G. A. DUPUIS.

Elevating Machines.

No. 140,485. Patented July 1, 1873.

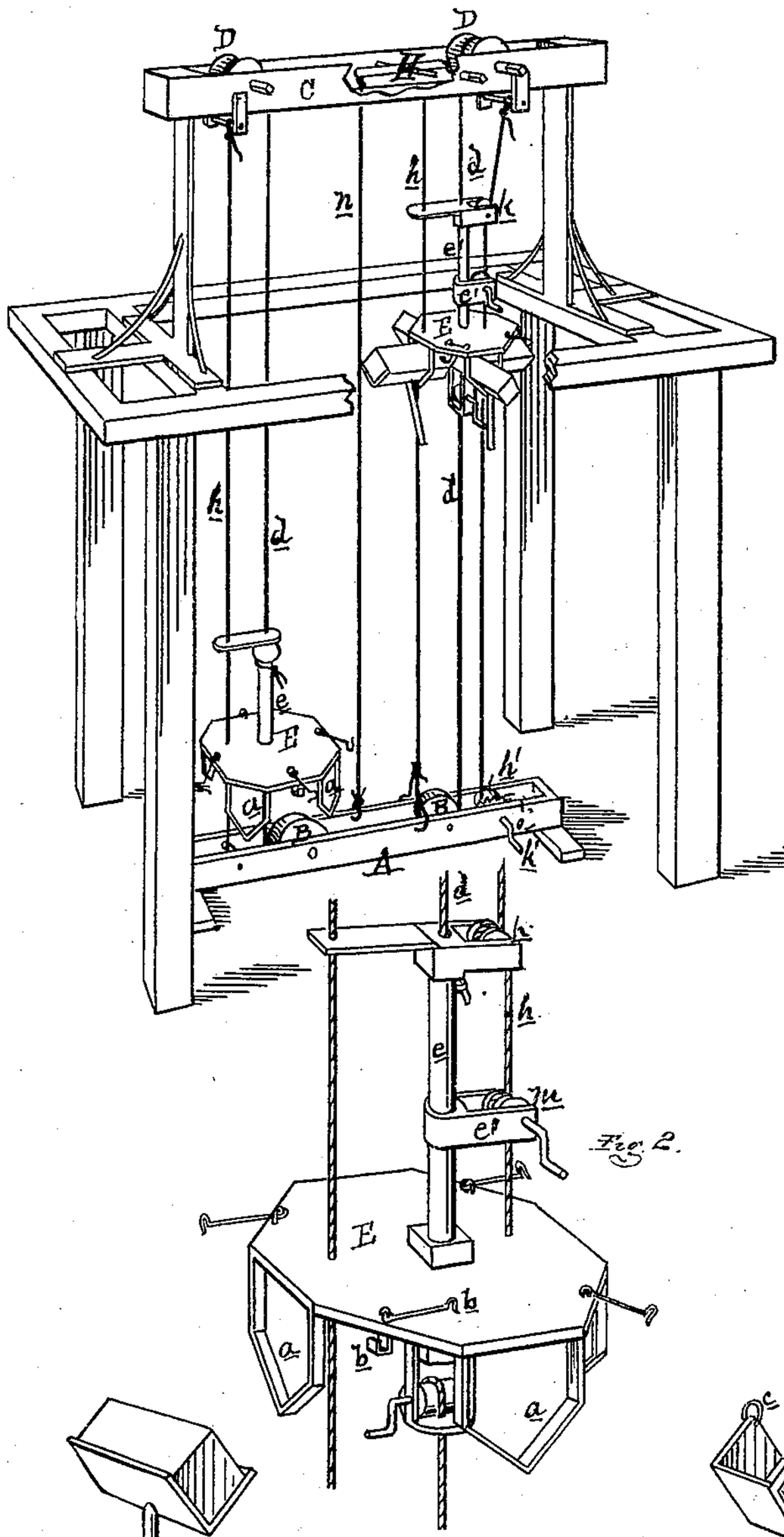

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4

ATTEST:

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UNITED STATES PATENT OFFICE.

GEORGE A. DUPUIS, OF DETROIT, MICHIGAN.

IMPROVEMENT IN ELEVATING-MACHINES.

Specification forming part of Letters Patent No. **140,485**, dated July 1, 1873; application filed April 5, 1873.

To all whom it may concern:

Be it known that I, GEORGE ALFRED DUPUIS, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Elevating-Machines; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a perspective view of my invention as set up and in use. Fig. 2 is an enlarged and detached view of one of the platforms and its attachments. Figs. 3 and 4 are detached views of brick and mortar hods.

Like letters refer to like parts in each figure.

The nature of this invention relates to the peculiar construction and arrangement of a device for elevating hods filled with brick and mortar from the ground to any desired height, so that the hods so elevated will be carried to a sufficient height above the platform or staging upon which their contents are to be used to enable a carrier to take them onto his shoulder from the elevator-platform and carry them to any part of the scaffold where they may be required. The invention consists in the peculiar construction and arrangement of the various parts to accomplish the desired result, and as more fully hereinafter described.

In the accompanying drawings, A represents a frame secured to the ground or floor where the brick are delivered and the mortar mixed. Within this frame are two pulleys or drums, B. C is another frame, designed to be set on the joists of floors above, successively as the walls progress upward. This frame is designed to be placed immediately above the ground-frame A, and it is provided with two drums or pulleys, D. E are elevator-platforms, to the under sides of which, and in suitable cradles *a*, or by means of hooks *b*, engaging with rigid bails *c* on the hods F, said hods are securely suspended. These platforms are secured to ropes, one of them, *d*, being fastened to the top of the guiding-standard *e*. It thence passes upward and around one of the pulleys D in the upper frame, and thence along to the opposite drum in the same frame, and upward and around said drum, and its other end is then secured to the top of the guiding-standard *e'* of the companion platform. The rope should be of sufficient length to allow the upper frame to be successively raised to succeeding floors of the building. Another rope, *d'*, is secured at one end to the under side of one of the platforms, and thence passing under the drums or pulleys B. The other end is secured to the under side of the companion platform. This rope should also be of sufficient length to allow of the operation of the device to be extended upward, as before described. Guide-ropes *h* are secured to the upper frame, and passing down over guide-pulleys *k* and through the platforms, as shown. The lower ends (the guide-ropes being long enough to allow of the necessary extensions, as hereinbefore described) are secured to tightener-drums *h'*, the latter being operated by the cranks *k'*, and held in position to keep the guide-ropes tight by means of the ratchet and pawl *g*. Secured to the guiding-standards *e* are out-bearings *e'*, carrying drums and cranks *m*, and the guide-ropes are passed around or "overhauled" around said pulleys. H is a brake, of ordinary construction, secured to the upper frame so as to brake against one of the pulleys D when compelled to do so by pulling the rope *n*, which hangs within easy reach of either platform.

The hods being filled and suspended from the lower side of the platform, which is near the ground, the other one being above the floor upon which the upper frame is placed, the operator takes a loaded hod upon his shoulder, and ascends to the upper floor by a ladder. He then, after emptying the hod, steps onto the upper platform, and by means of his own weight, and the working of the crank and drum upon which the guide-rope is overhauled, he is enabled to raise the loaded platform to the desired height, when the operation is repeated indefinitely, the unloaded platform always descending to be loaded as the loaded one ascends to be unloaded.

In order to tighten the ropes connecting the under sides of the platforms, screw-swivels

or other appropriate devices may be employed, and power of any desired description may be used.

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

1. The combination of the frames A C, pulleys or drums B D, platforms E, ropes *d d'*, guide-ropes *h*, guide-pulleys *k*, drums and cranks *m*, tightener-drums *h'*, ratchet and pawl *g*, and brake H, when the parts are constructed and arranged to operate substantially as and for the purposes described.

2. The hods F, provided with bails *c*, in combination with the hooks *b* of the platforms E, for the purposes specified.

GEO. A. DUPUIS.

Witnesses:
H. S. SPRAGUE,
CHAS. J. HUNT.