

R. HASKINS.
Spring Elevator.

No. 197,362.

Patented Nov. 20, 1877.

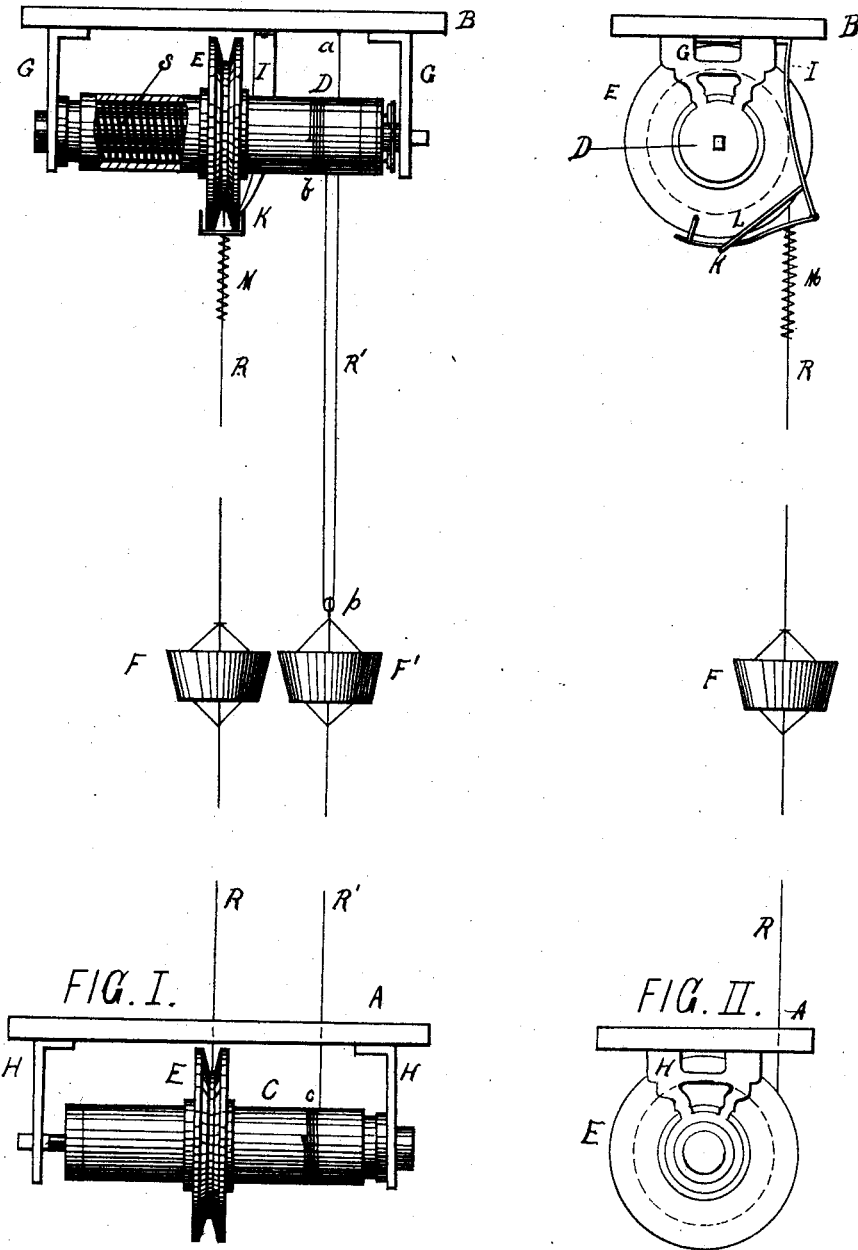


FIG. I.

FIG. II.

WITNESSES,
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UNITED STATES PATENT OFFICE.

RALPH HASKINS, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SPRING-ELEVATORS.

Specification forming part of Letters Patent No. **197,362**, dated November 20, 1877; application filed February 6, 1877.

To all whom it may concern:

Be it known that I, RALPH HASKINS, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Automatic Spring-Elevator, of which the following is a specification:

The object of my invention is to provide a simple and convenient means for elevating small articles from one story to another in buildings. It is designed to be used more especially in private dwellings, and applied in the space at the sides of the stairs, so that it can be readily put up in houses that are already built without necessitating any alterations in the structure.

The invention consists in the employment of a holder or receptacle of any convenient size, attached to a cord which extends upward, and is attached to a pulley on a spring-roller provided with a catch or ratchet, so as to hold the basket or receptacle at any desired height, and attached in any convenient manner to some proper support at the top of or in the upper story. A rope or cord extends from the holder or basket to a spring-roller, which takes up the cord when the holder descends, and is placed or hung in supports underneath the lower floor.

Referring to the drawings, Figure 1 represents a front elevation of my invention, and Fig. 2 is a side elevation of the same.

A represents a floor in the lower part of a building. C is a roller carrying a pulley, E, and is hung in brackets H, or supported in any other convenient manner underneath the floor A. The roller contains a spring, so as to take up the cord R on the pulley E when the holder is depressed.

F is a holder or receptacle of any suitable size for holding the articles required to be carried up or down, and is attached to the cord R above and below. The upper cord is secured to a pulley, E, on a roller, D, hung in bearings suitably attached to some portion of the upper part of the building.

The roller D is provided with a spring, S, and also a stop or ratchet, similar to those used in window-shade rollers, so that the holder or basket F may be retained in position at any desired height.

The cord R, at its upper end, passes through a slotted guide, K, which is hinged to a hanger or support, I, and held in position by a brace,

L, to admit of the free rotation of the pulley. Underneath the hinged guide K is a spring, M, so that, in case the holder or basket F is carried up too high, it will bear against the spring M, so as to cause the guide K to come in contact with the pulley D and act as a brake to prevent it from turning.

My invention may be applied to any part of a building, and made to pass through holes cut in the floors, or it may be inclosed in a tubing of tin, or other suitable inclosure. It may be very readily applied to dwellings already constructed, without the necessity of making any material alterations in the same.

It is very convenient for carrying up or sending down articles from one story to another, which may be effected by any given signal, and thus prevent the necessity of climbing the stairs to ascertain and accomplish an errand, thereby effecting a great saving of time, trouble, and labor.

If desirable, an iron rod or bar may extend up through or at the side of the elevating-holder, to serve as a guide to the same.

A modification of my device is shown in Fig. 1, in which the pulley E is dispensed with. One end of a cord is secured to the roller D. The cord R' passes down and through a pulley, p, which supports the holder F', and thence upward, and is attached at b to a support above or independently of the roller D. Below the holder F' the cord extends downward, and is wound on the spring-roller C, as shown.

I claim as my invention—

1. The combination of the spring-roller D, provided with the pulley E, the cord R, and the holder or receptacle F, as and for the purpose specified.

2. The combination of the spring-roller D, cord R, holder or receptacle F, and the spring-roller C, as and for the purpose set forth.

3. The combination, with the upper roller D, of the hanger I, the brake K, and support L, as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RALPH HASKINS.

Witnesses:

JOS. H. ADAMS,
THOS. J. MAYALL.