

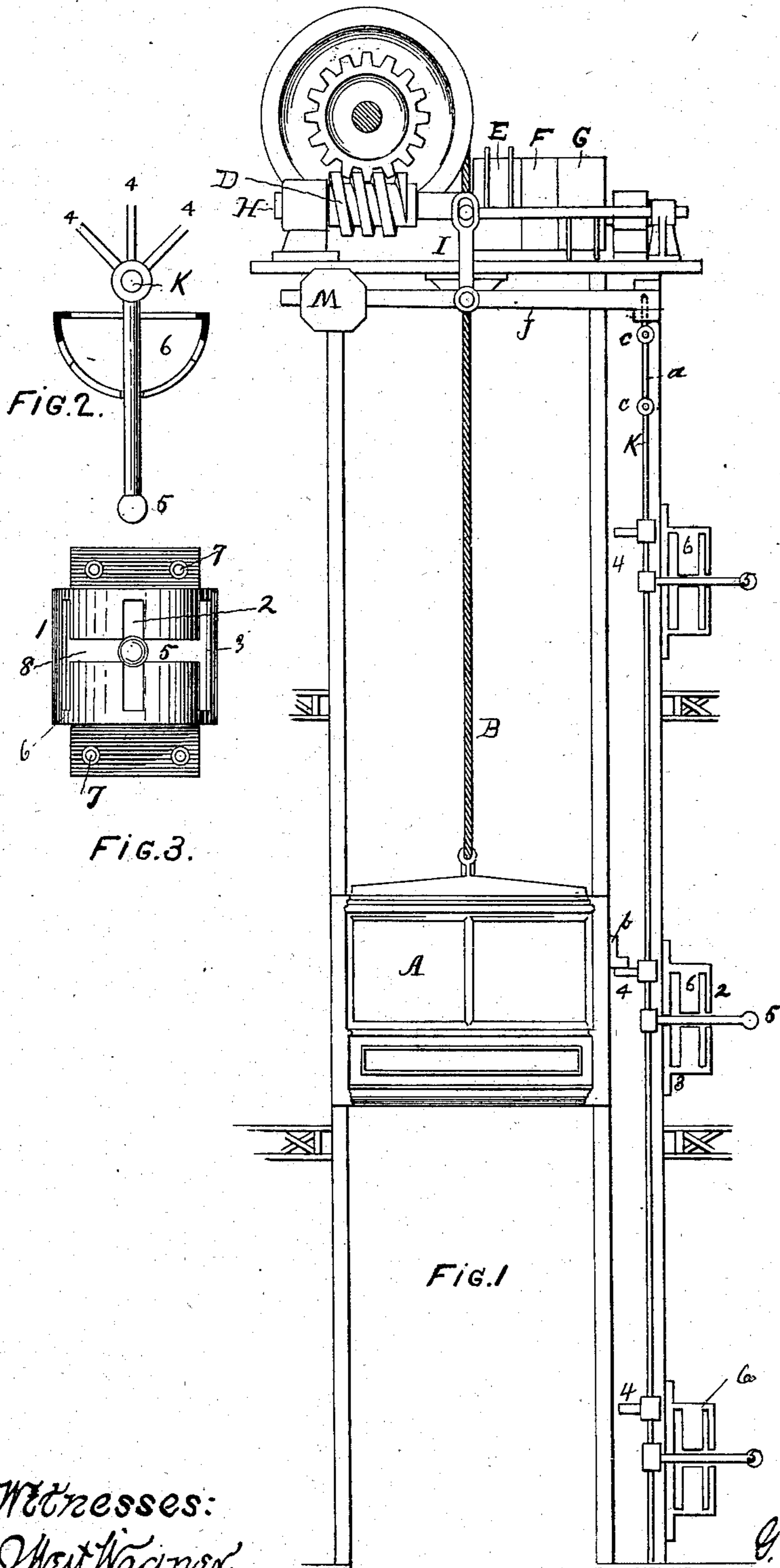
(No Model.)

G. C. TEWKSBURY.

ELEVATOR STOP.

No. 255,050.

Patented Mar. 14, 1882.



Witnesses:
J. West Wagner,
Frank Middleton

Inventor:
G. C. Tewksbury
by Ellis Spear
Attorney

UNITED STATES PATENT OFFICE.

GEORGE C. TEWKSBURY, OF LYNN, MASSACHUSETTS.

ELEVATOR-STOP.

SPECIFICATION forming part of Letters Patent No. 255,050, dated March 14, 1882.

Application filed July 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. TEWKSBURY, a citizen of the United States, residing at Lynn, in the county of Essex and Commonwealth of Massachusetts, have invented a new and useful Improvement in Elevator-Stops, of which the following is a specification.

My invention relates to that class of elevators used in transporting merchandise; and the objects of my improvement are, first, to provide means whereby the ascent or descent of the elevator may be automatically stopped at any given point or apartment between the two extreme ends of its journey; and, secondly, to afford facilities whereby the operator at the place and time of shipping the elevator may determine and fix the point or apartment at which it shall automatically stop. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of an elevator embodying my invention. Fig. 2 is a sectional plan of the stopping mechanism. Fig. 3 is a front elevation of the shipping-indicator.

The elevator-box A, cord B, drum C, worm D, pulleys E F G, shaft H, and shipping-levers I J are all constructed and combined to operate in the usual manner.

Connected with the lever J is a vertical rod, K, which extends the entire length of the elevator-well, and by this means communication with the driving-belts attached to the pulleys E F G may be had at any and every point throughout the entire journey of the elevator. Said rod K slides in suitable bearings secured to the walls of the building, and is swiveled to the lever J, so as to admit of the rotary movement hereinafter described. A movement of the rod K upward or downward changes the position of the belts upon the pulleys E F G, and in this manner the elevator is set in motion or the movement thereof is arrested whenever occasion requires. To avoid binding, the rod K is provided with a link, a, and joints c. The weight of the rod K is balanced by counter-weight M, arranged upon lever J.

Attached to the elevator-box A is a dog, b, which, by coming in contact with the pin 4, moves the rod K up or down, according to the movement of the said elevator-box, and in this manner the driving-belts are shifted off the

pulley F onto pulleys E G, whereupon the elevator stops.

Pins 4 are arranged at different points upon the rod K, one at each floor or apartment by which the elevator passes, and whenever the elevator is to be stopped at a given apartment the pin at that point has only to be arranged in direct line with the dog b.

Upon the rod K are handles 5, arranged one at each apartment, by which the elevator passes, and by grasping this handle the operator (in order to set the elevator in motion) has only to slide the rod K up or down. By moving the handle horizontally he may turn the rod K so as to bring the pin of any particular apartment into line with the dog b, thus insuring a cessation of movement whenever the elevator reaches that point.

Each of the handles 5 is provided with an indicator, which consists of a semicircular case, 6, secured to the wall of the building by means of screws 7, and perforated with slots 1 2 3, as shown in Fig. 3. A horizontal slot, 8, enables the handle 5 to be brought into communication with each of the slots 1 2 3. The number of vertical slots 1 2 3 are made to correspond with the number of apartments or points at which it is desired the elevator should be allowed to stop.

The pins 4 upon the rod K are numbered to correspond with the vertical slots upon the indicator, and each pin is arranged upon the rod K so that when the handle 5 is in a given slot of the indicator, which brings the pin of that station or floor into line with the dog b, the pin whose number corresponds with the number of that slot is at that moment in direct line with the dog b.

From the foregoing it must be evident that if the operator desires the elevator to stop at a given point—for example, at the second story—he has only to turn the handle 5 into line with the slot which bears that number upon the indicator, and then push the rod K up or down, according to the direction in which he desires the elevator should go, and when the elevator reaches the given point the dog b, operating upon the pin at that point, will move the rod, shift the belts to the loose pulleys, and stop the elevator. This may be done at any floor or station for any other floor or station, so that

a person on any floor can send the box to any other floor and cause it to stop there until moved to some other.

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

1. In combination with an elevator, a shifting device adapted to change the direction of the box, or to arrest the same, and an auto-
10 matic stop mechanism adapted to be set for any given station or floor and to be acted on by the box to arrest the same when it reaches that point, all substantially as described.

2. The combination of the lever I J, pivoted
15 as shown, the pulleys E F G, and the intermediate belt-shifting devices, the vertically-

sliding rod K, and the handles 5 5 5, arranged at different points on the shaft and provided with suitable locking mechanisms, substantially as described. 20

3. In combination with a connecting-rod, K, provided with handles 5, and suitable projecting pins, 4, an indicator, substantially as set forth, whereby the position of said pins may be regulated, as and for the purposes described. 25

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

GEO. C. TEWKSBURY.

Witnesses:

C. B. TUTTLE,

GEO. E. GOODING.