

(No Model.)

J. PAUL.
LUMBER ELEVATOR.

No. 302,771.

Patented July 29, 1884.

Fig. 3.

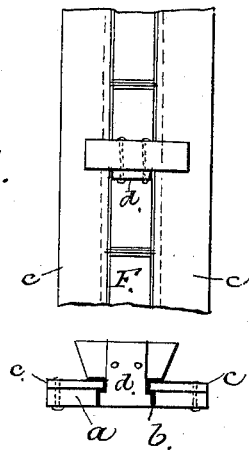


Fig. 1.

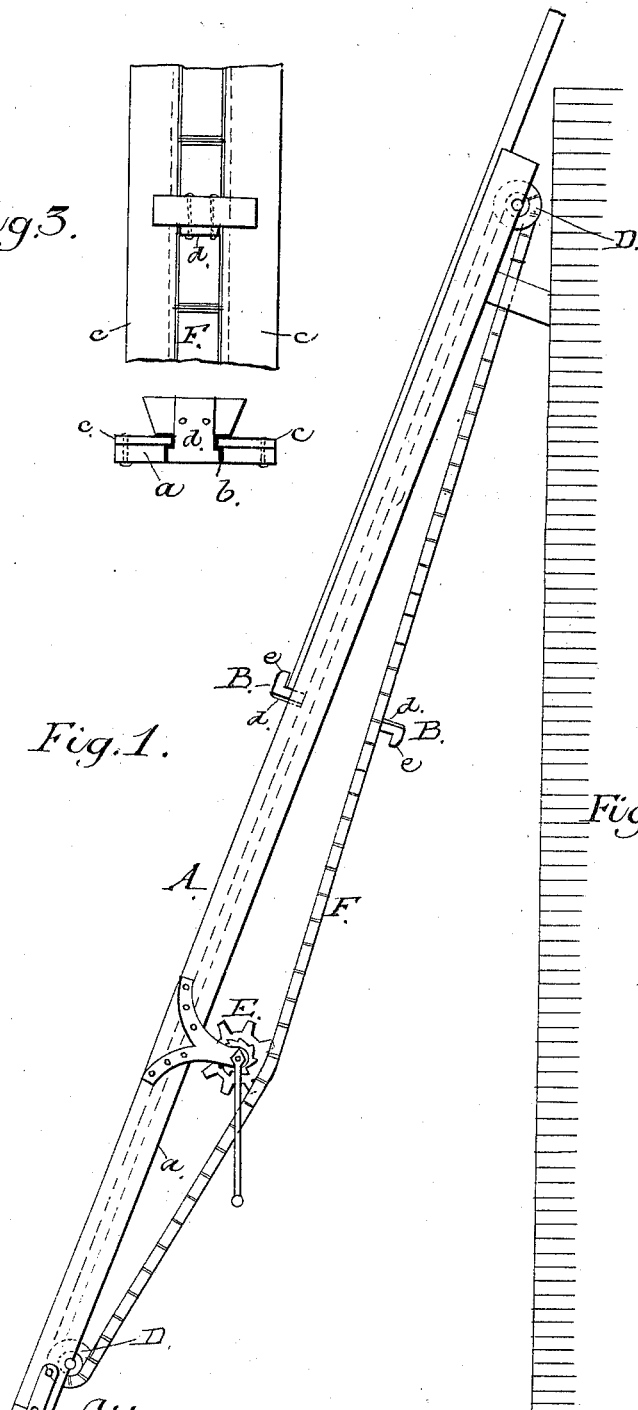
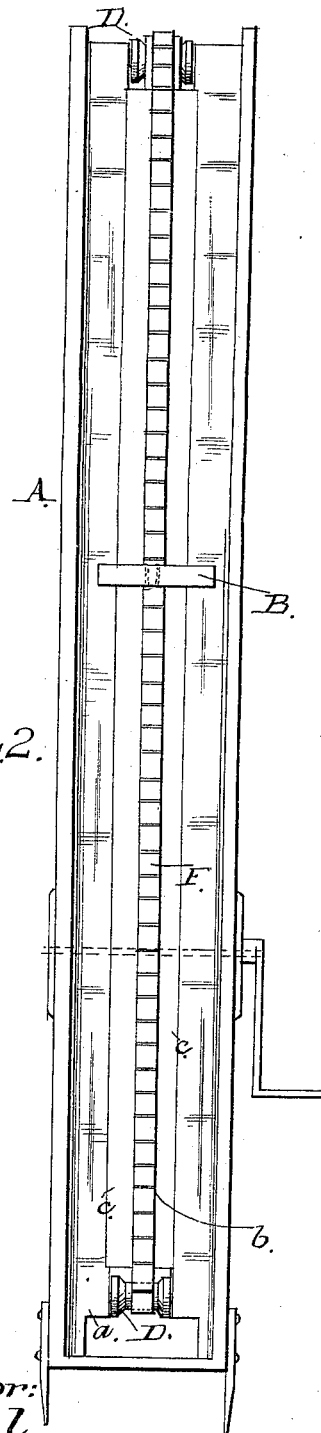


Fig. 2.



Attest;
T. Walter Fowler,
H. B. Applewhite,

Inventor:
John Paul.
by his Attorneys
A. H. Evans & Co

UNITED STATES PATENT OFFICE.

JOHN PAUL, OF LA CROSSE, WISCONSIN.

LUMBER-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 302,771, dated July 29, 1884.

Application filed June 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN PAUL, a citizen of the United States, residing at La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and useful Improvements in Lumber-Elevators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of a lumber-elevator with my improvements attached. Fig. 2 is a front elevation of same. Fig. 3 represents details of carriage.

My invention relates to means for elevating, conveying, and hoisting lumber out of steam-boats, barges, or other lumber-carrying vessels onto docks, wharves, lumber-yards, or other suitable places, also for elevating lumber into piles in lumber-yards or other suitable places; and it consists in a carriage for holding the lumber, provided with an endless chain or chains passing over pulleys at the top and at the bottom, and is more especially adapted to be operated by horse or steam power applied to a sprocket-wheel at the top or bottom or on windlass G, but may be operated by an operator stationed at the bottom, by operating a crank or windlass, G; and it further consists in the arrangement and combination of devices to be hereinafter more fully set forth, and specifically pointed out in the claims, and it is an improvement on my application for patent for a similar device allowed May 21, 1884, Serial No. 131,510.

To enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the said drawings, A represents a frame of any particular form or size, which consists, essentially, of a base-board, *a*, which is provided with a slot or slots, *b*, running lengthwise of elevator, and in these slots work endless chains or cables for operating the lumber, as will be hereinafter more fully set forth.

Bolted to the base-boards on each side of slots and arranged in such manner that their inner edges project slightly beyond the inner edges of the base-boards, as shown in Fig. 3, are strips of wood or other material, *c*, which

act as guides for carriage B. This carriage differs slightly from that shown in my former application, in that the portion *d*, which is provided with the usual toe-piece, *e*, to prevent the end of the lumber from slipping, is made approximately in the form of an inverted T, and it is so arranged that it has a free movement in the slot or slots *b*, formed in the base-board, and the strips *c*, projecting over the lower end of the piece *d*, always keep the carriage within the slot during the ascent of the lumber. The lower and upper ends of the base-board are also cut away to permit of the passage of ropes or chains and the carriages attached thereto, and in each end of the frame are suitably journaled pulleys on band-wheels D, over which the rope or chain passes.

In my former application I had only one carriage for raising the lumber; but I have found by actual experience that this manner of handling lumber may be simplified and a greater amount of material handled by the employment of devices as herein set forth, more especially by the application of steam-power.

In my improved elevator I have mounted in bearings secured to the frame of the machine a sprocket-wheel, E, which may be provided with any pawl-and-ratchet mechanism for controlling the ascent or descent of the carriages.

It will be seen from the drawings that I employ in my present application an endless rope or chain, F, and have two or more carriages secured thereto, so that I am enabled to more rapidly handle the material to be elevated than by the means described and claimed in my former application.

Upon the shaft on which the sprocket-wheel E is mounted may be secured a crank or handle, by means of which motion may be communicated to the rope or chain.

The operation of my improved device is substantially the same as that described in my former application, except that motion may be applied through a sprocket-wheel at the top or bottom or on the windlass by steam or other motive power.

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

1. In a lumber-elevator, the frame A, having a slot, *b*, running lengthwise of elevator, provided with strips *c*, in combination with an endless rope or chain provided with carriages, and mechanism, as described, for operating said chain, substantially as herein set forth.
2. In a lumber-elevator, and in combination with an endless rope or chain provided with carriages, a frame having a slot running lengthwise of elevator, pulleys mounted in the frame at each end, and mechanism for operating said chain, substantially as herein set forth.
3. In a lumber-elevator, and in combination with a frame having a slot running lengthwise of elevator, and strips of wood or metal *c*, secured to the bottom of said frame, a carriage consisting of a toe-piece, *e*, bolted or otherwise secured to the portion *d* in such manner that the said portion *d* will slide in said slots, and an endless rope or chain, to which said carriages are secured, substantially as herein described.

JOHN PAUL.

Witnesses:

F. A. A. ROBERTSON,
GEO. SALZER.