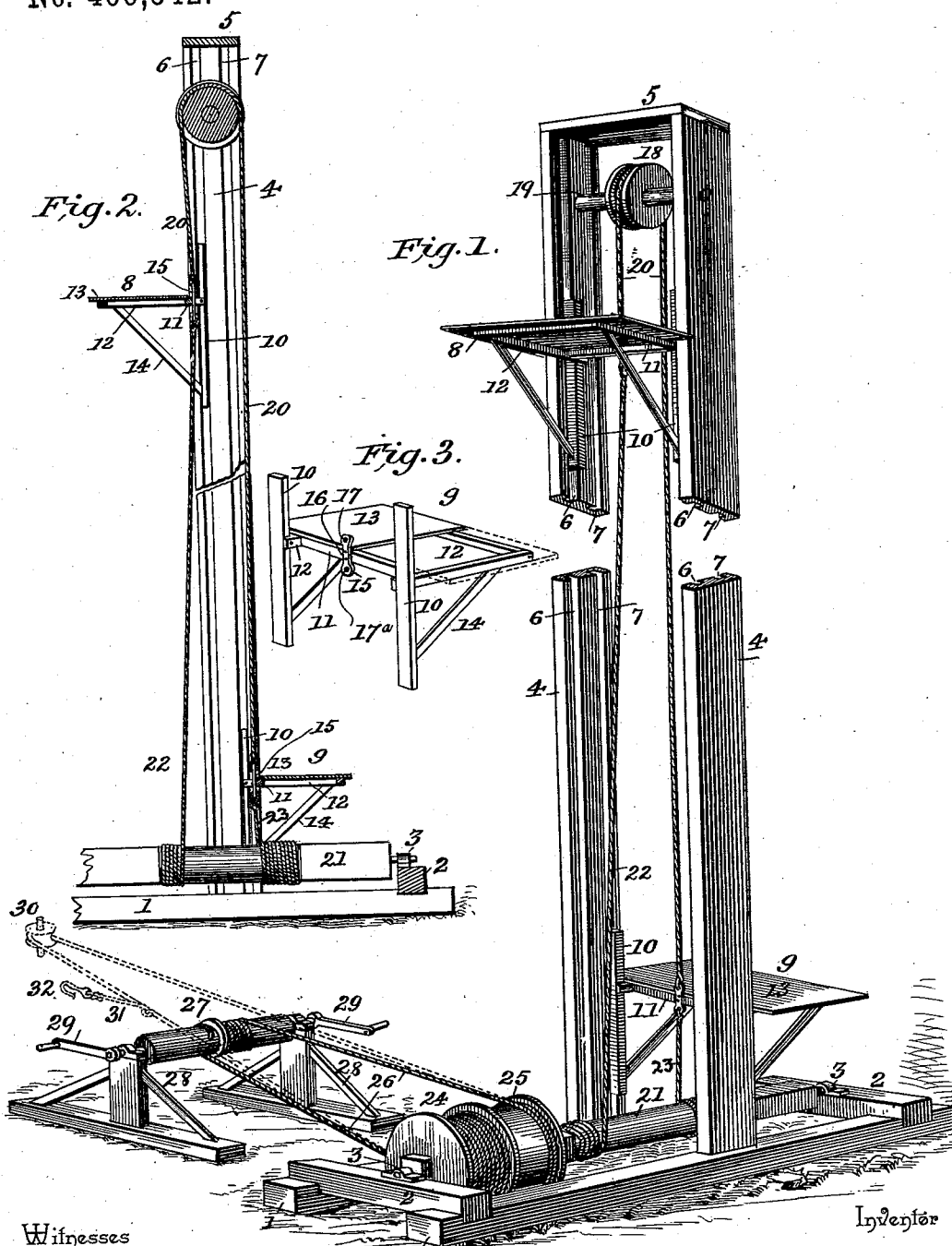


(No Model.)

C. OLSEN.
BRICK ELEVATOR.

No. 466,542.

Patented Jan. 5, 1892.



Witnesses

Julius M. Jr.
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UNITED STATES PATENT OFFICE.

CHRISTIAN OLSEN, OF CANTON, MISSISSIPPI.

BRICK-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 466,542, dated January 5, 1892.

Application filed August 18, 1891. Serial No. 403,052. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN OLSEN, a citizen of the United States, residing at Canton, in the county of Madison and State of Mississippi, have invented a new and useful Brick-Elevator, of which the following is a specification.

This invention relates to improvements in that class of elevators adapted for raising mortar and brick to the scaffolds of houses while under construction.

The objects of the invention are to provide a cheap and simple elevator adapted to be operated by hand or horse power and to elevate mortar, bricks, and other building material with facility and dispatch.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a brick-elevator constructed in accordance with my invention. Fig. 2 is a vertical transverse section. Fig. 3 is a detail in perspective of one of the elevating-platforms.

Like numerals of reference indicate like parts in all the figures of the drawings.

The base of the elevator comprises a pair of opposite longitudinal side beams 1, which are connected near their ends by transverse end beams 2, the latter being provided upon their upper sides and at their centers with bearings 3. From the beams 1, at one side of the center thereof, there rise a pair of opposite vertical standards 4, which are connected at their upper ends by a transverse crown-piece 5. Each of the standards 4 is provided near its opposite edges with a pair of vertical grooves 6 and 7, those grooves of one standard being transversely opposite and parallel with those of the opposite standard.

I employ two elevating-platforms 8 and 9, the former mounted in the grooves 6 and the latter in the grooves 7. Each of said platforms consists of a rear pair of sliding cleats 10, which are connected by a transverse bar 11, thus maintaining the cleats a suitable distance apart and in position in their respective grooves. To the inner sides of the cleats a rectangular frame 12 is bolted, and the same supports a platform 13, said platform being

braced by inclined braces 14, leading from the outer ends of the frames 12 and bolted to lower ends of the cleats 10. To the inner sides of the platforms metal straps 15 are bolted, as at 16, said straps being extended above and below the platforms and provided near their ends with perforations 17 and 17^a. A large pulley 18 is pivoted, as at 19, between the upper ends of the standard 4, and over the same passes a supporting-rope 20, the ends of which are connected to the upper openings 17 of the straps 15, so that as one elevating-platform ascends its companion descends, and vice versa.

In the bearings 3 of the end bars there is journaled a drum-shaft 21, and wound about the same in opposite directions are ropes 22 and 23, the former being connected to the perforation 17^a in the strap 15 of the platform 8, while the latter rope is connected to the corresponding opening in the strap of the platform 9, and the two ropes are passed in reverse directions around the drum-shaft 21 and secured thereto. It will be obvious that as the drum-shaft revolves in one direction one platform will be elevated, while the other is drawn down. The drum-shaft is provided near one end with a pair of drums 24 and 25, considerably larger than the shaft, and about the same in opposite directions are coiled the terminals of a cable 26, which intermediate its ends is coiled about a windlass 27, which latter is mounted in a suitable frame-work 28 and has the ends of its shaft provided with operating-cranks 29. The windlass described is to be employed only when the elevator is operated by hand-power, and if by horse-power is omitted, and in lieu thereof I employ a pulley 30, which is anchored a suitable distance from the drums 24 and 25 and around which the cable 26 passes. Between the drums 24 and the pulley I secure to the cable 26 by means of a short section of rope 31 a draft-hook 32, which is adapted to engage with an ordinary singletree of a harness. In the first construction—that is, connection with the windlass—it will be seen that by reversing the direction of rotation of said windlass through the medium of its cranks the elevators are given reverse movements—that is, while one ascends its companion descends—so that while

one is being emptied the other may be loading; and in this manner no time is lost. When operated by horse-power, the horse is first driven from the elevator toward the pulley, 5 so that the cable 26 is drawn in one direction, and by turning the horse at the end of the travel and driving him toward the elevator the cable is moved in an opposite direction, thus imparting different movements to the 10 elevating-platforms.

Having described my invention, what I claim is—

1. The combination, with the oblong base, the vertical standard rising therefrom, having 15 opposite parallel ways or grooves, and the pulley located in the upper ends of the standards, of the opposite cleats mounted for movement in the ways, the platforms extending from the cleats, the supporting-rope 20, passed over the pulley and connected to the platforms at its terminals, the elevating-ropes depending from the platforms, the drum-shaft journaled in the base and having the elevating-ropes passed in reverse directions around and secured thereto,

the twin drums 24 and 25, mounted on the 25 drum-shaft, the cable 26, having its terminals wound in reverse directions upon the drums, and means for operating said cable, substantially as specified.

2. In an elevator of the class described, the 30 combination, with the opposite grooved standards, the platforms mounted for movement therein, and the pulley above the platforms, the supporting-rope passed over the pulley, the metal straps 15, bolted to the edges of the 35 platforms, extending above and below the same, and provided with perforations, the upper ones of which receive the rope 20, and the ropes 22 and 23, connected to the lower perforations of the straps, substantially as specified. 40

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CHRISTIAN OLSEN.

Witnesses:

I. B. LUCKETT,
J. P. PARKER.