

(No Model.)

H. H. BLADES.
ELECTRIC ELEVATOR.

No. 459,229.

Patented Sept. 8, 1891.

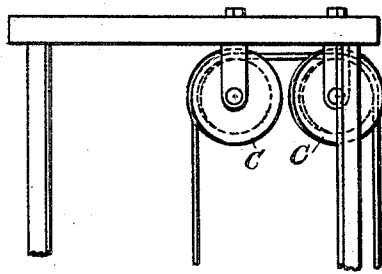
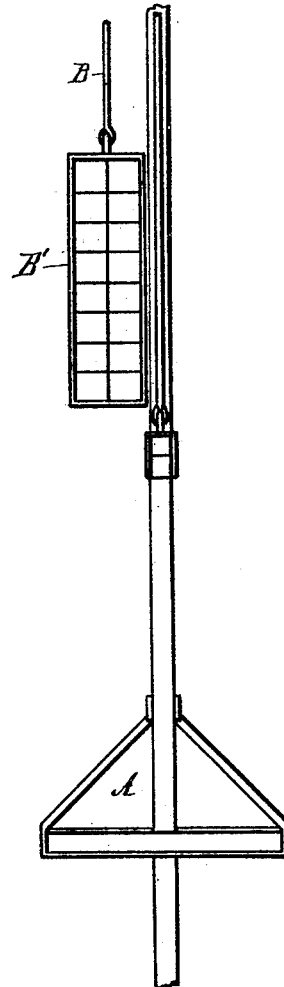
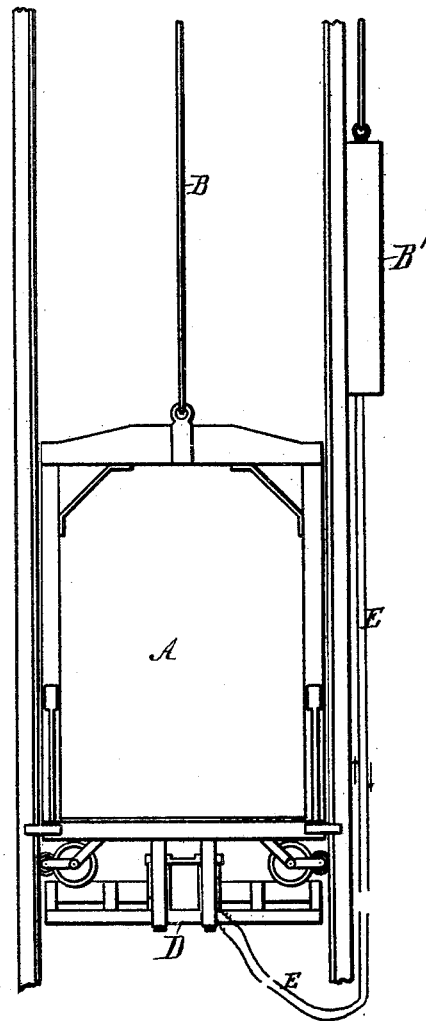


Fig. 1.



Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

HARRY H. BLADES, OF DETROIT, MICHIGAN.

ELECTRIC ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 459,229, dated September 8, 1891.

Application filed September 19, 1890. Serial No. 365,539. (No model.)

To all whom it may concern:

Be it known that I, HARRY H. BLADES, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Electric Elevators; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

In the drawings, Figure 1 is a front elevation, and Fig. 2 is a side elevation, of an elevator embodying my invention.

The purpose of my invention is to simplify the construction of an electric-elevator mechanism designed to be operated by a storage-battery or in connection with a storage-battery; and my invention consists, essentially, in providing the elevator with a storage-battery as a counterpoise-weight instead of the usual counterpoise-weight employed with elevators.

In carrying out my invention, A represents an elevator of any usual construction. B is a cable passing over pulleys C C and connected at its extremity with a counterpoise B'. To constitute this counterpoise-weight I purpose to employ a storage-battery, which is itself sufficiently weighty to accomplish the desired purpose. Of course it may constitute the entire counterpoise-weight, or additional weight may be added either to the car or to the counterpoise in case there is not a proper relation between the two.

D may be a suitable motor located on the car for operating the elevator through the medium of current derived from the storage-battery.

The conductors E may be led to and from the motor in any convenient manner. Thus

they may depend from the battery and come up beneath the cab to the motor, as shown in Fig. 1. They may be in this position and be passed through a hose for protection, or they might follow the line of the cable B from the battery to the cab and then follow along the frame of the cab to the motor. I would not, however, limit myself to such a construction, for the motor might be located at the base and be employed either for hoisting water to the top, whereby the elevator may be run, or might, through the medium of suitable gearing, operate the elevator directly, the counterpoise-weight in each case being the storage-battery, which serves either alone or in connection with direct current to operate the motor. By a construction of this character much trouble may be avoided in the matter of suitable connections between the storage-battery and the elevator, especially where the motor is located upon the elevator itself, while at the same time expense is saved in the matter of a separate counterpoise-weight. So, also, there is obviated in a great degree liability of fires or other accidents due to breaks in the circuit, which are liable to occur should the storage-battery be disconnected from the elevator and its hoist.

What I claim is—

The combination, with an elevator, of an electric motor for operating the same, located on the elevator-cab, and a counterpoise-weight consisting of a storage-battery adapted to supply said motor with operative current, substantially as and for the purposes described.

In testimony whereof I sign this specification in the presence of two witnesses.

HARRY H. BLADES.

Witnesses:

MARION A. REEVE,
C. J. SHIPLEY.