

No. 743,750.

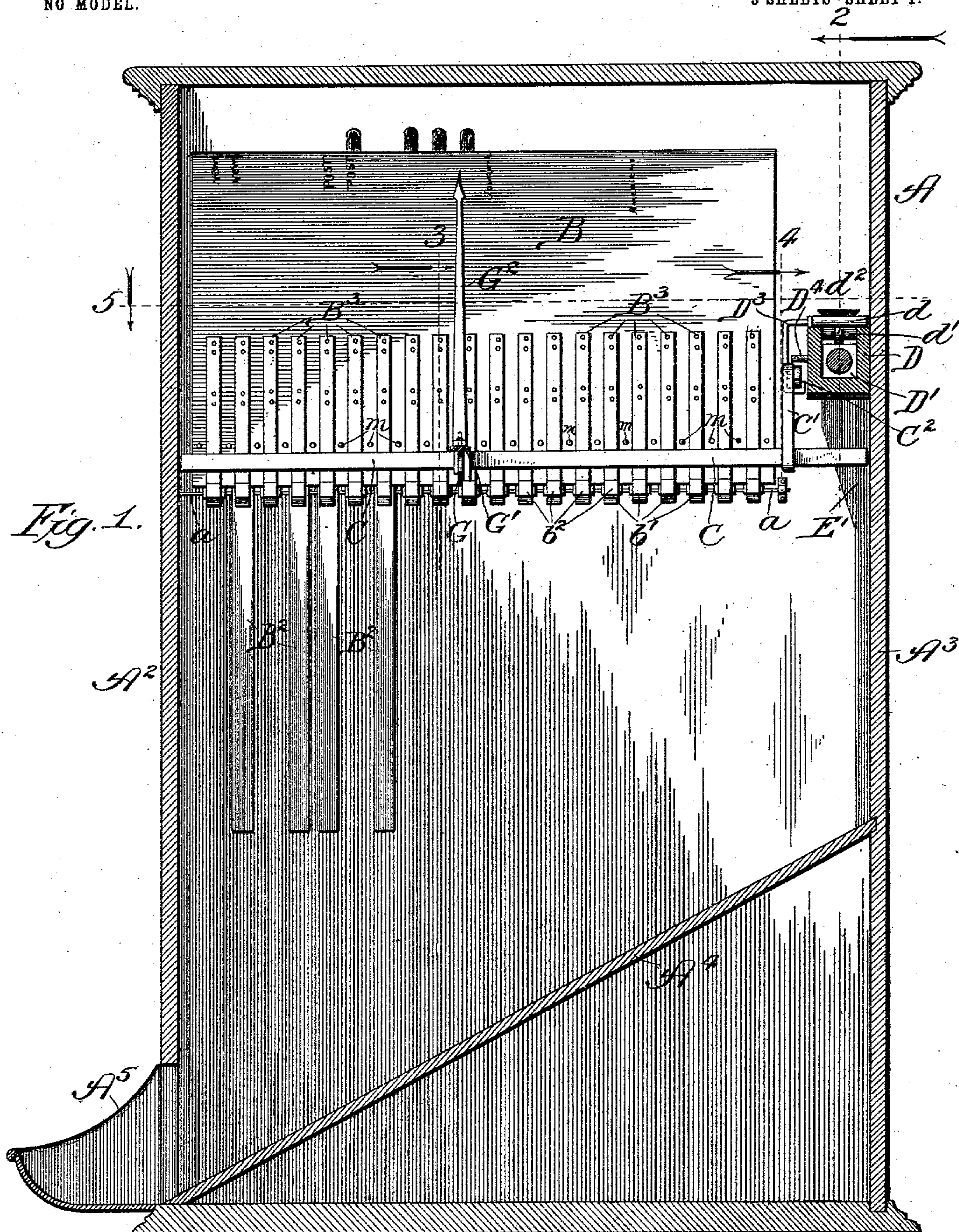
PATENTED NOV. 10, 1903.

L. PEDERSEN.  
VENDING MACHINE.

APPLICATION FILED NOV. 15, 1902.

NO MODEL.

3 SHEETS—SHEET 1.



Witnesses:

Edw Lloyd  
Jes C. Larson

Inventor:

Lauritz Pedersen.

By Dyrenforth, Dyrenforth & Lee

Att'y Gen.







No. 743,750.

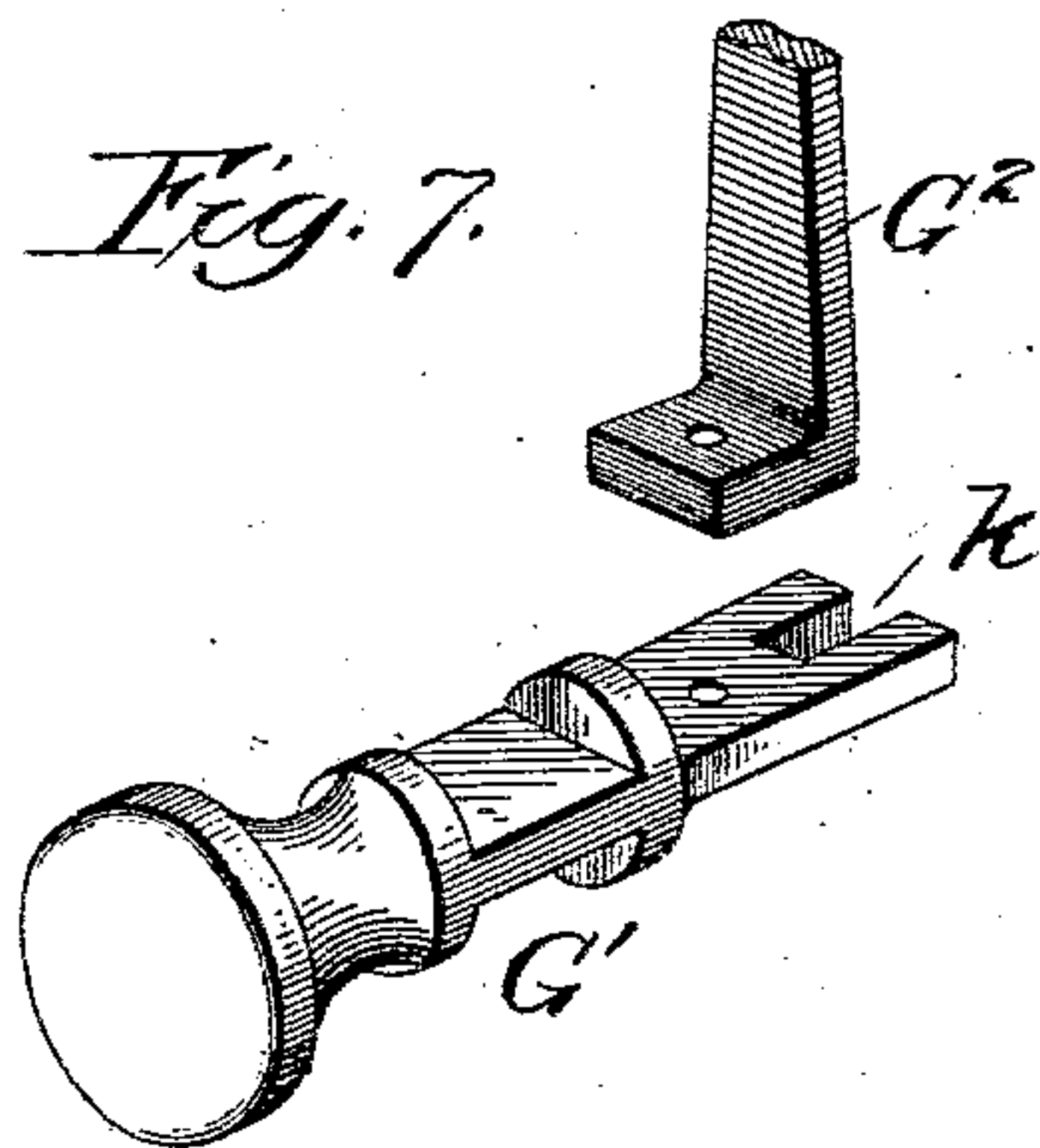
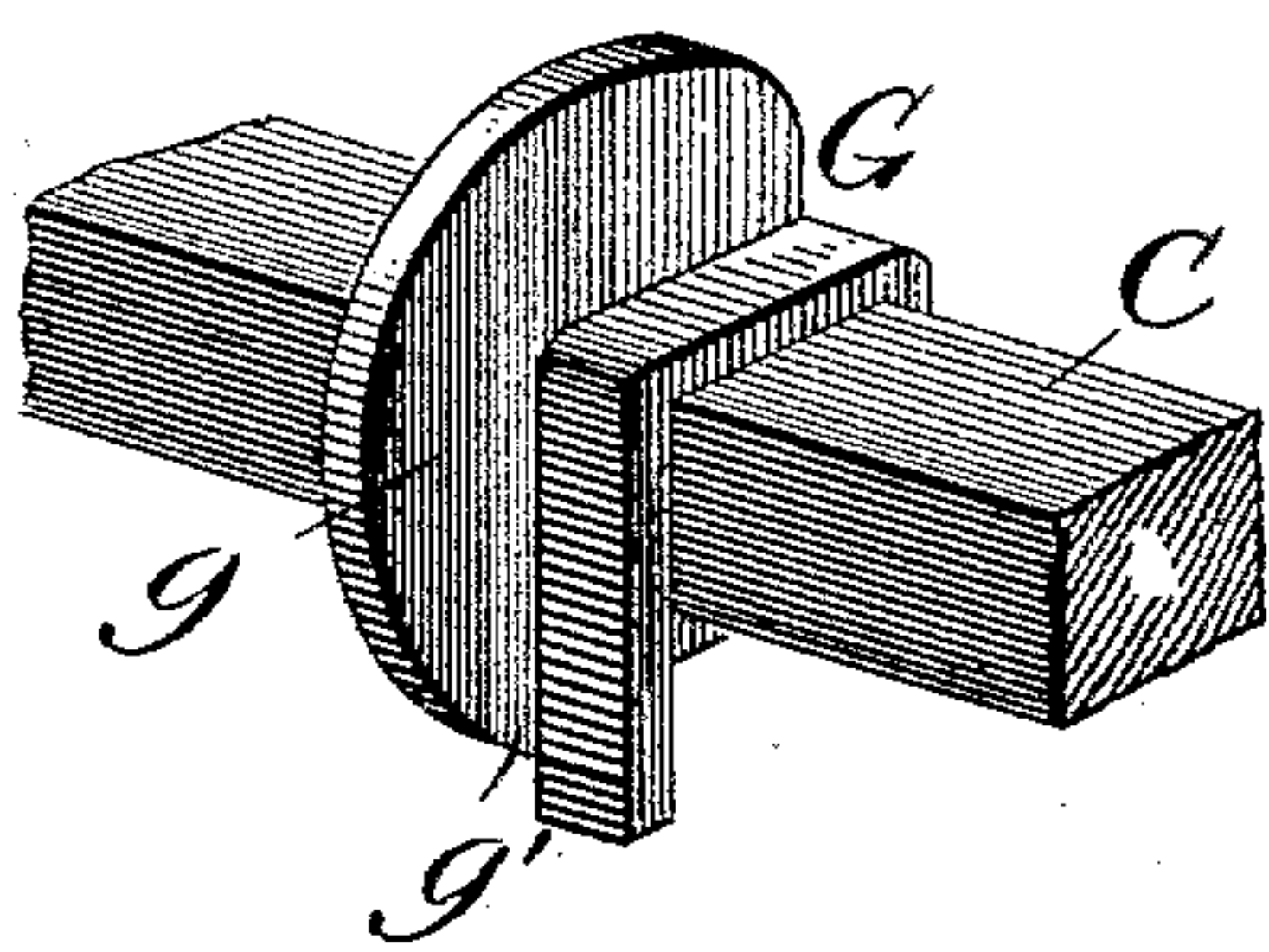
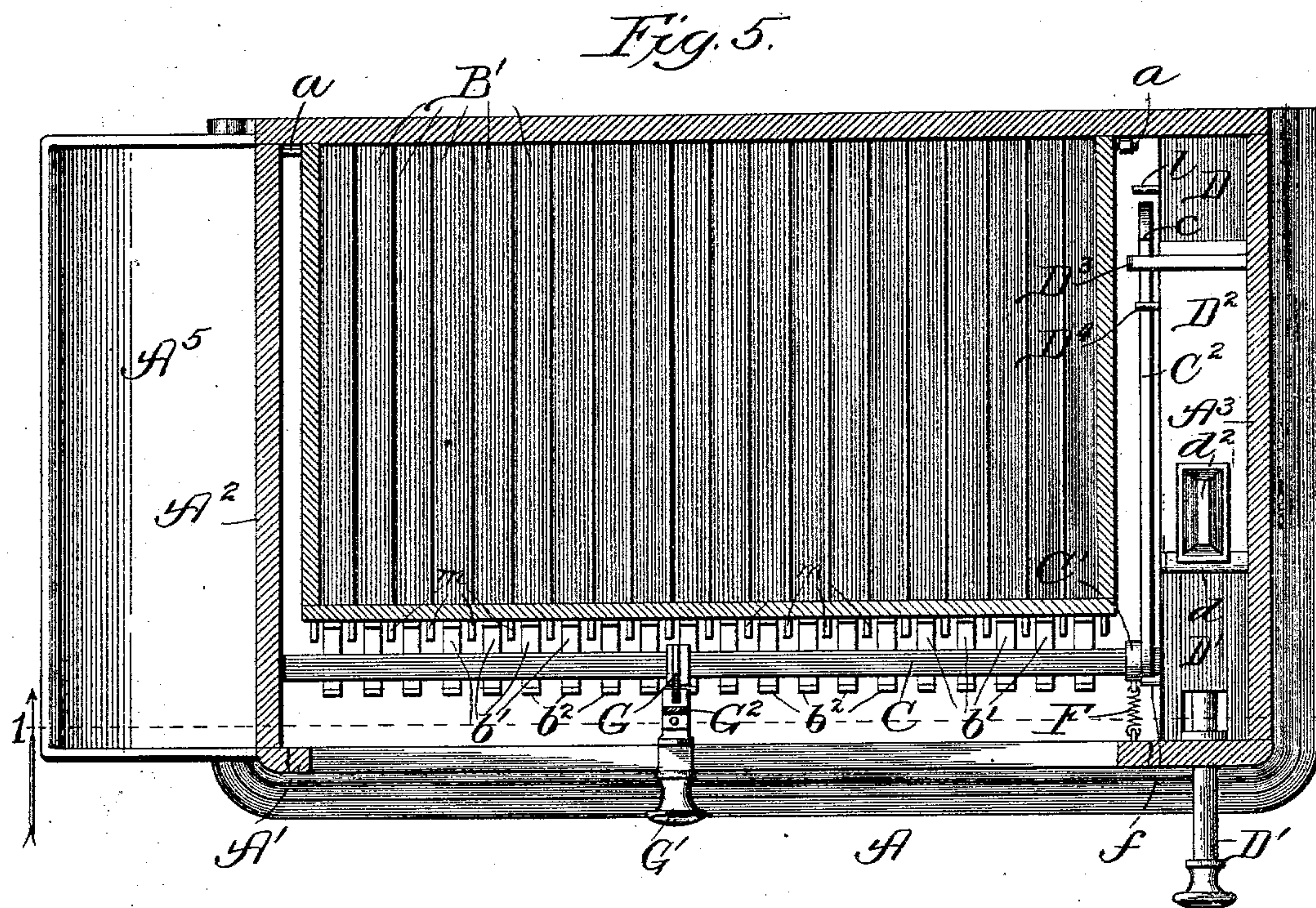
PATENTED NOV. 10, 1903.

L. PEDERSEN.  
VENDING MACHINE.

APPLICATION FILED NOV. 15, 1902.

NO MODEL.

3 SHEETS—SHEET 3.



Witnesses:  
 East. J. Gaylord.  
 Geo. C. Brown.

Inventor:  
Laurits Pedersen,  
By Dyrenforth, Dyrenforth and Lee,  
Att'ys.



# UNITED STATES PATENT OFFICE.

LAURITS PEDERSEN, OF CHICAGO, ILLINOIS.

## VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 743,750, dated November 10, 1903.

Application filed November 15, 1902. Serial No. 131,530. (No model.)

*To all whom it may concern:*

Be it known that I, LAURITS PEDERSEN, a subject of the King of Denmark, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Vending-Machines, of which the following is a specification.

My invention relates particularly to coin-controlled vending-machines adapted for use in the sale of newspapers or other articles or packages of merchandise.

My primary object is to provide a machine capable of vending or dispensing articles of different kinds or descriptions—such, for instance, as different newspapers—with the employment of a single coin-controlled mechanism.

In the accompanying drawings the invention is shown embodied in a machine for vending newspapers or the like, the machine comprising in this form a series of vertical compartments equipped with independent bottoms sustained by spring-catches, a rock-shaft extending parallel with the front of the casing, a slide upon said rock-shaft adapted to serve in the withdrawal of any one of the series of catches at will, a pointer with which said slide is connected and which serves to indicate the position of the slide with reference to any particular compartment of the paper-receptacle, and coin-controlled mechanism for operating the rock-shaft after the slide has been preparatorily set by the purchaser.

In the drawings, Figure 1 represents a vertical sectional view taken parallel with the front of the casing, as indicated at line 1 of Fig. 5; Fig. 2, a broken sectional view taken parallel to one end of the casing, as indicated at line 2 of Fig. 1; Figs. 3 and 4, broken sectional views taken as indicated at the corresponding lines of Fig. 1; Fig. 5, a horizontal section taken as indicated at line 5 of Fig. 1; and Figs. 6 and 7, broken perspective views of the rock-shaft, slide, pointer, and pointer-actuating handle.

The preferred construction is as follows: A represents a casing having a front  $A'$ , sides  $A^2$   $A^3$ , and a transversely-inclined delivery-plate  $A^4$ , terminating at a ledge or trough  $A^5$ ; B, a commodity-receptacle provided with a

series of vertical chambers  $B'$ , perpendicular to the front of the casing and having their lower ends closed by a series of bottom plates or article-supports  $B^2$ , secured at their rear ends to a longitudinally-extending pivotal wire  $a$ , suitably supported by the casing;  $B^3$ , a series of spring catches or retainers secured to the front wall of the commodity-receptacle and provided at their lower ends with shoulders  $b$ , upon which the free ends of the plates  $B^2$  rest, and provided adjacent thereto with forwardly-extending arms  $b'$ , terminating in upturned extremities  $b^2$ ; C, a rock-shaft of square cross-section extending parallel with the front of the casing and suitably journaled in the casing ends;  $C'$ , an actuating-arm rigidly connected with the rock-shaft at one end thereof;  $C^2$ , a link pivotally connected at its front end with the free end of the arm  $C'$  and provided at its rear end with a shoulder  $c$ ; D, a horizontally-disposed plunger tube or guide lying adjacent to the right-hand end of the casing;  $D'$ , a coin-actuating plunger provided with a recess or slot for receiving a coin;  $D^2$ , a coin-actuated member pivotally secured at  $d$  and provided on its under surface with an inclined shoulder  $d'$ , with which the coin engages, said member  $D^2$  being provided with a coin-slot  $d^2$ , located above the slot in the plunger  $D'$ ;  $D^3$ , a curved depending arm or link carried by the free end of the member  $D^2$  and loosely connected, Fig. 4, with the free end of the link  $C^2$ ;  $D^4$ , a stud projecting laterally from the inner side of the plunger and moving in a slot  $d^3$ , with which the plunger-guide D is provided, said stud serving to engage the shoulder  $c$  when the free end of the link  $C^2$  is in its elevated position, thereby to rock the shaft C through the medium of the arm  $C'$ ; E, a coin-chute leading to the slot  $d^2$ ;  $E'$ , a coin-chute through which the coin is delivered to any suitable till (not shown) after the machine has been actuated; F, a spring serving normally to hold the arm  $C'$  against a stop or stud  $f$ , projecting laterally from the inner side of the plunger-guide; G, a catch-actuating or catch-withdrawing slide mounted upon the shaft C and provided with a forwardly-projecting flange  $g$ , terminating at its lower end in a rounded tip or nose  $g'$ ;  $G'$ , a slide-actuating han-



dle moving in a horizontal slot  $g^2$  in the casing front, and  $G^2$  a pointer carried by the handle  $G'$ .

Upon the outer surface of the front wall of the receptacle B are printed the names of the papers with which the corresponding chambers are charged. The front wall of the casing A is provided with a transparently-covered horizontal view slot or opening  $h$ , through which the names upon the receptacle B may be read and the upper portion of the pointer  $G^2$  viewed. The slide G has a square opening which receives the shaft C, the flange  $g$  extending across the front of the slide and over the top of the slide, said flange being received by a slot  $k$ , with which the inner end of the handle  $G'$  is provided. The prolongation of the flange across the front of the slide permits the rock-shaft to be rotated without allowing the slide to become disengaged from the handle. Preferably the plunger-guide D is equipped with an additional stud  $l$ , and the extremity of the link  $C^2$  has an inclined surface  $l'$ , which rides upon said stud during the inward movement of the link  $C^2$  while engaged by the stud  $D^4$ , assuming the free end of the link  $C^2$  to be in its raised position. The plunger is normally held in its extended position by a spring, as shown.

The operation of the machine will be readily understood from the foregoing detailed description. The slide G is normally free to be moved through the medium of the handle  $G'$  in a position to engage any one of the series of catches  $B^3$ , according to the newspaper desired, the pointer serving to indicate where the slide is to be placed in order to serve in the release of the bottom plate of the chamber which is selected. Assuming the slide to be preparatorily placed in alinement with any compartment, the purchaser may secure the paper in the compartment by dropping a coin in the slot E and pressing the plunger  $D'$  inwardly. During the first portion of the inward movement of the plunger the coin is carried beneath the inclined shoulder  $d'$ , thereby swinging the member  $D^2$  upwardly about its pivot and lifting the free end of the link  $C^2$  through the medium of the link  $D^3$ . This movement brings the shoulder  $c$  into the path of the stud  $D^4$ , and farther inward movement of the plunger causes the link  $C^2$  to be drawn inwardly, thereby rocking the shaft C through the medium of the arm  $C'$ . As the shaft C is rocked during the final inward movement of the plunger the nose  $g'$  of the slide G presses outwardly upon the upturned extremity  $b^2$  of the catch whereat the slide is located, thereby releasing the free end of the corresponding bottom plate and permitting the plate to fall. This allows the paper to fall folded edge downwardly upon the inclined plate  $A^4$ , down which it slides to the delivery-trough  $A^5$ . Obviously when the member  $D^2$  is not raised during the inward movement of the plunger the stud  $D^4$  will pass over the shoulder  $c$  of the link  $C^2$ , so that the rock-shaft will not be

actuated unless the proper coin is employed to raise the member  $D^2$ . For the purpose of resetting of the slide while the rock-shaft is held in the rotated or partially-rotated position a series of studs  $m$  project from the lower portion of the front side of the receptacle B, said studs being out of the path of the slide G except when the rock-shaft is rotated, when the upper portion of the flange  $g$  would by engagement with a stud prevent the slide from being moved to a new position.

Obviously the form and proportions of the machine may be variously modified to adapt the machine to vend articles of different sorts. The form of the delivery means may be altered also without departure from my invention.

Changes in details of construction within the spirit of my invention may be made by those skilled in the art. Hence no undue limitation should be understood from the foregoing detailed description.

What I regard as new, and desire to secure by Letters Patent, is—

1. In a vending-machine, the combination of a plurality of compartments, individual delivery means for the compartments, a rock-shaft, and a normally free slide movable longitudinally upon said rock-shaft which may be preparatorily set to correspond with any selected compartment and through the medium whereof the delivery means of the selected compartment may be actuated.
2. In a vending-machine, the combination of a plurality of compartments, article-supports for the several compartments, retainers for said article-supports, a normally free movable actuating device for said retainers, and means for actuating said device regardless of the position of the device, for the purpose set forth.
3. In a vending-machine, the combination of a plurality of compartments, individual article-supports connected therewith, retainers for said article-supports, a rock-shaft, a retainer-actuating slide on said rock-shaft, and means for preparatorily setting said slide, for the purpose set forth.
4. In a vending-machine, the combination of a plurality of compartments, article-supports therefor, retainers for said supports, a normally free movable retainer-actuating device, and a pointer movable with said device, for the purpose set forth.
5. In a vending-machine, the combination of an article-receptacle, a plurality of article-supports, retainers for said supports, a rock-shaft, a retainer-actuating slide on said rock-shaft, an actuating-arm for said rock-shaft, and a link connected with said arm, for the purpose set forth.
6. In a vending-machine, the combination of a casing having at its front side a horizontal slot, a slide-adjusting handle movable in said slot, an article-receptacle, a plurality of article-supports, a plurality of article-support retainers, and a retainer-actuating slide con-



nected with said handle and through the medium whereof the retainer of any selected support may be actuated, for the purpose set forth.

5 7. In a vending-machine, the combination of an article-receptacle, a plurality of article-supports pivotally supported at their rear ends, a plurality of spring-retainers bearing the front ends of said supports and equipped  
10 with projections, and a normally free movable device which may be set at will to engage any selected one of the projections, for the purpose set forth.

15 8. In a vending-machine, the combination of a plurality of compartments, a plurality of article-supports, a plurality of retainers for said supports, a slide through the medium whereof said retainers may be actuated, a

pointer movable with said slide, inscriptions for indicating the contents of said compartments, and a casing provided with a view-  
20 slot through which said pointer may be viewed, for the purpose set forth.

9. In a vending-machine, the combination of a casing, a plurality of vertical compartments perpendicular to the casing-front, bot-  
25 tom plates for said compartments pivoted at their rear ends, retainers for the front ends of said plates, means for releasing said retainers, and a transversely-inclined delivery-  
30 plate beneath said compartments, for the purpose set forth.

LAURITS PEDERSEN.

In presence of—

A. C. KITTLESON,  
ALBERT D. BACCI.