

(No Model.)

B. WALDSTEIN.
LETTER ELEVATOR.

No. 512,075.

Patented Jan. 2, 1894.

Fig. 1.

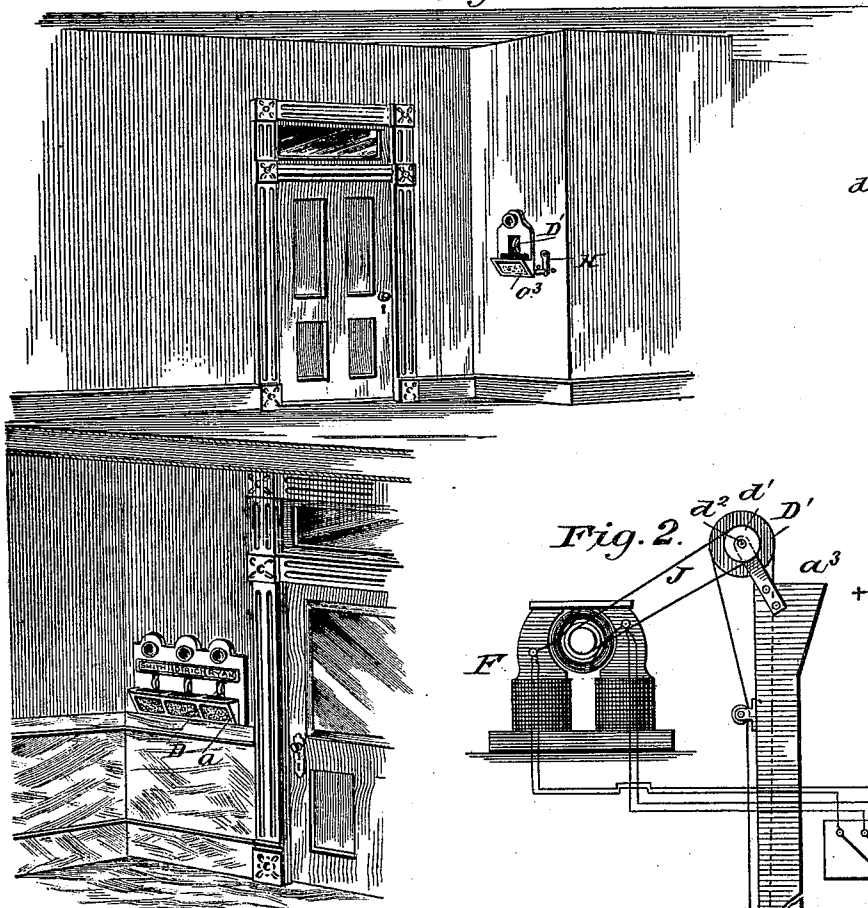


Fig. 3.

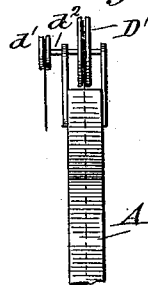


Fig. 2.

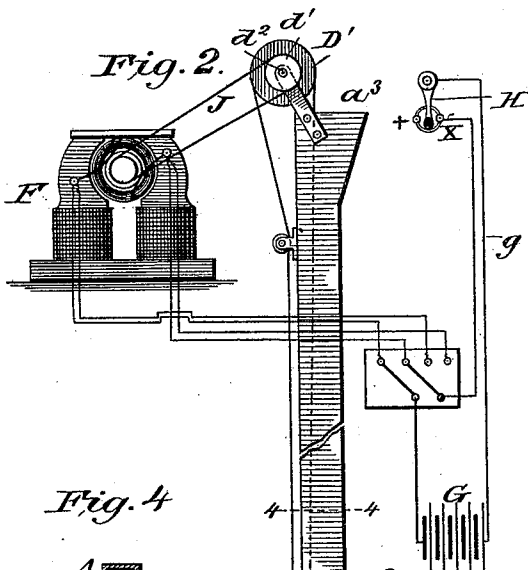
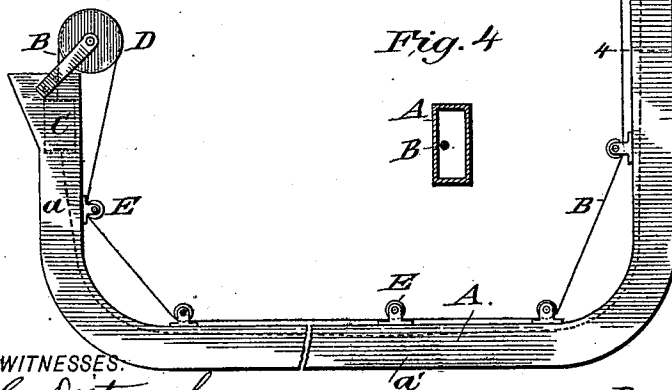


Fig. 4.



WITNESSES.

Fred G. Dieterich

Jos. A. Ryan

INVENTOR

Bernard Waldstein

BY

Munn Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

BERNARD WALDSTEIN, OF NEW YORK, N. Y.

LETTER-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 512,075, dated January 2, 1894.

Application filed September 12, 1893. Serial No. 485,370. (No model.)

To all whom it may concern:

Be it known that I, BERNARD WALDSTEIN, residing at New York, in the county of New York and State of New York, have invented a new and Improved Letter-Elevator, of which the following is a specification.

My invention relates to means for elevating letters, parcels and the like from the first or ground floor of an office building or dwelling, to the upper compartments or floors, and it has for its object to provide an elevating device which can be set from such upper floors in operation to automatically elevate or lower the letter or parcel holding carriage.

It has also for its object to provide an elevator of this kind simple and inexpensive in construction and effective for its desired purpose.

The invention consists in the peculiar arrangement and combination of parts, all of which will hereinafter be first described in the specification and then particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of a compartment house illustrating the manner in which my improved devices are arranged. Fig. 2 is a view in side elevation of my improved elevator devices. Fig. 3 is an end view of the upper guide pulley and the chute and Fig. 4 is a transverse section on the line 4—4 Fig. 2.

My invention, which is more especially designed for use in connection with compartment houses, comprises a chute A, of which in the practical application of such invention a number, corresponding to the number of floors or compartments are used, each of which however is arranged for independent use, and as all are constructed and arranged to operate alike I shall only describe one of such chutes and the elevator mechanism connected therewith, in detail.

The chute A is preferably rectangular in cross section, and has its lower portion extended upward as at *a* which forms the receiving or mouth end, which portion merges into a horizontal portion *a'* which terminates at a vertical portion *a''*, the upper end of which forms the discharge *a'''*. I desire it understood that such chute is disposed, preferably with its mouth projected into the vestibule or

front hall of the building and its horizontal member disposed under the floor of the vestibule, run back into the building, and its vertical member carried up from such point as the location or arrangement of the upper compartments may require and which would be the most convenient to the occupants. To avoid making any special provision in the walls for the vertical members of the several chutes they may be run up in the dumb waiter shaft of the building if desired. It will be noticed by reference to Fig. 1 that the receiving and discharge ends of the chute flare out to facilitate the ingress and egress of the letters or parcels.

B indicates an endless cable, which is held to travel through the chute, and has secured to it a carrier or box C, which in practice may have a double cover of any approved construction, and which is adapted to be reversely carried through the chute. At each end of the chute is arranged in extensions or bracket like portions a main guide pulley D D' and on the outer face of the inner side of such chute smaller guides E are journaled over which the cable passes in the manner shown most clearly in Fig. 2.

As a simple and effective means for elevating and lowering the letter carriage I employ the electro mechanical means shown, which consist of the electric motor F operated from the battery G in the usual manner. The motor and the battery may be located at any convenient point, preferably out of sight, but one of the circuit wires *g*, is run adjacent the upper or discharge end of the chute, and connected with a reversing switch H, and from the drive shaft of the motor, runs a belt J which connects with a drive pulley *d'* on the upper pulley wheel shaft *d''*.

From the foregoing taken in connection with the drawings it will be readily understood that when the switch H is centrally disposed as shown the electric circuit will be broken and the elevator mechanism be at rest. Now should the occupants of a particular compartment wish to ascertain whether mail or other matter has been deposited for them, by turning the switch to contact mark X, the motor will be set in operation to raise the carrier, and as it reaches the top, the switch is shifted to its cut off position, and

the carrier left at its elevated point. Now by shifting the switch to point + the carrier would be carried reversely back to its lower position. While I have not shown it, it is manifest that a suitably arranged annunciator or gong may be provided to indicate when the carrier is back to its receiving point.

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

1. A letter elevating device for buildings comprising a chute formed of a horizontal portion having vertical extensions, the upper ends of which terminate in receiving or discharge chutes, said chutes having extensions or bracket portions projected above the inner edges of such open ends pulleys journaled in such brackets one of which has a driveshaft, guide pulleys secured on the outer face of the inner side of the chute, an endless cable extended through the chute over the pulley at the top and over the inside of the guide pulleys, a carrier box secured to the cable and

held for reverse movement in the chute and means for imparting reverse motion to the drive shaft all arranged substantially as shown and described.

2. A letter elevating mechanism for buildings comprising a chute having a horizontal portion terminating at its ends in vertical extensions having open upper ends, pulleys mounted over such ends, one of which has a main drive shaft an endless cable having a carrier box passed through the chute and over the pulleys at the ends, intermediate guides for such cable, a motor connected to the aforesaid drive shaft, and reversing devices arranged adjacent the upper or discharge end of the chute connected with the motor, all arranged substantially as shown and for the purposes described.

BERNARD WALDSTEIN.

Witnesses:

E. L. WHITE,
FRED G. DIETERICH.