

(No Model.)

H. LONGAUER.
ELEVATOR.

No. 536,215.

Patented Mar. 26, 1895.

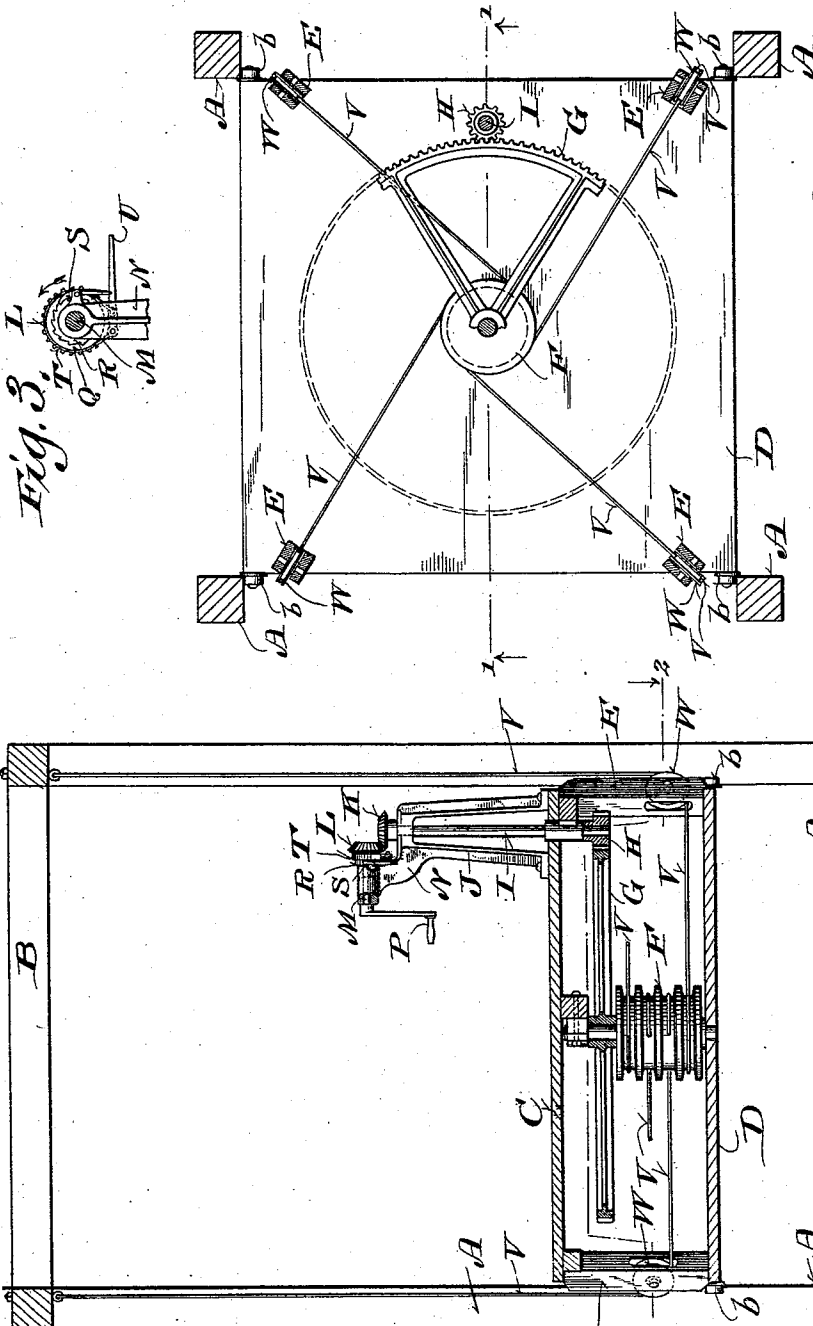


Fig. 1.

Witnesses:
Geo. W. Loring.
N. E. Oliphant

Inventor:
Hubert Longauer
By H. C. Underwood
Attorney

Fig. 2.

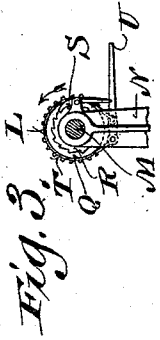
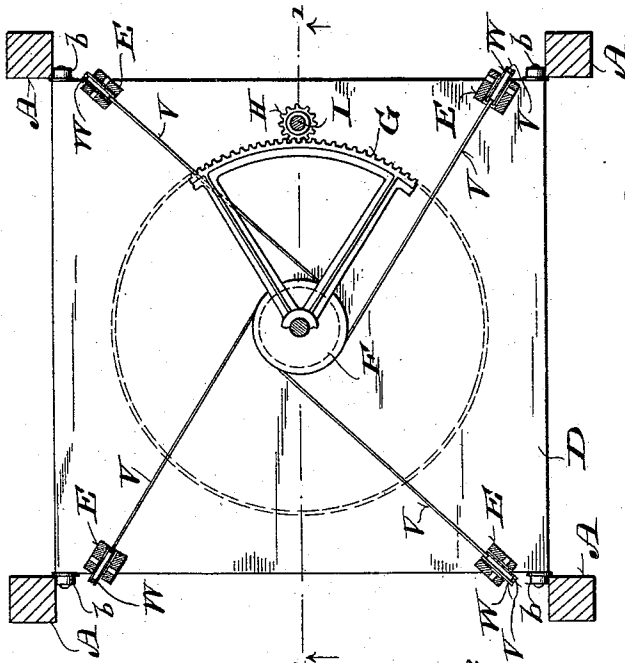


Fig. 3.

UNITED STATES PATENT OFFICE.

HUBERT LONGAUER, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF THREE-FOURTHS TO ERNEST STAROSTE, JULIUS WEGERT, AND LORENZ F. WAGNER, OF SAME PLACE.

ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 536,215, dated March 26, 1895.

Application filed November 30, 1894. Serial No. 530,303. (No model.)

To all whom it may concern:

Be it known that I, HUBERT LONGAUER, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Elevators; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide a simple, economical, efficient and durable elevator of that class generally operated by manual power; and it consists in certain peculiarities of construction and combination of parts hereinafter specified with reference to the accompanying drawings and subsequently claimed.

In the drawings: Figure 1 represents a vertical transverse sectional view of my improved elevator taken on line 1—1 of the succeeding figure; Fig. 2, a plan view of the same in horizontal section taken on line 2—2 of the preceding figure, and Fig. 3, a detail elevation illustrating a friction-brake and stop-mechanism embodied in my elevator.

Referring by letter to the drawings A represents vertical standards joined by cross-beams B to constitute a supporting frame and guides for the elevator, although the latter may be operated within a walled inclosure or well. Horizontal floors C, D, spaced apart by blocks E constitute the elevator platform and the lower floor is provided with anti-friction rollers *b* that bear against the vertical guides or walls above specified. Intermediate of the platform-floors C, D, central of the same, is a grooved drum F that has its journals in suitable bearings, and fast on one of said journals is a spur-wheel G, of suitable diameter, in mesh with a pinion H, the latter being fast on a vertical shaft I that is also arranged in suitable bearings. One of the bearings for the vertical shaft is embodied in a stand J rising from the upper floor of the platform, and by means of intermeshing bevel-gear wheels K, L, motion is communicated to said shaft from another horizontal shaft M that turns in an arm N of the stand.

The horizontal shaft M is provided with a crank P, a brake-wheel Q and a ratchet-wheel R, the latter being engaged by a detent S, and the brake-wheel embraced by a band T under

control of a lever U pivoted to the stand above specified.

Cables V or other suitable flexible devices suspended from the cross-beams B are run under sheaves W journaled in the blocks E that space the platform floors, the inner ends of said flexible connections being joined to the drum F hereinbefore set forth.

By means of the crank-driven gearing above specified, the drum is rotated to wind the flexible devices V thereon and thereby raise the platform, each of said flexible devices winding in a separate groove of said drum.

The detent S in engagement with the ratchet-wheel R operates to lock the platform in any position to which it may be adjusted, and when said detent is held away from said ratchet-wheel the descent of said platform is controlled by the lever-actuated band T that embraces the brake-wheel Q on the crank-shaft.

From the foregoing it will be seen that the hoisting-mechanism for the platform is comparatively simple, easily operated and not liable to get out of order.

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

An elevator having a platform comprising upper and lower floors spaced apart by blocks, sheaves journaled in the blocks, a drum intermediate of the platform floors, flexible suspending devices that run under the sheaves and connect with the drum, a spur-wheel fast on a journal of said drum, a shaft carrying a pinion in mesh with the spur-wheel, a stand on the upper platform floor embodying a bearing for the pinion-shaft, a drive-shaft supported in an arm of the stand and in bevel-gear with said pinion-shaft, a brake-wheel and ratchet-wheel on the drive-shaft, a lever-controlled band embracing the brake-wheel, and a detent for engagement with the ratchet-wheel, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

HUBERT LONGAUER.

Witnesses:

N. E. OLIPHANT,
HENRY DANKERT.