

J. MINNICH.

Distributing Apparatus for Derricks.

No. 152,149.

Patented June 16, 1874.

Fig. 1

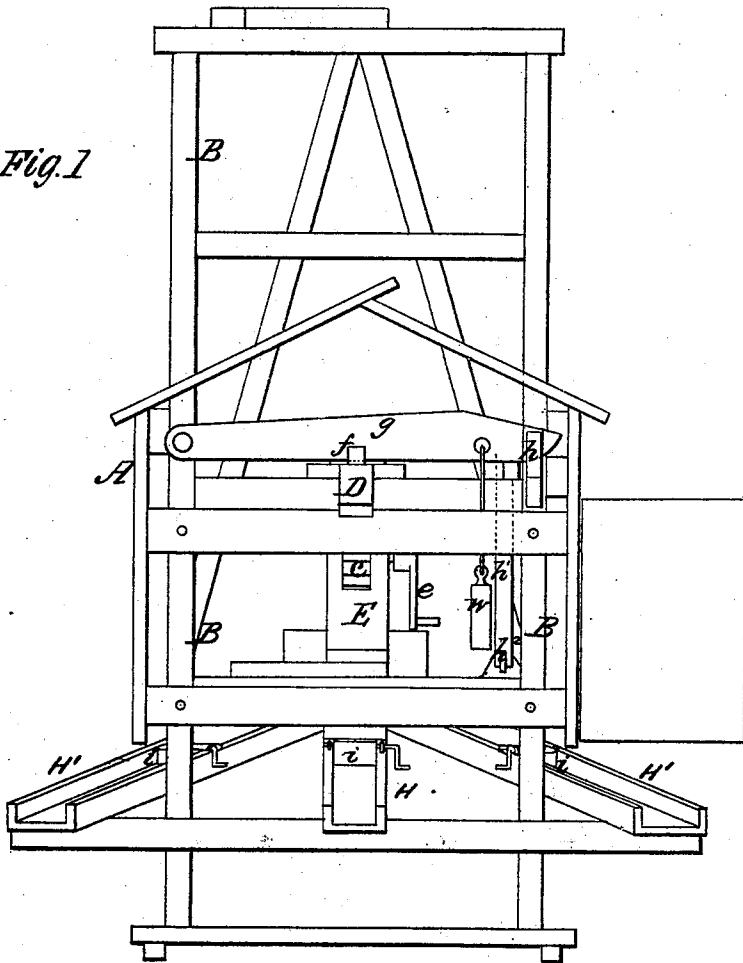
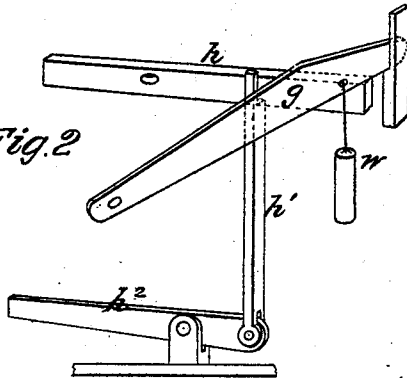


Fig. 2



WITNESSES  
*E. H. Bates*  
*George C. Upham.*

By

INVENTOR  
*John Minnich*  
*Chipman & Osborn & Co*

ATTORNEYS.

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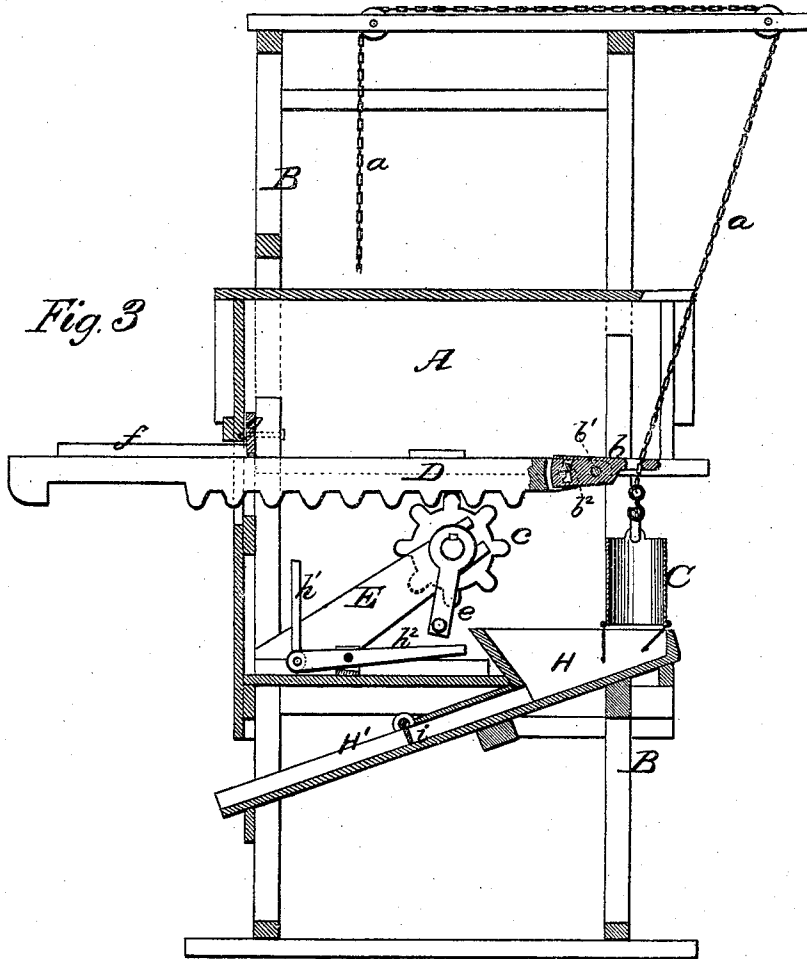


Fig. 3

WITNESSES  
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# UNITED STATES PATENT OFFICE

JOHN MINNICH, OF LEBANON, PENNSYLVANIA.

## IMPROVEMENT IN DISTRIBUTING APPARATUS FOR DERRICKS.

Specification forming part of Letters Patent No. 152,149, dated June 16, 1874; application filed March 28, 1874.

*To all whom it may concern:*

Be it known that I, JOHN MINNICH, of Lebanon, in the county of Lebanon and State of Pennsylvania, have invented a new and valuable Improvement in Distributing Apparatus for Derricks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front view of my elevator. Fig. 2 is a detail view of the same, and Fig. 3 is a sectional view.

This invention has relation to derricks for elevating coal from vessels, and for other purposes; and it consists mainly in the construction of a rack-bar having a pivoted guiding-eye, and receiving through it the rope of the elevator-bucket, as will be hereinafter more fully described.

In the drawings hereunto annexed, A designates a house, which is constructed upon a suitable frame-work, B, on the upper end of which is a derrick-beam, B', that overhangs an opening through one end of the house for the admission of the elevator-bucket C. The elevating-rope *a* passes over pulleys applied to the derrick-bar, and is carried down through an eye, *b*, which is pivoted to the outer end of a rack-bar, D. This rope *a* has attached to it the elevating-bucket C. The rack-bar is longitudinally movable between guides, which are slightly inclined, and the teeth of this rack-bar engage with the teeth of a pinion spur-wheel, *c*, the shaft of which has its bearings in a beam, E, and carries on one end a hand-crank, *e*. On top of the bar D is a rib, *f*, with which a pivoted catch-arm, *g*, is intended to engage. This arm *g* crosses the bar D, and is held down upon it by means of a weight, *w*. Beneath the catch-arm *g* is a tripping-lever, *h*, which is connected by a push-

rod, *h*<sup>1</sup>, to a treadle, *h*<sup>2</sup>, arranged on the floor of the house A alongside of the crank-arm *e*, where it will be convenient to a person having hold of this arm. H designates a hopper, which is constructed upon the floor of the house A at the front opening of this house, and from which radiate one or more spouts, H', for conducting off the coal or other substances in different directions. Each spout has a valve, *i*, applied in it, by means of which the flow of grain from it can be stopped at pleasure.

When the bucket C is filled and elevated to the proper height, the catch-arm *g* is raised and the bar D allowed to move back, carrying with it the bucket over the hopper H. The load is then discharged from the bucket into the hopper, after which the bar D is moved forward by turning the wheel *c*, so as to carry the bucket outside of the house to be lowered for another load. The bucket C is hung in such manner that when it is fully raised, and the bar D is released from its catch *g*, it (the bucket) will of itself swing over the hopper.

The eye-piece *b* is pivoted at *b*<sup>1</sup> to the front end of the bar D and allowed to vibrate freely, so that it will accommodate itself to the different positions of the rope *a* without cramping this rope or unduly wearing it. The movements of the eye-piece *b* are limited by a transverse pin, *b*<sup>2</sup>, which passes through a curved slot in said piece, as shown in Fig. 3.

What I claim as new, and desire to secure by Letters Patent, is—

The pivoted guiding-eye *b* on rack-bar D, arranged over a hopper, and receiving through it the rope of the elevator-bucket C, substantially as and for the purposes described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN MINNICH.

Witnesses:

BASSLER BOYER,  
ANTHONY S. EHP.