

JOSIAH BISHOP.

Improvement in Elevators.

No. 115,813.

Patented June 13, 1871.

Fig. 1

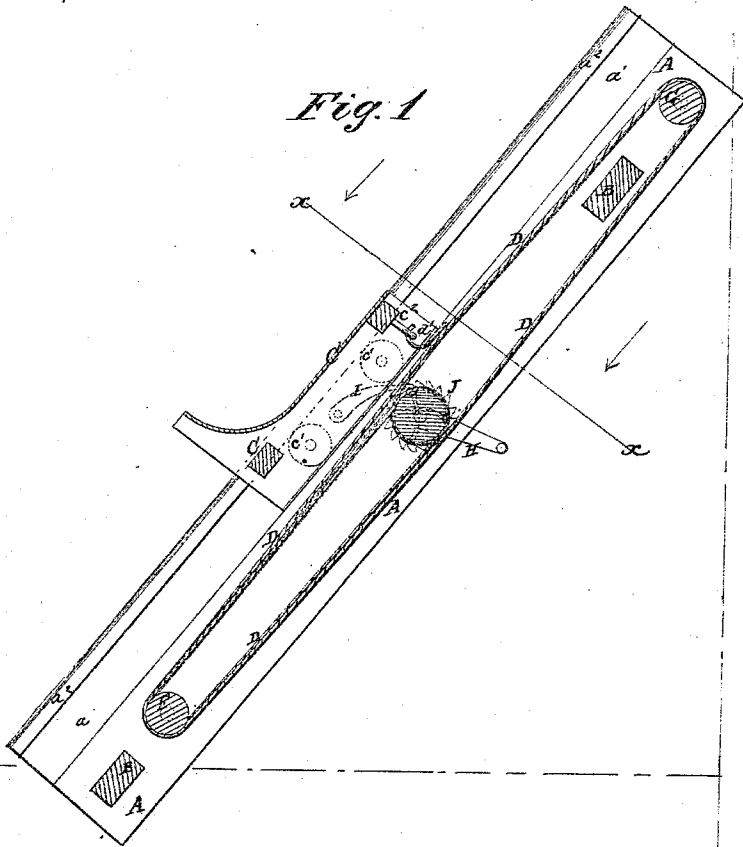
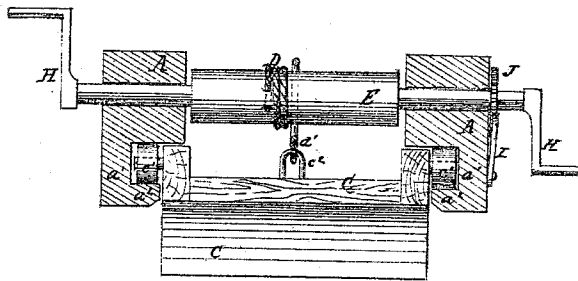


Fig. 2



Witnesses:
A. W. Magnusson
Wm. H. C. Smith.

Inventor:
J. Bishop.

PER

Attorneys.

UNITED STATES PATENT OFFICE.

JOSIAH BISHOP, OF AUSTIN, TEXAS.

IMPROVEMENT IN ELEVATORS.

Specification forming part of Letters Patent No. 115,813, dated June 13, 1871.

To all whom it may concern:

Be it known that I, JOSIAH BISHOP, of Austin, in the county of Travis and State of Texas, have invented a new and useful Improvement in Elevators; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a detail vertical section of my improved elevator. Fig. 2 is a detail cross-section of the same taken through the line $x x$, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved portable elevator for raising brick, mortar, &c., for building; for loading boxes, barrels, &c., upon wagons; and for various other purposes; and it consists in the construction and combination of the various parts of the elevator, as hereinafter more fully described. A are the side beams or bars of the elevator, which are connected and held in their proper relative positions by cross-bars B , and which should be made of such a length and strength as the place in which, and the purpose for which, the elevator is used may require. Upon the outer parts of the upper sides of the bars A are formed flanges a^1 , to keep the carriage in place upon the said bars while moving up and down. To the upper edges of the flanges a^1 may be attached caps or inwardly-projecting flanges a^2 , to keep the carriage in place upon the said ways or bars A ; but said caps will scarcely be necessary unless the elevator be set very steep. C is the carriage, the side bars of which rest upon the bars or ways A . If desired, small wheels c^1 may be pivoted to the sides of the body or frame of the carriage C , to roll along the bars or ways A . The form of the upper part of the body of the carriage C must depend upon the particular use to which the elevator is to be applied. The drawing shows a convenient form for raising

barrels and boxes into a wagon or other desired place. For raising mortar for building, the lower part of the upper side should be raised above the bars A $a^1 a^2$, so that the hand-barrows may stand level while being raised. To the under side of the upper end of the carriage C is attached a loop or link, c^2 , to hook upon a hook, d' , attached to the hoisting-rope D . One end of the rope D is attached to the shaft E , pivoted to the bars A . From the shaft E the rope D passes down to and around a roller, F , pivoted to the lower parts of the bars A , up to and around a roller, G , pivoted to the upper parts of the bars A , down to and around the lower end of the roller F , in the opposite direction from that in which it first passed around said roller, and up to the shaft E , to which its other end is attached. By this construction, as the shaft E is revolved, one end of the rope D will be wound upon and the other end unwound from the shaft E , raising or lowering the carriage C , according to the direction in which the shaft E is revolved. The shaft E may be revolved by hand-power, by cranks H attached to the journals of the said shaft, or to the ends of one or both of the rollers $F G$. By attaching a pulley to one of the journals of the shaft E , the elevator may be operated by steam or other power. The carriage is held at any desired point, and kept from running back by a pawl, I , pivoted to the bar A , and which takes hold of the teeth of a ratchet-wheel, J , attached to a journal of the said shaft E .

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

The construction and arrangement, with the endless carrier $D E F G d'$, of the frame A $a^1 a^2$, and the carriage C , having rollers c^1 and loops c^2 , for the purpose specified.

JOSIAH BISHOP.

Witnesses:

L. W. COLLINS,
W. R. T. THOMPSON.