the swinging over of the hod by the workman, the almost instant sliding back of the collar toward the less-curved rear part of the recess, so that the collar changes quickly and easily from its former inward inclination to one in outward direction.

The taking off of the brick and mortar hods are, by this pivotal motion of the collar, greatly facilitated, so that hardly any exertion is needed to carry the hod from the inwardly-inclined into the outwardly-inclined position, obviating thereby the stooping over or stepping forward of the workman, and admitting the raising of the hod out of the forked carrier to the shoulder with comparative ease and without the least danger, as the workman has always a secure foot-hold without requiring trap-doors or other protective

devices. The empty hods are returned in similar manner, furnishing thus a hod-elevator of great simplicity and increased convenience and safety to the workmen.

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

1. A hod-elevator, constructed of side beams, top piece, side-extending arms, and lateral arm-connecting bars with forked hod-supporting pieces or carriers, arranged at such height above the lower end of the side beams that hod-shanks of various lengths may be supported therein, substantially as and for the purpose set forth.

2. The combination of the top piece of the

elevator-frame and the forked and outwardly-inclined carriers with hods having shanks provided with shoulders or collars at equal distance from the head part of the hod, substantially as specified.

3. The forked hod-supporting piece or carrier, having concaved interior groove or recess with steeper curved indentation near the front part thereof than at the rear part, for facilitating the taking off of the hods, substantially as described.

WILLIAM MULLEN.

Witnesses:

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