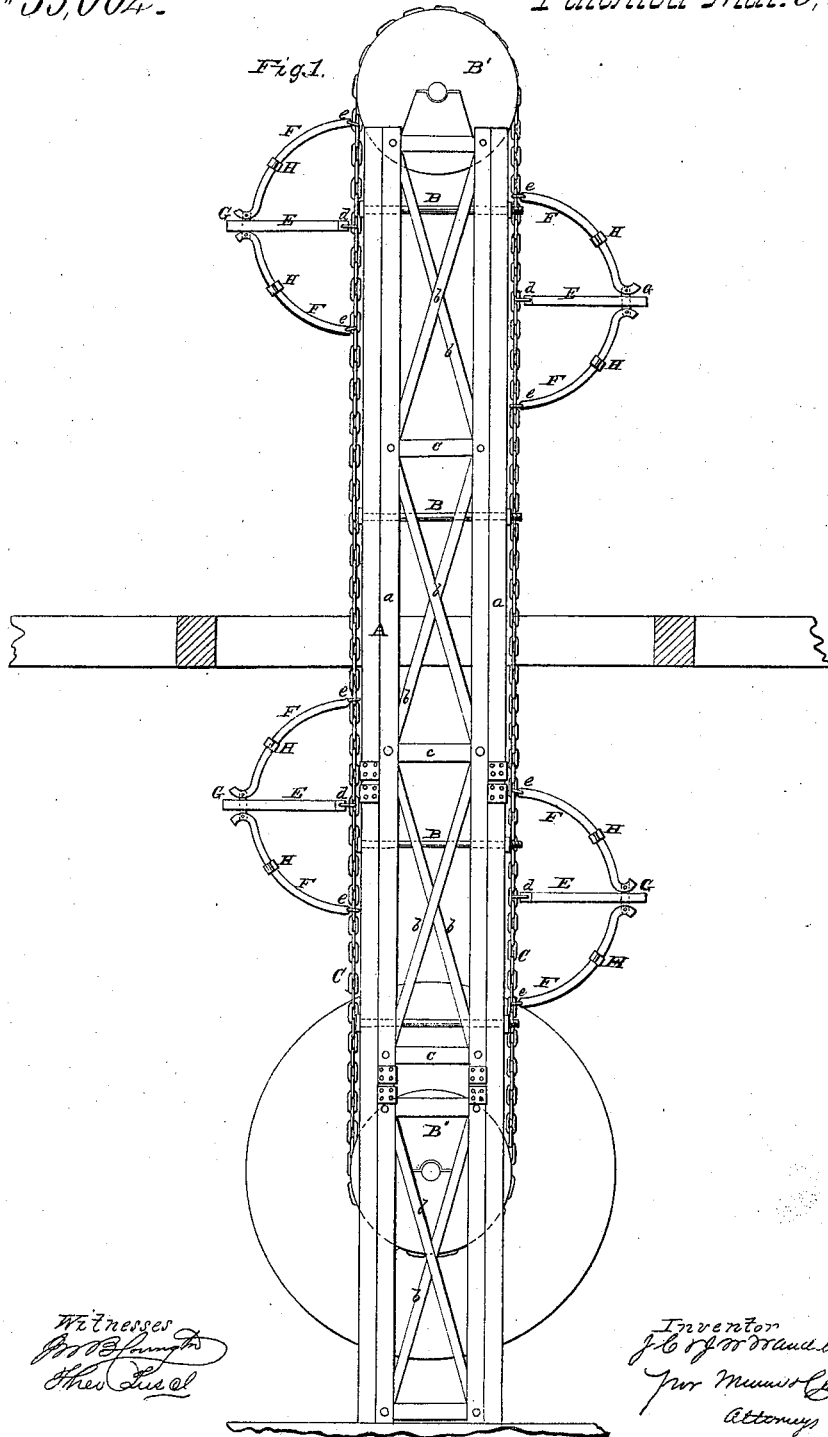


J. C. & J. W. Wandell,

Elevator,

N^o 53,064.

Patented Mar. 6, 1866.



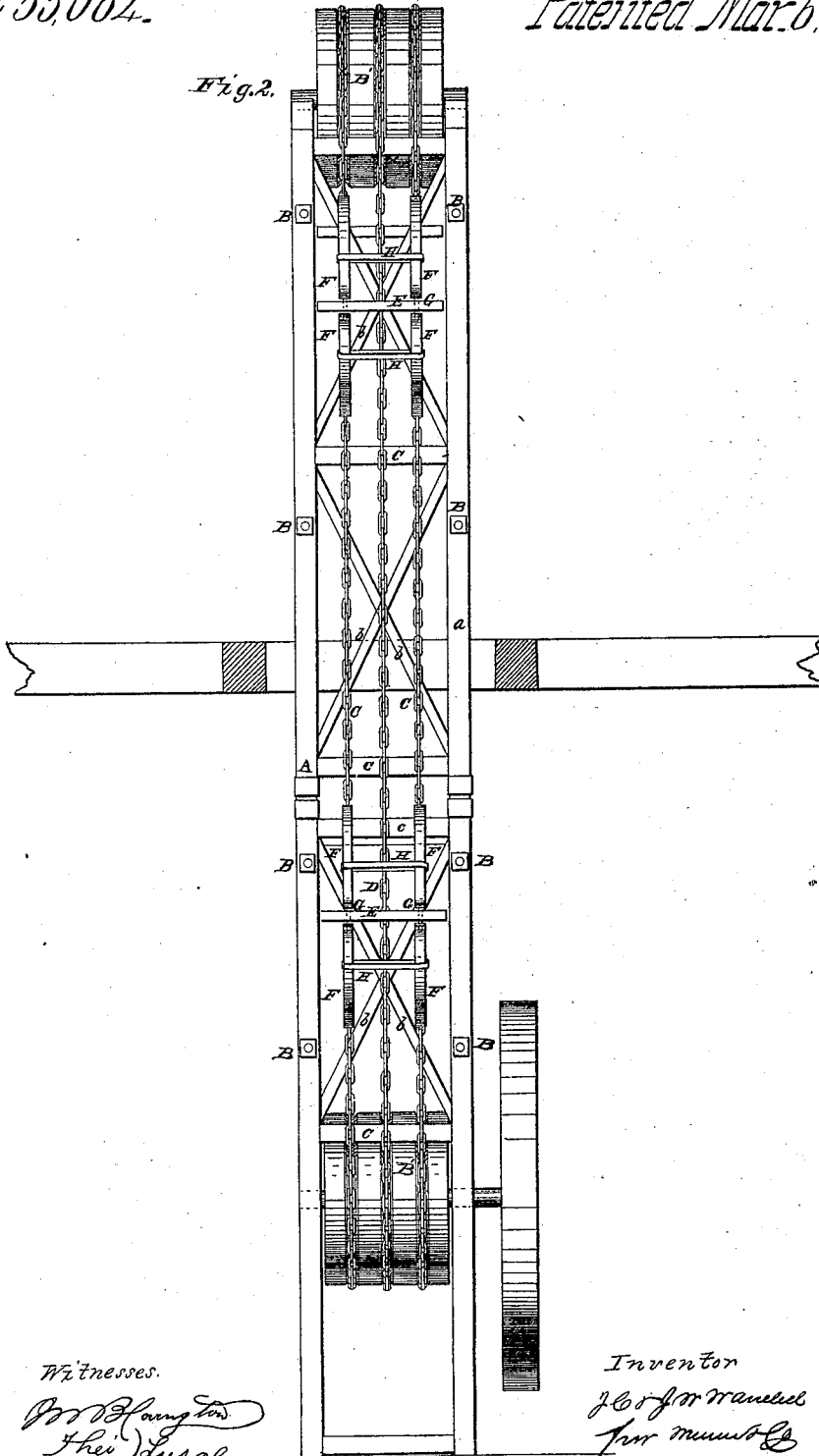
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Fig. 2.



Witnesses.

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Thos. J. Lusk

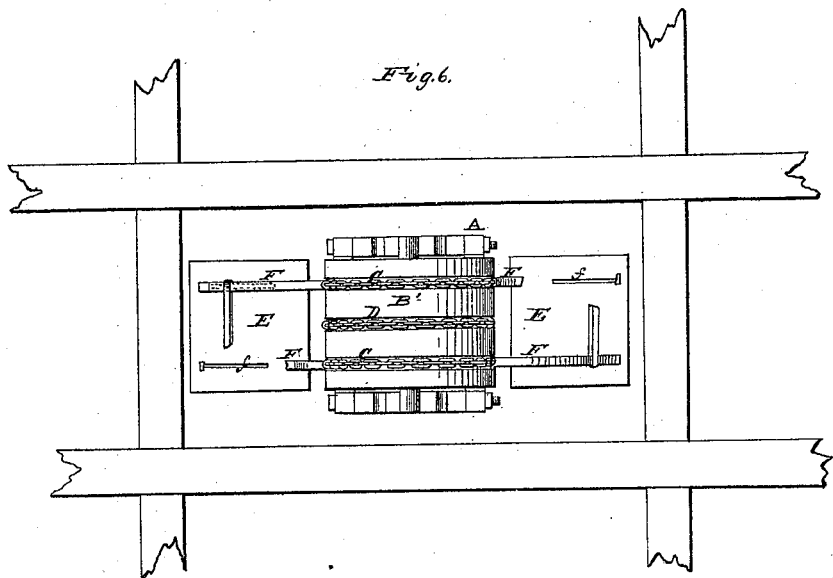
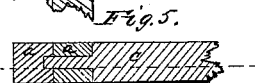
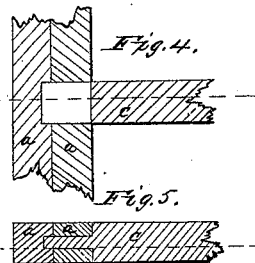
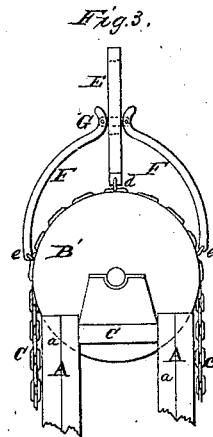
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UNITED STATES PATENT OFFICE.

JOHN C. WANDELL AND JAMES W. WANDELL, OF NEW YORK, N. Y.

IMPROVED ELEVATOR.

Specification forming part of Letters Patent No. 53,064, dated March 6, 1866.

To all whom it may concern:

Be it known that we, JOHN C. WANDELL and JAMES W. WANDELL, of the city, county, and State of New York, have invented a new and Improved Elevator; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, Sheet No. 1, is a side view of our invention. Fig. 2, Sheet No. 2, is a front view of the same. Fig. 3, Sheet No. 3, is a side view of the upper end of the same; Fig. 4, an enlarged vertical section of a portion of the framing of the same, showing the manner in which the framing is put together. *x x*, Fig. 5, indicate the line of section; Fig. 5, a horizontal section of Fig. 4, taken in the line *y y*; Fig. 6, a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and useful device for elevating building materials—such, for instance, as brick, stone, mortar, &c.—during the process of the construction or erection of a building.

The object of the invention is to supersede the use of the common hod and the windlasses now employed for such purposes.

The invention consists in the employment or use of endless chains arranged to work over drums in an upright frame, which drums are driven by a separate or independent chain, the endless chains having platforms constructed and applied to them in a novel manner, so that they may pass around the drums, and all arranged as hereinafter fully shown and described, whereby the building materials may be raised or elevated by a continuous movement of the elevator in one direction.

A represents an upright frame of rectangular form, and composed of upright beams *a*, braced by diagonal bars *b* and horizontal bars *c*. These beams and braces are made in sections and secured together, as shown at *d* in Figs. 1 and 2, the sections at one side of the frame being arranged so as to break joints with those at the adjoining sides, and the horizontal bars *c* of the side sections pass entirely through their upright beams *a* and into the

beams of the front and rear sections, as shown in Figs. 4 and 5, iron bolts B being employed to keep the sections firmly in contact. This frame A may be made of any desired height, as occasion may require, and in the upper and lower parts of the frame there are placed drums B' B', over which chains C D pass, the latter being designed especially for a driver to rotate the upper drum B' and impart motion to the chains C C, to which platforms E are attached. These platforms E may be of rectangular form, and they are attached to the chains C C by joints *d*, as shown in Fig. 1, so that they may swing freely on said chains. Each platform E is connected with two pairs of arms, F, a pair of arms being at each side of each platform. These arms are of curved or segment form, and are connected to the chains C C by joints *e*, the outer ends of the arms of each pair being connected by a link, G, the ends of which are pivoted in the arms, as shown clearly in Figs. 1 and 3. These links G pass through slots *f* made in the platforms E, the links being allowed to work or move freely in the slots. The ends of the arms F support the platforms, serving to retain them in a horizontal position while passing either upward or downward, and said arms admit of the platforms passing around the drums B' B', causing them to assume a radial position with the drums while passing around them, (see Fig. 3,) and then assume a horizontal position after passing around the drums, as shown in Fig. 1, the links G being at the inner ends of the slots *f* when the platforms are passing around the drums and at the outer ends of said slots when the platforms are in a horizontal position and passing either upward or downward.

The device is placed in a building in a position to admit of the building materials being elevated to the desired point, the material being placed in the ascending platforms and removed therefrom when they reach the desired height, the empty platforms descending at the opposite side of the frame A.

By this arrangement it will be seen that no time is lost in waiting for the descent of a platform, as is the case in all other hoisting devices for a similar purpose, as the platforms E move continuously in one direction, except when the device is stopped for the purpose of

putting on or taking off the material to be elevated.

In Figs. 1, 2, and 6 the beams of a building are represented by the red lines.

The arms F are braced by bars H, which admit of the two pairs of arms of each platform moving or working in a direction longitudinally with the chains C and independently of each other. The bars H are slotted at their ends and simply fitted over the arms F. This attachment of the bars H is necessary in order to admit, without breaking or bending said bars, of any inequalities in the movement of the two chains C C.

The chain D is necessary in order to insure motion being communicated to the upper drum from the lower one. The chains C C, in consequence of having the arms F and platforms E connected to them, might possibly not be capable of being adjusted sufficiently tight to insure that result. The power is applied to the axle of the lower drum.

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

1. An elevator composed of endless chains C C, or their equivalents, working over or around suitable drums B B in a frame, A, and having platforms E attached, arranged with arms F, which are also connected with the chains C C, substantially as and for the purpose herein set forth.

2. The supplemental or driving chain D, when used in combination with the chains C C, platforms, and arms, substantially as and for the purpose specified.

3. The brace-bars H, when fitted to the arms F of the platforms E, substantially in the manner as and for the purpose set forth.

JOHN C. WANDELL.

JAMES W. WANDELL.

Witnesses:

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C. L. TOPLIFF.