

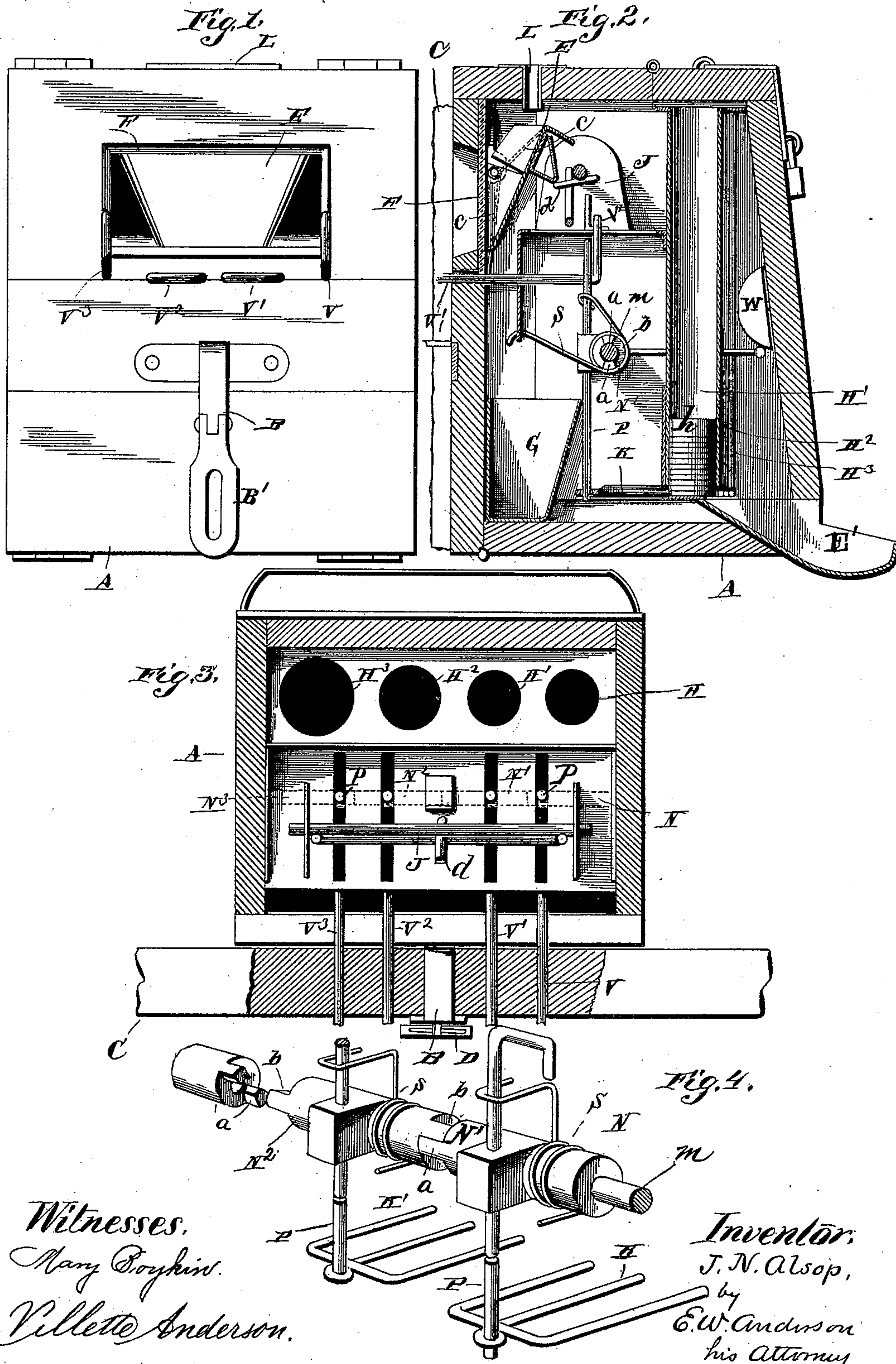
(No Model.)

2 Sheets—Sheet 1.

J. N. ALSOP.
MONEY CHANGING MACHINE.

No. 420,896.

Patented Feb. 4, 1890.



(No Model.)

2 Sheets—Sheet 2.

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Fig. 5.

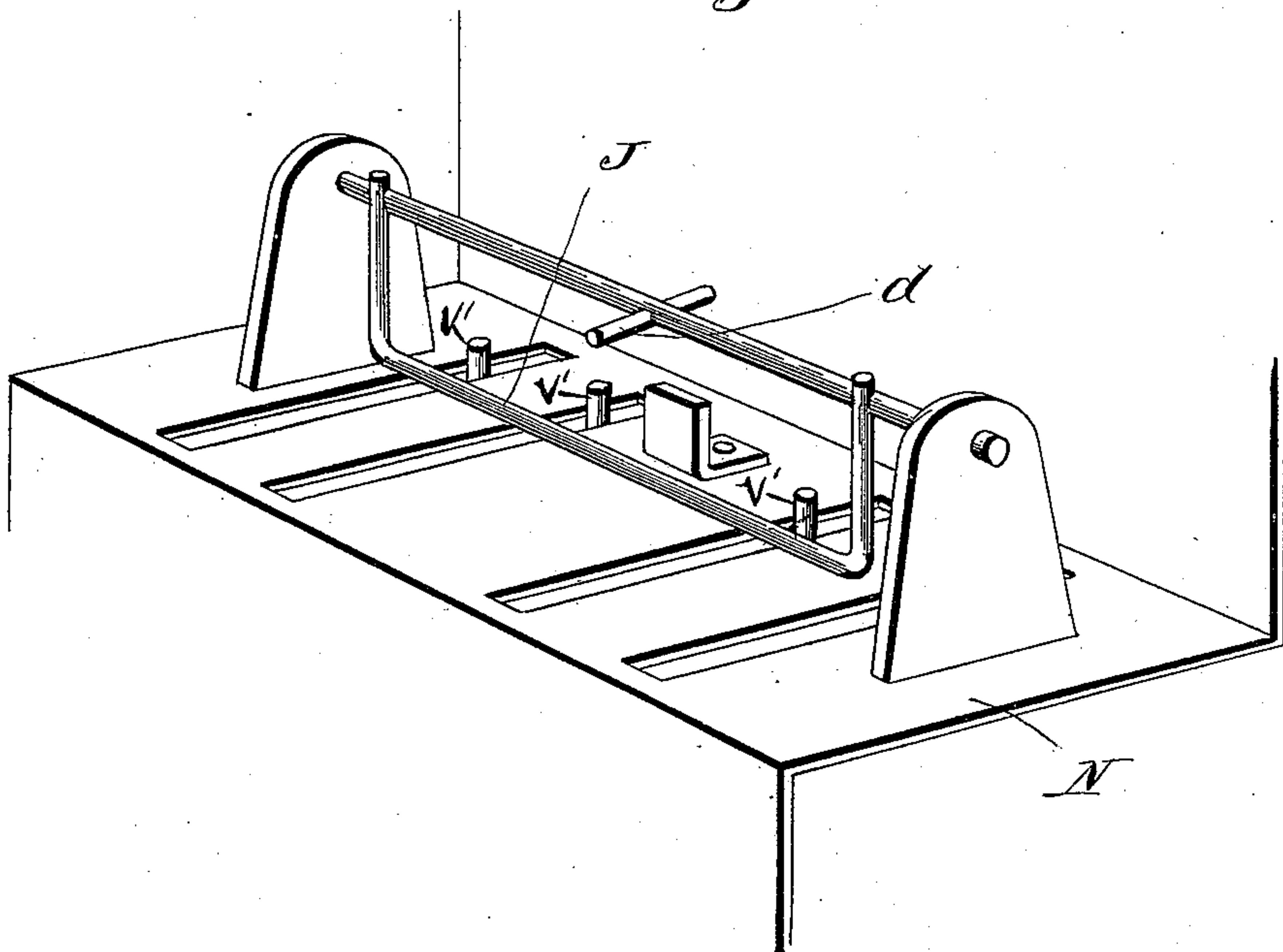
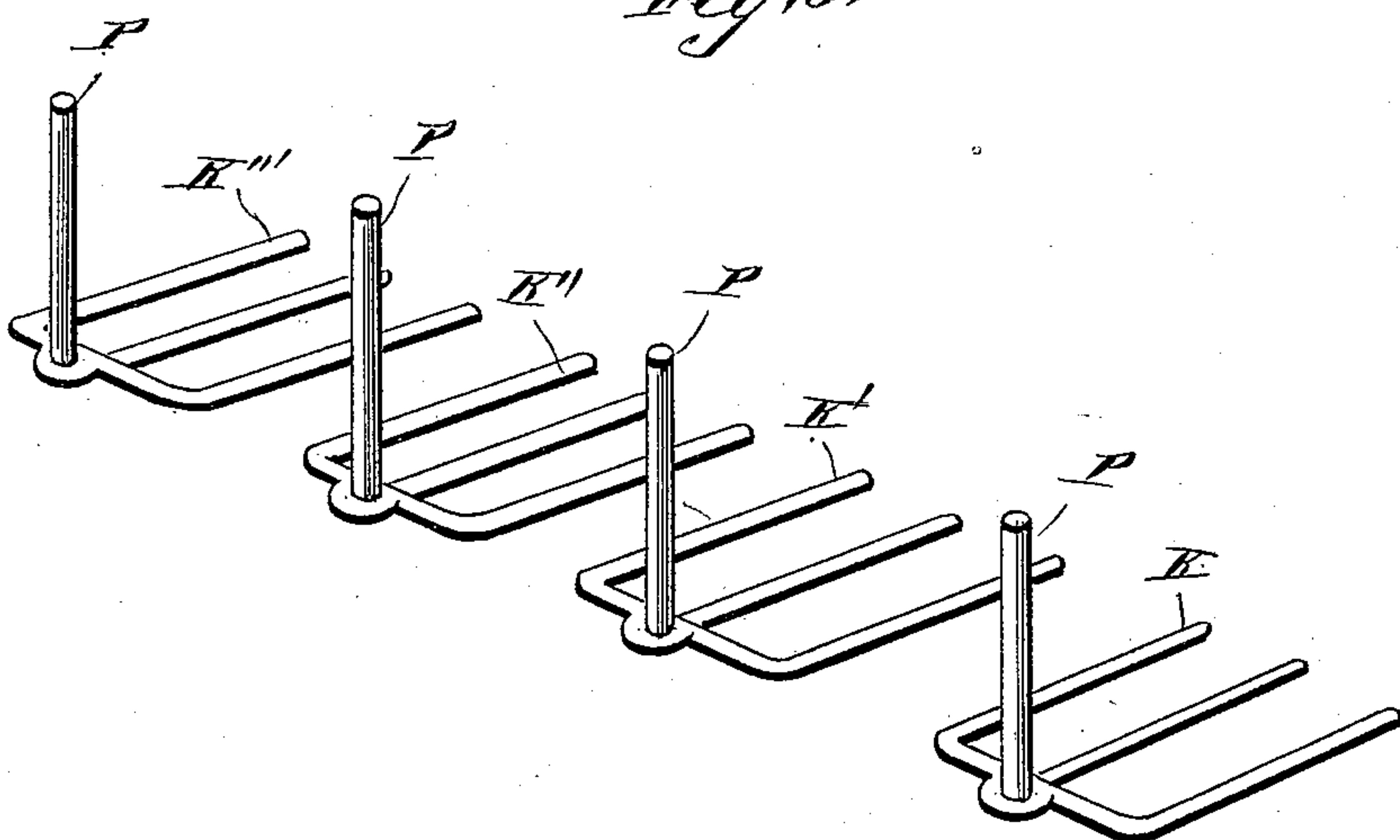


Fig. 6.



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UNITED STATES PATENT OFFICE.

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TO JOHN GILMOUR, OF SAME PLACE.

MONEY-CHANGING MACHINE.

SPECIFICATION forming part of Letters Patent No. 420,896, dated February 4, 1890.

Application filed March 7, 1889. Serial No. 302,363. (No model.)

To all whom it may concern:

Be it known that I, JAMES N. ALSOP, a citizen of the United States, and a resident of Owensborough, in the county of Daviess and State of Kentucky, have invented certain new and useful Improvements in Money-Changing Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a rear view of the machine. Fig. 2 is a vertical transverse section of the same. Fig. 3 is a horizontal section, and Figs. 4, 5, and 6 are enlarged detailed perspective views thereof.

The invention has relation to money-changing machines; and it consists in the novel construction and combinations of devices as hereinafter set forth.

In the accompanying drawings I have illustrated the invention in its application to a money-changer for use by the driver of a street-car.

The letter A designates a box or incasement, which may be portable or may be permanently secured in position. The portable form is preferred usually, as the driver is enabled to unfasten the box from its place and take it away with him when he finds it necessary so to do. To this end the box is usually provided with a holding hook or arm B, adapted to engage an opening of the door or partition C, and in connection therewith a lock-fastening B' is employed.

The case A is provided in front with the change-delivery hopper E, and in rear with the sight-glass F and the movable receiving-hopper G. In the front portion of the case are the charging-tubes H H' H² H³, which are cylindrical, and in which are placed series of coins in columnar arrangement, the tubes H and H' holding five-cent pieces or nickels, the tube H² holding quarters of a dollar, and the tube H³ holding half-dollars. In the bases of the tubes are the slides K K', which are designed, respectively, to move out from each column of coin the lowest coin or coins there-

in, so that said coin or coins will fall into the delivery-hopper E' below, whereby they are presented to the passenger, who has deposited the coin for which he wishes change in the opening at L above. To this end, for street-car use in nearly all cities and towns of this country, the slide K is made of sufficient thickness to span two nickels, the slide K' of the thickness to span three nickels, the slide K'' of the thickness of a quarter, and the slide K''' of the thickness of a half of a dollar. The slide K is therefore capable of delivering two nickels or change for a dime; the slides K and K' are capable of delivering five nickels, or change for a quarter; the slides K, K', and K'' are designed to deliver five nickels and a quarter, which is the change for half dollar, and the slides K, K', K'', and K''' will deliver five nickels, a quarter, and a half-dollar, which is the change for a dollar. Back of the tubes is a transverse shaft m, on which are the cylinder-hubs N N' N² N³, to which are joined the levers P, which are connected to the coin-delivery slides, said hubs having springs S, whereby they are brought back to normal position after operation by the keys V V' V² V³, respectively. These keys engage the upper ends of the levers P.

The cylinder-hubs are arranged in succession upon the shaft m, and each hub is provided at its end with a projection or stud a, which engages a notch b on the end of the adjacent hub, said notch being long enough to allow the first lever to work without operating the second; but when the second, third, or fourth levers are operated the engagement of the hub-cylinders causes a simultaneous movement, respectively, of the first and second levers, the first, second, and third levers, or the first, second, third, and fourth levers. The first key V, therefore, is operated by the driver to give change for a dime, the second to give change for a quarter, the third in the case of a half-dollar, and the fourth in changing a dollar, this operation at the same time discharging the money paid by the passenger into the receiving-hopper E. To this end the receiving-hopper E, which has an inclined ledge, is pivoted, and is provided with a spring c, which is held up against the sight-glass or a stop-plate, the sight-glass performing the

office of a stop-plate in the construction shown.

J is a bail-lever having an arm *d* engaging the inclined hopper E.

5 The keys above described have upward-turned ends or arms, which are designed, when said keys are operated, to engage the lever J and draw the hopper E away from the glass or stop-plate, allowing the money
10 thereon to fall into the receiver G below.

When the money is put into the receiving-hopper E through the aperture above the same by the passenger, the driver notices the value of the coin deposited and operates the
15 proper key to give change therefor. This operation discharges the money at the sight-glass into the receiver below, and at the same time delivers the proper change into the hopper in front for the use of the passenger.

20 In order to prevent the machine from delivering incomplete change, each tube is provided with a stop-piece *h*, which is of greater thickness than the number of the coins to be delivered therefrom. This stop-piece is
25 placed in the tube on the top of the column of coins, and as the coins are discharged from the bottom said stop-piece descends. If there should remain in either tube no coin, or a less number than are normally required to be dis-
30 charged therefrom in making change, the machine will not operate.

As the levers which operate the slides engage only in one direction, the amount of coin delivered in change is determined by the po-
35 sition of the lever or its key.

In the incasement is arranged an alarm-bell W, which is operated whenever the key V is moved in making change, and in this manner a guard is provided to call the attention of
40 the driver should there be any attempt to operate the box by any unauthorized person.

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

45 1. A money-changing machine consisting of a closed box or incasement having in front the coin-holding tubes and delivering-hopper

and in rear a sight-glass and movable receiving-hopper, the coin-discharging slides, their keys, and the levers, said levers having up- 50 per hooked ends engaged by said keys, substantially as specified.

2. In a money-changing machine, the combination, with the closed box or incasement having a sight-glass in rear and a movable 55 receiving-hopper within said box at said sight-glass, the rear keys, their levers, and the coin-discharging slides, of the front coin-tubes and the delivery-hopper of the same, and the bail-lever having a transverse pin engaging said 60 receiving-hopper, said keys engaging said levers and said bail-lever, substantially as specified.

3. A portable money-changing machine consisting of a closed case having receiving and 65 delivering hoppers, coin-tubes within said box, the slides thereof, their levers operating as described and having upper hooked ends, the keys on the opposite side of the box from the delivery-hopper, having upturned ends 70 engaging the hooked ends of said levers, the bail-lever having a transverse pin engaging said receiving-hopper, said bail-lever being engaged by the upturned ends of said keys, and the attachment devices whereby the box 75 or case may be secured in position for use, substantially as specified.

4. In a money-changing machine, the combination of the closure, the coin-tubes, the dis- 80 charging-slides, the shaft supported in the closure, the series of hubs arranged to turn upon said shaft and having engaging projections and notches on their ends, the levers connected one to each of the said hubs and having upper hooked ends, springs applied to 85 said hubs and bearing against said levers, and the keys having their inner ends engaging said levers, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES N. ALSOP.

Witnesses:

VILLETTE ANDERSON,
MARY BOYKIN.