

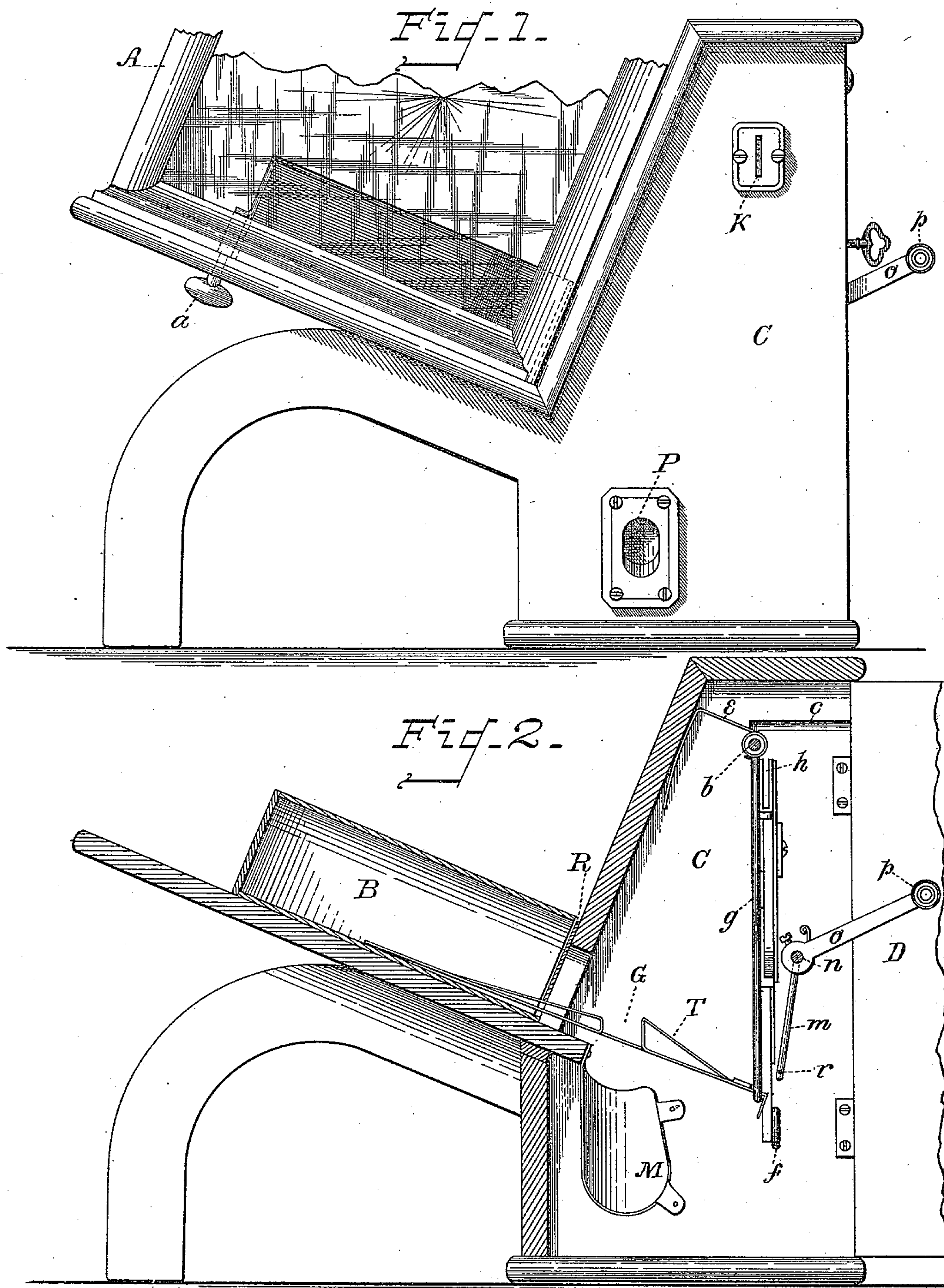
(No Model.)

2 Sheets—Sheet 1.

P. L. SYLVESTER.
VENDING MACHINE.

No. 441,259.

Patented Nov. 25, 1890.



Witnesses:
Gertrude A. Krapp.
George Underwood

Inventor:
Philip L. Sylvester.
By Frederick J. Allen.
Attorney.

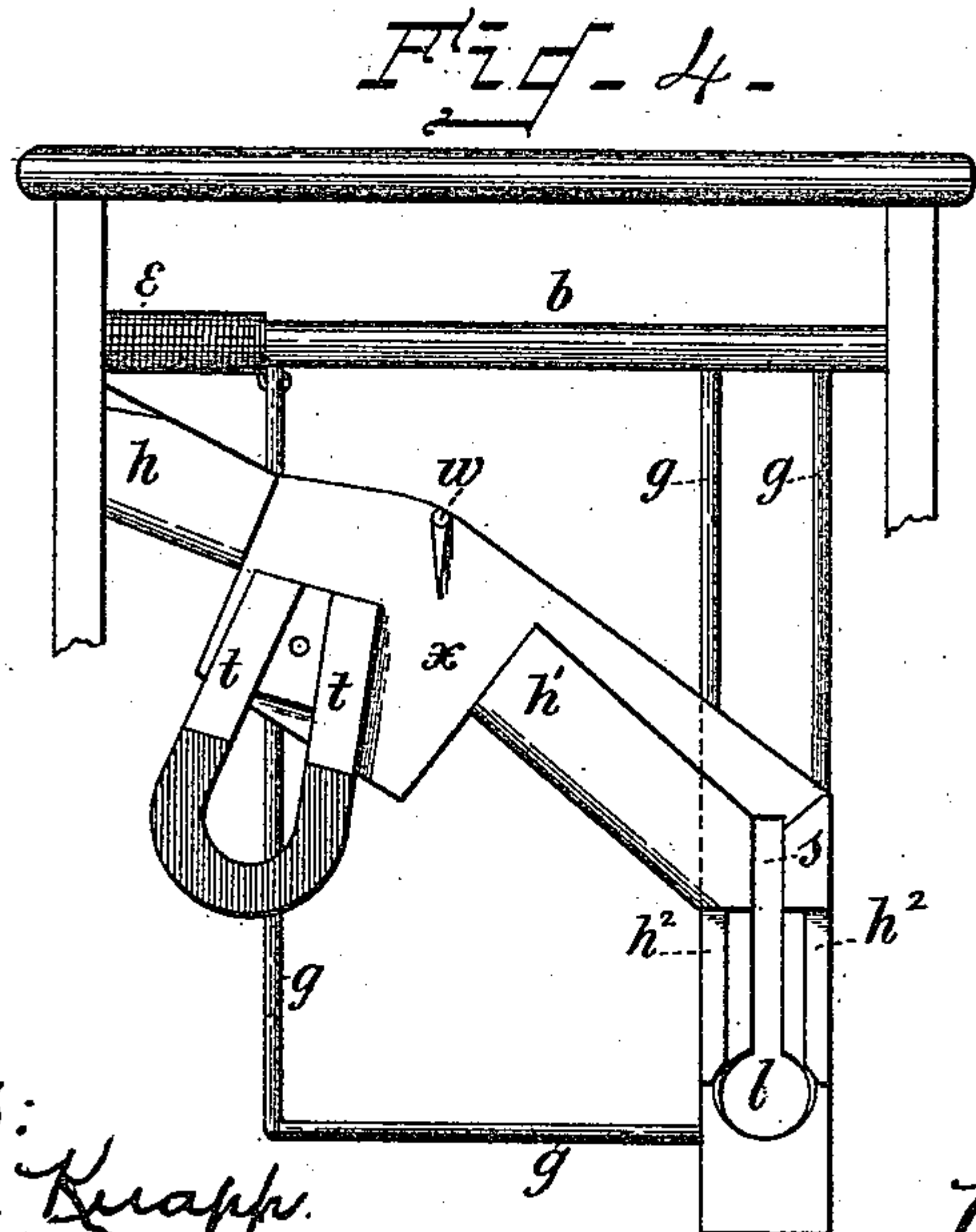
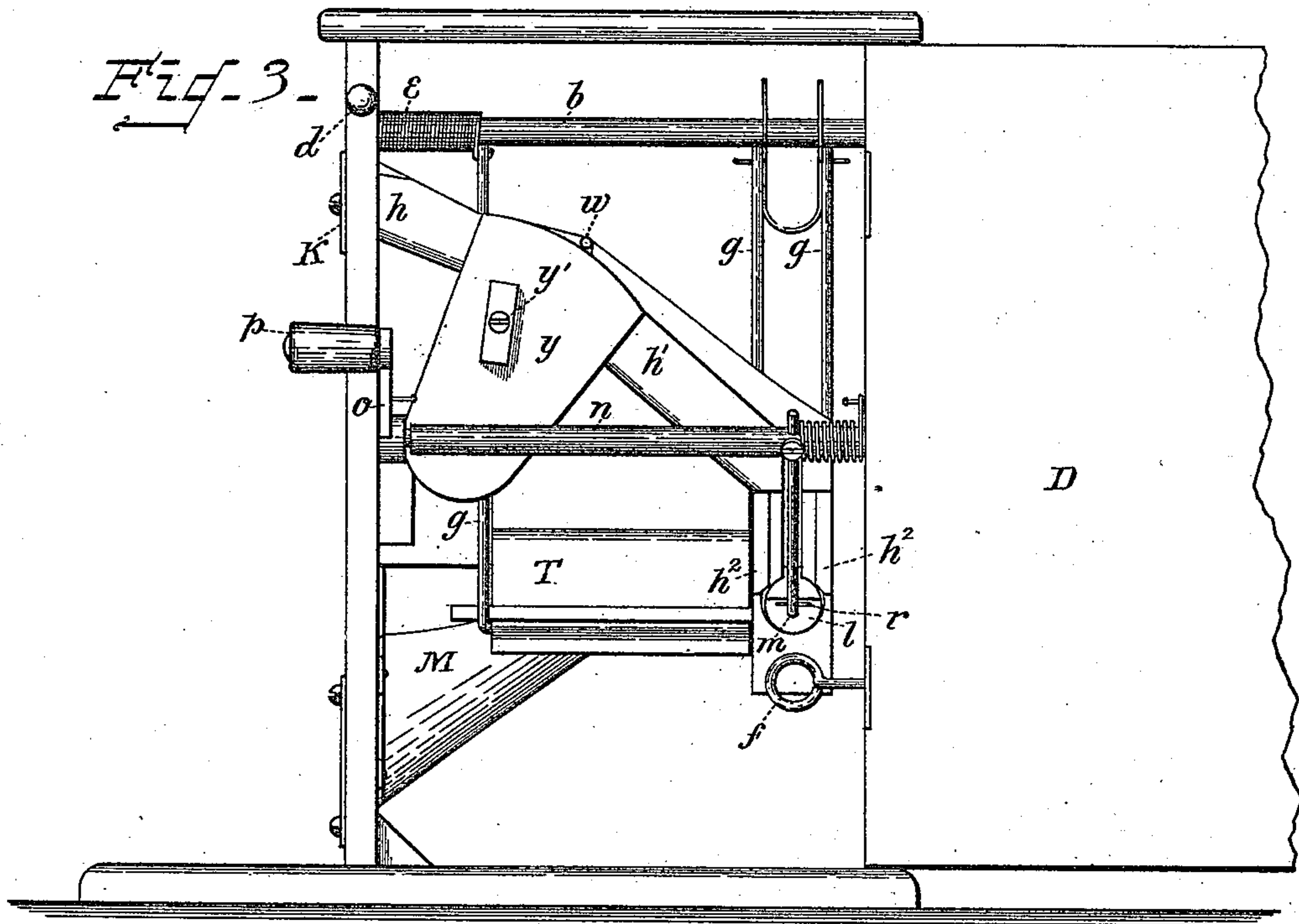
(No Model.)

2 Sheets—Sheet 2.

P. L. SYLVESTER.
VENDING MACHINE.

No. 441,259.

Patented Nov. 25, 1890.



Witnesses:
Gertrude C. Knapp.
Henry Underwood.

Inventor:
Philip L. Sylvester.
By Frederick J. Allen.
Attorney.

UNITED STATES PATENT OFFICE.

PHILIP L. SYLVESTER, OF AUBURN, NEW YORK.

VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 441,259, dated November 25, 1890.

Application filed January 27, 1890. Serial No. 338,266. (No model.)

To all whom it may concern:

Be it known that I, PHILIP L. SYLVESTER, of the city of Auburn, New York, have invented certain new and useful Improvements in Vending-Machines, of which the following is a description, reference being had to the accompanying drawings, forming part of this specification.

This invention is in the nature of an improvement upon the vending-machine set forth in an application filed by me in the United States Patent Office December 30, 1889, which is numbered 335,377; and it consists in certain new constructions and arrangements of mechanism tending to simplify the machine referred to, and in the adaptation of a magnet to that machine or to others possessing analogous coin-ducts, whereby the machine is protected from being operated by pieces of iron or other magnetizable metals, as well as by disks of cardboard or other light material, by means hereinafter described.

In the drawings, Figure 1 is an external side view; Fig. 2, a side view with side of casing removed; Fig. 3, a front view of the machine open, and Fig. 4 the swinging coin-duct removed from the machine.

A is an inclosing-case, within which is a box B of the articles to be sold, secured in position by a stop *a*.

C is the casing of the machine; D, a door thereto. Within the casing a shaft *b* is supported at its extremities in bearings, which for ease of construction are shown as slotted in the casing-walls at *c*. A button *d*, Fig. 3, covers the end of this slot. A spring *e* tends to hold this shaft with its attachments in their forward position against a stop *f*. A pendent frame *g g*, rigidly secured to the shaft *b*, serves to support a coin-duct *h h'*, whose upper extremity registers with a coin-slot K. The coin-duct is a simple trough, wide and deep enough to convey the predetermined coin, which rolls down it by gravity. At the lower end of this coin-duct *h h'* a short vertical extension thereof, provided with flanges *h² h²*, retains and guides the coin to its lodgment in a recess *l*. In this position the coin is safely retained by the extremity of an actuating-arm *m*, which extends to a

position in front of said lodgment-recess from a shaft *n*, to which it is rigidly attached, and which is revolved in its terminal bearings by means of a handle *p* and crank-arm *o*. The actuating-arm *m* is provided with a transverse pin *r* long enough to overlap the edges of the slot *s*, while it is short enough to pass through the circular aperture at *l*.

A permanent magnet *t t* is secured a short distance from the upper end of the coin-duct *h h'*, and an opening *x* in the bottom of the duct just beyond or below it is made large enough to permit an object the size of the predetermined coin to drop through. About over the middle of this spring *x* is pivoted a light metal pendent deflector *w*, and a cover *y*, secured by a screw and nut *y'*, completes the side wall of the coin-duct.

A reciprocating carrier T is hooked or otherwise secured to the lower part of the frame *g*, and from its shape and size is adapted to be inserted into a package of the articles to be sold, and by its withdrawal to extract one or more specimens, as has been predetermined, therefrom by means of the recess G therein (the form shown is adapted to withdraw a cigar from its box B) and drop it in the trough M, down which it slides to emerge from the machine through the aperture P. The package B has its lower end removed, and an adjustable gate R is set to leave an opening of proper width for insertion and withdrawal of the carrier T and its charge.

The operation is as follows: A coin is dropped through K, and, as this will be of copper, nickel, or silver, it will not be attracted by the magnet *t t*, and the proper predetermined coin will have weight enough to displace the pendant *w* and leap the opening *x* to the lower part of the coin-duct *h'*, while an iron washer or disk will be attracted by the magnet *t t* and its momentum so far destroyed that it will drop down through the opening *x*. At the same time a pasteboard disk or one of any other light material will have insufficient inertia to push past the pendant *w*, and will by its means be dropped through *x*. The proper coin, having reached *h'*, passes down it, and its edges pass behind *h² h²*, lodging it in the recess *l*. If now the

handle *p* be depressed, the shaft *n* is revolved, and the end of the arm *m* presses against the face of the lodged coin, pushing it, together with the frame *g g*, backward in its swinging course from the axis of its shaft *b* and pushing the carrier *T* into the package *B*. Soon, however, in this rearward swinging movement of *m* and *g g* the end of the arm *m* slides off upwardly from the lodged coin, which drops into the lower part of the case *C*, and the cross-pin *r* presses upon the sides of the slots *s* and continues the movement.

It is apparent that without the coin to receive the impulse from *p* until the parts have swung far enough to cause *r* to engage as aforesaid the machine will not be operated, as the pendent arm *m* will pass freely through the slot *s*.

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

1. In a vending-machine, a coin-duct having an aperture *x* in its bottom and a pivoted pendent deflector *w* above the said aperture, whereby bodies of less than a predetermined weight will be deflected so as to pass through said aperture.

2. In a vending-machine, a coin-duct provided with a magnet *t t*, deflector *w*, and aperture *x*, opposed to said deflector and adjacent to said magnet.

PHILIP L. SYLVESTER.

Witnesses:

GEORGE UNDERWOOD,
FREDERICK I. ALLEN.