

(No Model.)

2 Sheets—Sheet 1.

J. N. STRONG.
INDICATOR FOR ELEVATORS.

No. 567,012.

Patented Sept. 1, 1896.

Fig. 1.

Fig. 2.

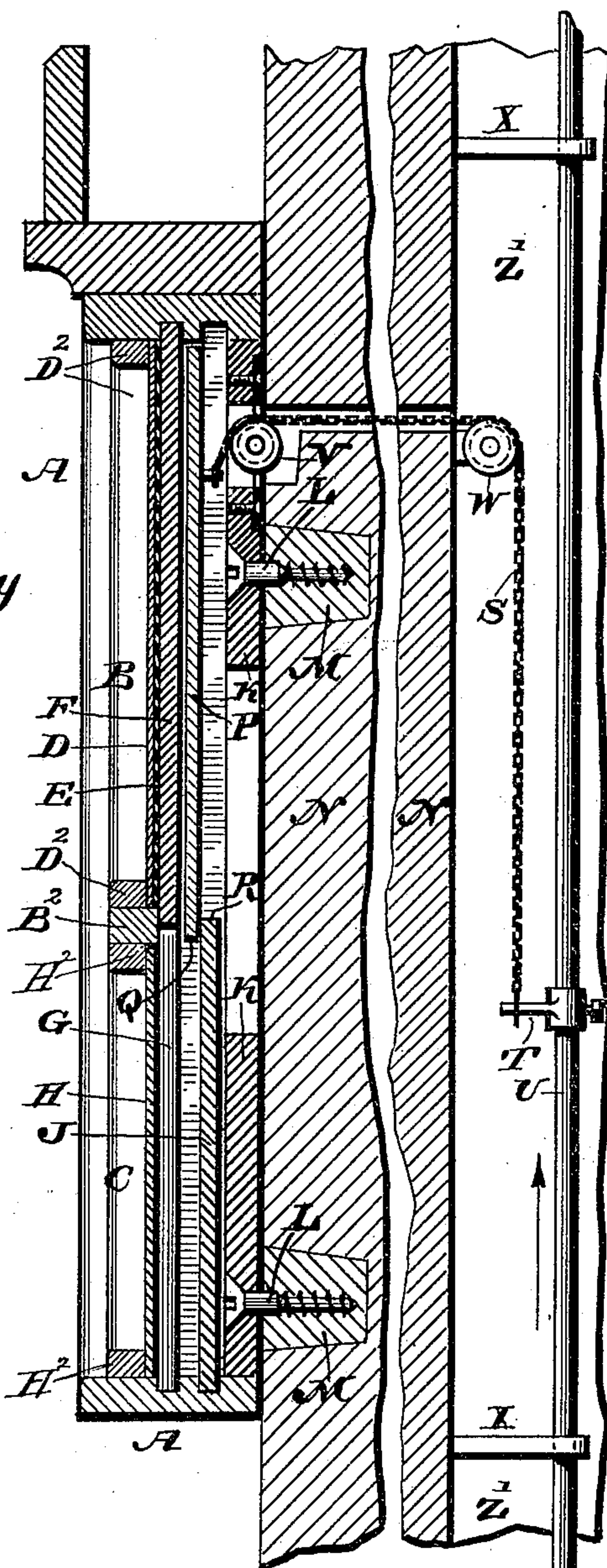
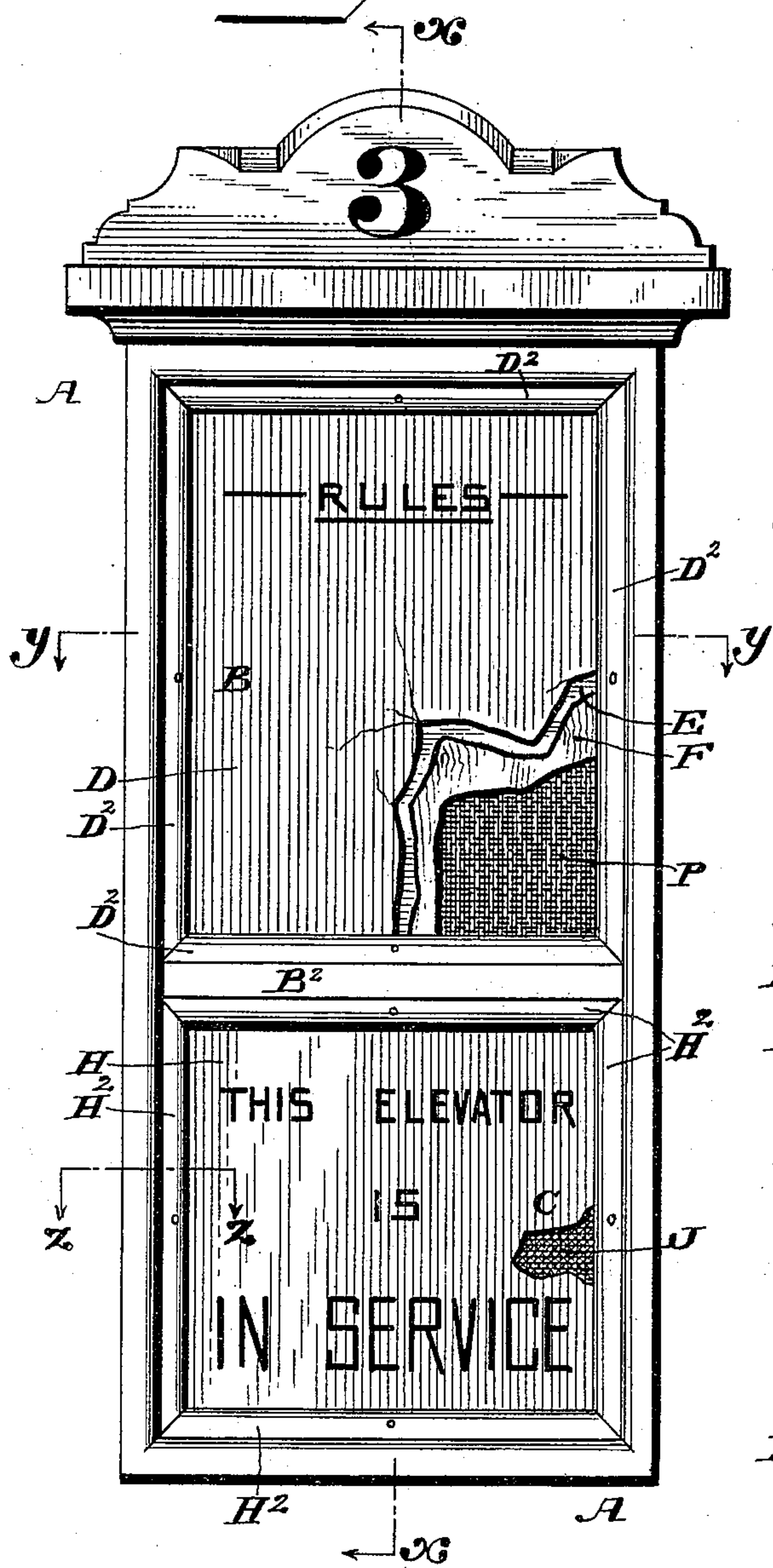
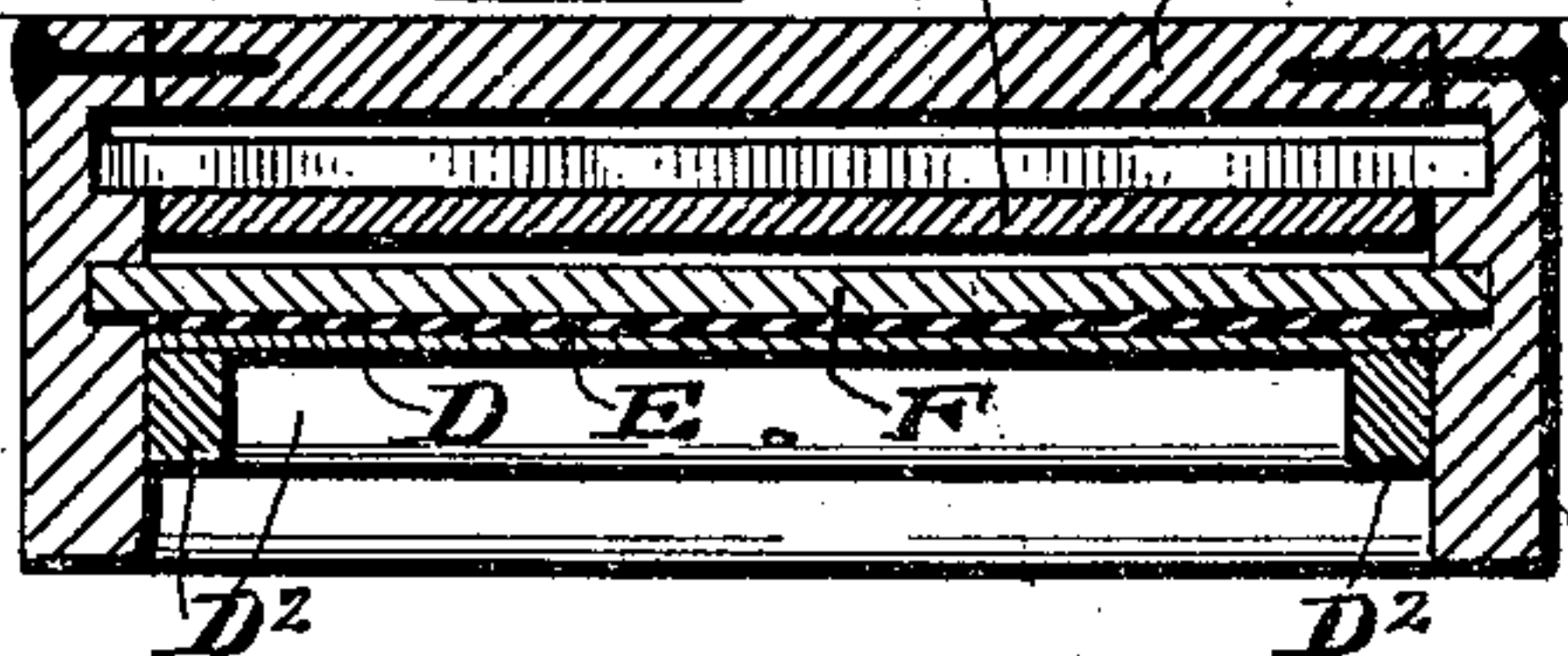


Fig. 3.

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E. H. Gaubert.



INVENTOR.

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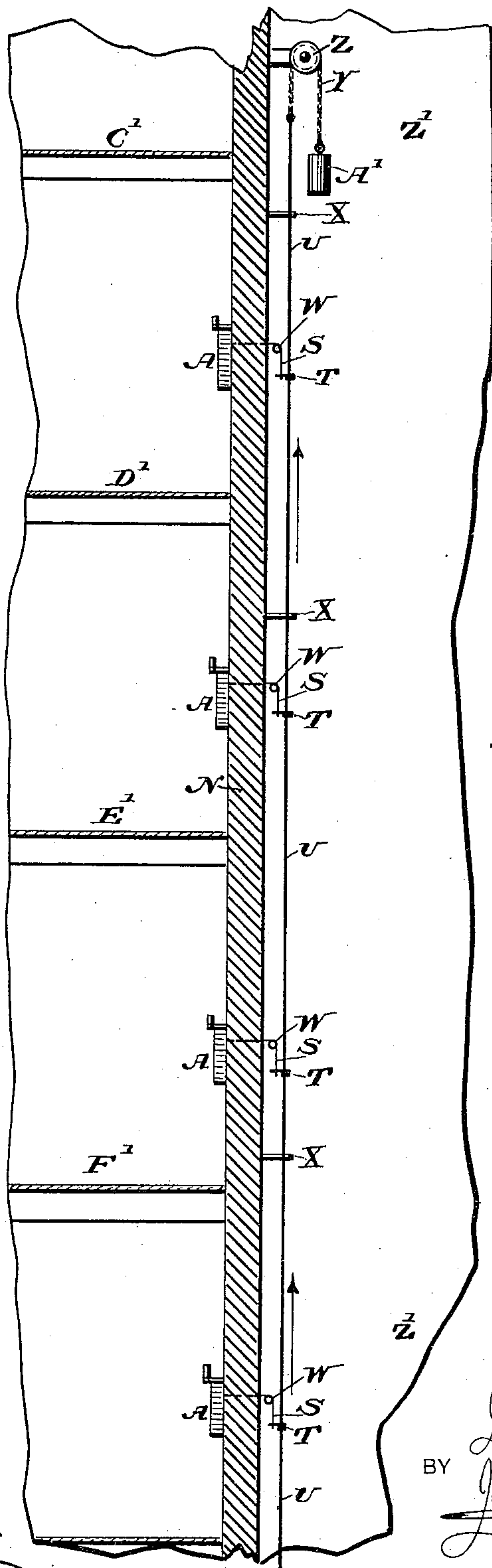
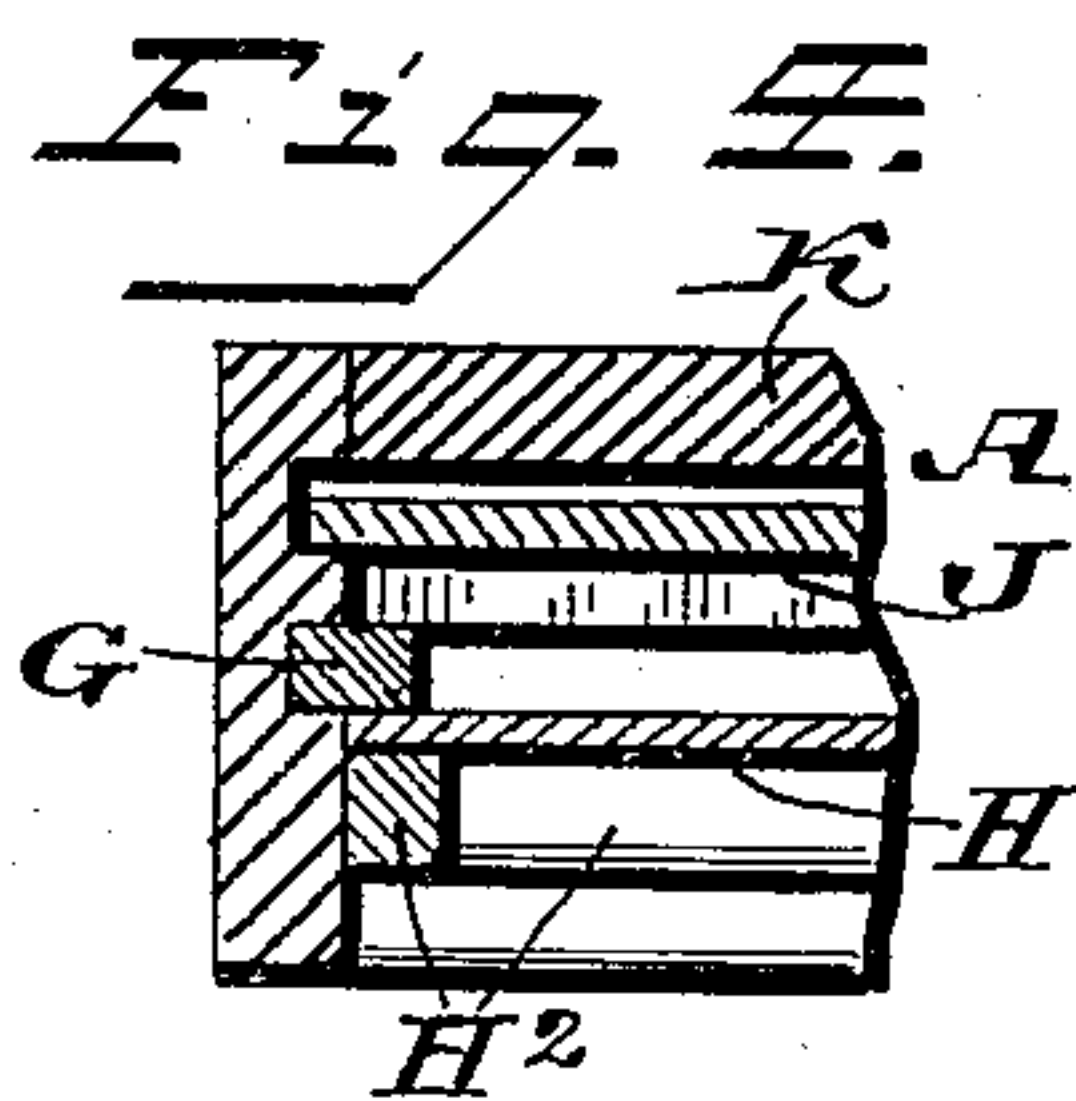


Fig. 5.

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UNITED STATES PATENT OFFICE.

JOHN N. STRONG, OF PHILADELPHIA, PENNSYLVANIA.

INDICATOR FOR ELEVATORS.

SPECIFICATION forming part of Letters Patent No. 567,012, dated September 1, 1896.

Application filed September 12, 1895. Serial No. 562,238. (No model.)

To all whom it may concern:

Be it known that I, JOHN N. STRONG, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Indicators for Elevators, which improvement is fully set forth in the following specification and accompanying drawings.

My invention has for its object the simultaneously operating of a series of indicators for an elevator from a given point; and to this end it consists of the novel construction of mechanism whereby an attendant can cause to be indicated simultaneously upon every floor, when desired, the fact that the elevator is not in service, and by another movement indicate upon each floor that the elevator is in service.

The invention further consists of novel details of construction, all as will be hereinafter set forth.

Figure 1 represents a front elevation of an elevator service-indicator embodying my invention, a portion of the same being broken away to show its construction. Fig. 2 represents a vertical section of the same on line *xx*, Fig. 1. Fig. 3 represents a section on line *yy*, Fig. 1. Fig. 4 represents a section on line *zz*, Fig. 1. Fig. 5 represents a diagrammatic view showing the application of my invention to an elevator system and showing the manner of operating the same.

Similar letters of reference indicate corresponding parts in the several figures.

As the construction of each individual indicator is substantially the same, a description of one will suffice for all, reference being first to Figs. 1 and 2, in which A designates the indicator of an elevator, the same being divided into the upper and lower compartments B and C. The said upper portion B has secured therein and resting upon the ledge B² a pane of glass D, which is held in position by means of the strips D², behind which is located the card E, on which may be printed the instructions or rules guiding the signaling or operation of the elevator.

F designates a backing which is supported upon the upright strips G, whose location will be readily understood from Figs. 2 and 4, said strips G serving in connection with the strips

H² to hold in position the pieces of transparent material H.

J designates a card which may be fixedly secured behind said glass H, said card J having printed thereon in the present instance the words "This elevator is in service," as seen in Fig. 1, said card being adapted to rest normally against the back K of the indicator-casing, through which passes the screws L or similar devices, which are adapted to enter a wooden plug M, which may be inserted in the plaster or wall N, thereby affording a convenient means for holding the indicator in position.

P designates a second indicator-card, which has printed thereupon the fact that the elevator is disabled or is not in service, which inscription thereon may be "This elevator is not in service," if desired, it being especially noted that the lower end Q of said car P extends, when the latter is in its highest position, a short distance below and in front of the upper end R of the stationary card J, as will be understood from Fig. 2, whereupon it will be seen that any improper displacement of the card P will always be prevented, and that when the same descends it will always tend to slide in front of said card J, upon which is printed the fact that the elevator is in service.

S designates a chain or other flexible connection which has one end attached to a suitable portion of the card P, while its other end is secured to the arm T, which is mounted upon the upright rod U, said chain S passing over the pulley V, which may be journaled in the back K of the indicator, and also over the pulley W, which may be journaled to any convenient support.

X designates guides which are attached to any suitable fixed point and which serve to guide the rod U as the same ascends and descends.

Y designates a flexible connection which has one end attached to the upper extremity of said rod U and passes over the pulley Z, which is journaled in any convenient support in the upper portion of the elevator well or shaft Z', the other extremity of said connection Y having a counterbalance A' connected thereto, which, it will be understood,

is to be of substantially the same weight as the rod U, so that the same will remain in whatever position it may be placed.

In the diagrammatic view shown in Fig. 5 the application of my invention will be understood, the different floors or landings being indicated at C', D', E', and F', &c., while the location of the several indicators A will also be understood, one indicator being supplied for each floor, as is usual, and each indicator having a connection S, extending therefrom to the arms T, which are attached to said upright rod U.

The operation is as follows: The parts in their normal position appear as in Figs. 1 and 2, the card J indicating that the elevator is in service. If now by reason of any cause there should be a stoppage of the elevator, and it should be desired to indicate that the latter is not in service, it is only necessary that the attendant from any floor in the building raise the rod U in the direction of the arrows, thereby slackening the chains S, this allowing the cards P, one of which is attached to each chain and is located within each indicator, to descend in front of the card J, it being remembered that said card P has the inscription thereon "This elevator is not in service." The counterbalance A' will cause the rod U to remain in the desired position wherever it may be left, and when the elevator is once more in service it is only necessary for the attendant to pull on the rod U, this drawing up the cards P into the position shown in Fig. 2 again and allowing the inscription on the card J to appear, stating "This elevator is in service." If it should be desired for any reason to obtain access to the interior of the indicator, it will only be necessary to remove the strips H², after which the glass H can be removed and the card J,

if desired, after which by taking out the upright strips G the back F can be pulled downwardly and thereafter removed, after which the card E, having the rules and instructions thereon, and the glass D, access being also had to the card P, upon which is printed the fact that the elevator is not in service, as has been stated, the above thus affording a ready means for obtaining access to the interior of the indicator when desired, without dismantling the same or removing the sides thereof.

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

1. A device of the character described having a casing, a normally-visible stationary notice in said casing, a movable notice normally concealed in said casing and having a portion of itself normally in front of said stationary notice, and a counterbalance connected by flexible means with said movable notice, said parts being combined substantially as described.

2. In a device of the character described, a series of indicators, each having a normally-visible stationary notice, and a movable notice normally concealed but adapted to be moved in front of said stationary notice, and a counterbalanced rod, having flexible connections with said movable notices, said parts being combined substantially as described.

3. In an elevator service-indicator, a casing, a shelf B², a board or back F, removable supports G therefor, a pane of glass H, strips H² for holding the same in position, a stationary notice J, and a movable notice P, said parts being combined substantially as described.

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Witnesses:

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