N. N. NEHER.

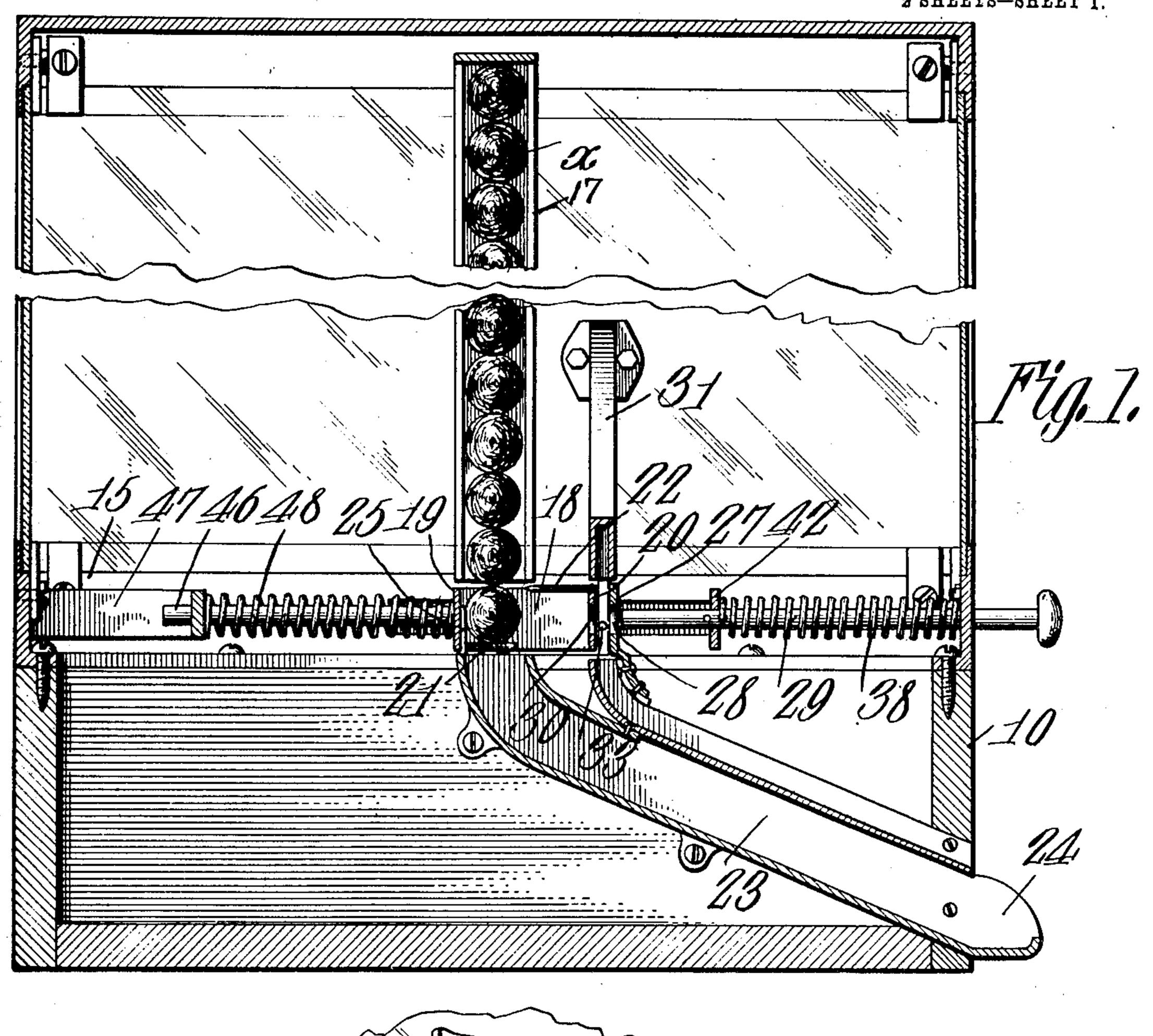
VENDING MACHINE.

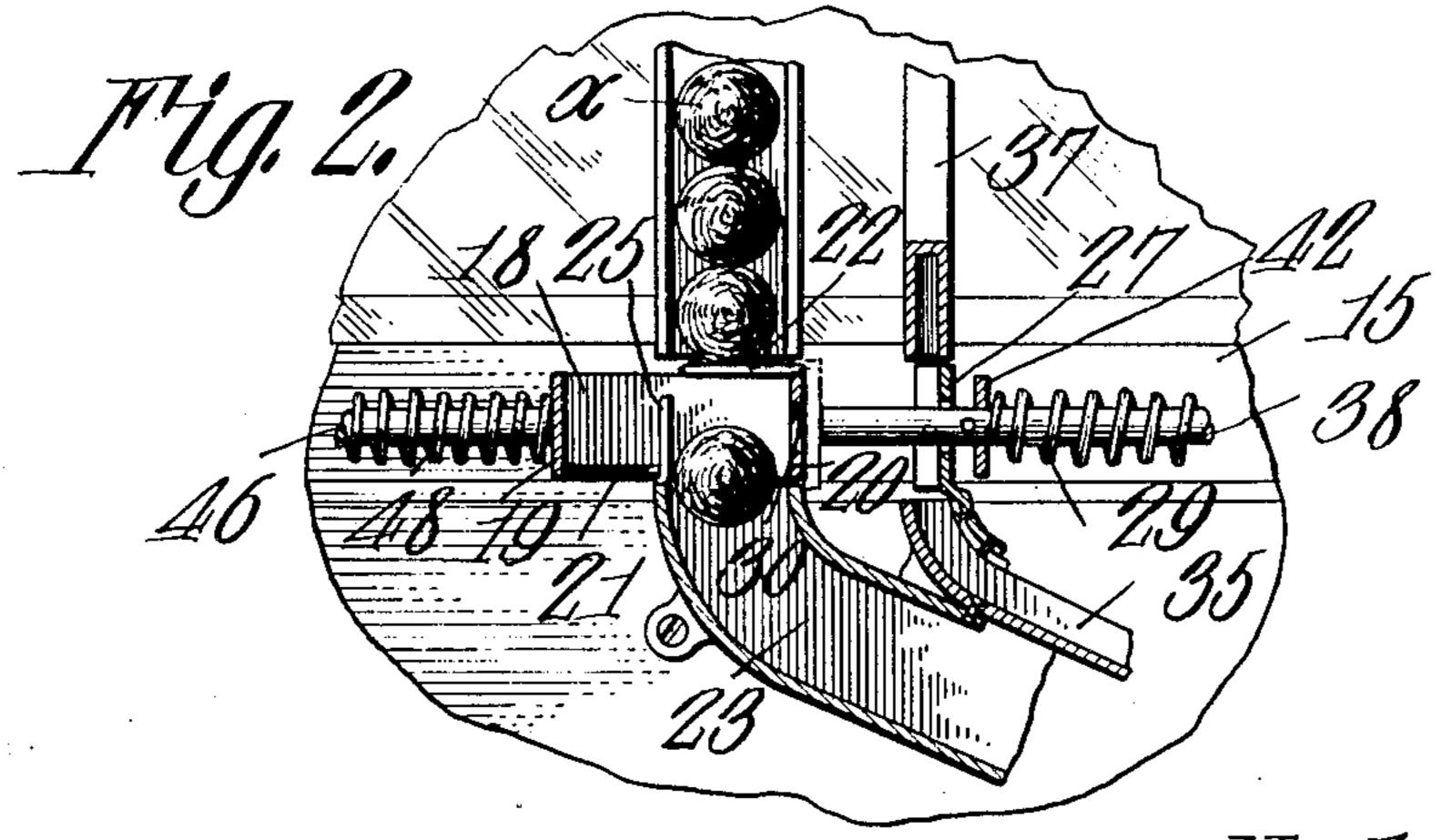
APPLICATION FILED MAR. 9, 1908.

913,151.

Patented Feb. 23, 1909.

2 SHEETS-SHEET 1.





Monto M. Mentor

By

Cachow the

attorneys

Witnesses

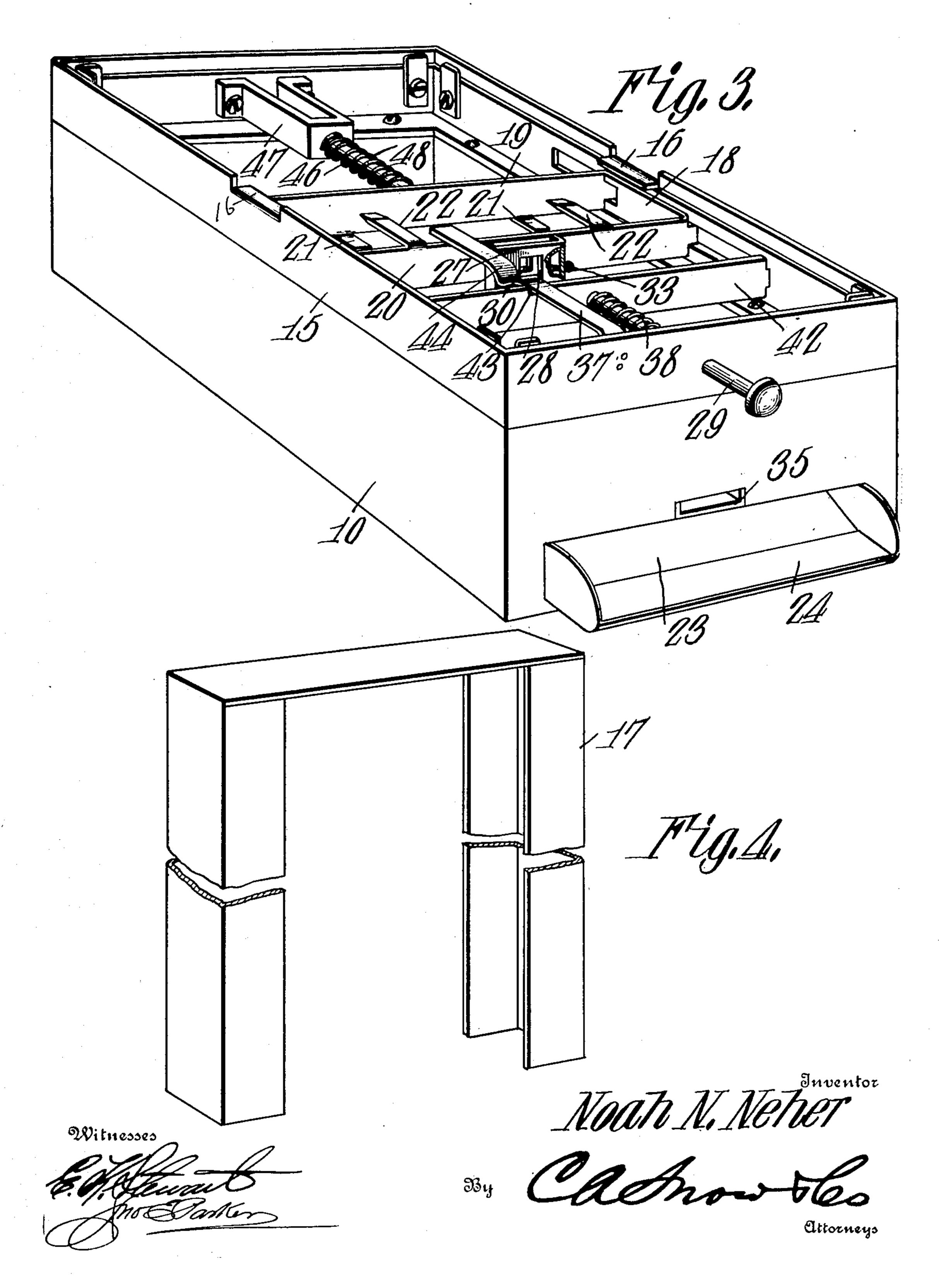
Fro Cantin

N. N. NEHER. VENDING MACHINE. APPLICATION FILED MAR. 9, 1908.

913,151.

Patented Feb. 23, 1909.

2 SHEETS-- TEET 2.



UNITED STATES PATENT OFFICE.

NOAH N. NEHER, OF LOS ANGELES, CALIFORNIA.

VENDING-MACHINE.

No. 913,151.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed March 9, 1908. Serial No. 420,031.

To all whom it may concern:

Be it known that I, Noah N. Neher, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and 5 State of California, have invented a new and useful Vending-Machine, of which the following is a specification.

This invention relates to vending machines, and more especially to machines of 10 that class employed for the vending of cigars, and other comparatively small articles

of merchandise.

The principal object of the invention is to provide a machine of very simple construc-15 tion in which a delivery slide is so arranged at the bottom of a magazine or reservoir as to form in one position a support for the entire column of articles, and in the other position to release the lowermost article and 20 form a support for the remainder of the column, the movement of the slide being accomplished only after the introduction of a coin of predetermined value.

A further object of the invention is to prolease of the coin and permitting its fall to a suitable receptacle after the discharge of the

article.

With these and other objects in view, as 30 will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and particularly 35 pointed out in the appended claims, it being understood that various changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the 40 advantages of the invention.

In the accompanying drawings:—Figure 1 is a sectional elevation of a vending machine constructed in accordance with the invention. Fig. 2 is a similar view of a portion of 45 the same with the slide in discharging position. Fig. 3 is a detail perspective view of the principal portions of the mechanism below the reservoir. Fig. 4 is a perspective

view of the reservoir.

50 Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The working parts of the device are sup-55 ported within a suitable frame or casing 10, | the machine and is provided with a suitable 110

the lower portion of which may be constructed of wood or metal, while the upper part of the frame is preferably made of glass or other transparent material, and the shape of this part of the casing may be altered in 60 any desired manner, and may be of such construction as to wholly or partly inclose the article containing reservoir or magazine.

Between the upper and lower portions of the structure is an approximately rectan- 85 gular metallic frame 15, the opposite sides of which are notched and bent inward to form tongues 16 on which is seated a reservoir 17 that is arranged to contain the articles x to be vended, and the magazine as a whole may 70 be made removable, so as to be charged from

the bottom, if desired.

Arranged below the magazine is a delivery slide 18 that is in the form of an open rectangular frame having a rear wall 19 and a 75 front wall 20. From the bottom of the rear wall extend forwardly projecting fingers 21 that serve to engage with and support the lowermost article of the reservoir, and in 25 vide an improved means for effecting re- | fact that entire column of articles, while the 80 upper edge of the front wall 20 is provided with rearwardly extending fingers 22 which are arranged to pass between the lowermost and next to the lowermost articles when the slide is moved rearward, so that the lower- 85 most article may fall from the fingers 21 into the chute 23, and roll by gravity to a delivery tray 24 at the front of the machine, while the fingers 22 pass above the lowermost article and support the remaining arti- 90 cles in the reservoir, until the slide returns to its normal position, and when this is accomplished, the articles descend, so that the lowermost will then rest upon the fingers 21 in readiness for another discharging opera- 95 tion. In order to prevent the lowermost article being carried rearward with the slide, and to insure its falling downward through the chute 23, the upper edge of the chute is provided with one or more upwardly ex- 100 tending fingers 25 which engage against the rear of the lowermost article, as will be seen on reference to Fig. 1.

> Secured to a fixed part of the structure in front of the front bar 20 of the slide is a coin 105 receiving pocket 27, the front wall of which is provided with an opening 28 for the passage of an operating plunger 29 that extends outward through an opening at the front of

operating handle. The front plate 20 of the slide has a corresponding opening 30, so that if the plunger is forced inward without first depositing a coin, the plunger will simply 5 move through the two openings without effecting movement of the slide. If a coin is inserted through the side chute 31, it will fall down into the pocket and remain in position to be engaged by the end of the plunger, so 10 that when the latter is thrust inward, it will engage the forward face of the coin and will press the same against the front plate 20 of the slide, thereby imparting movement to the entire slide, and effecting the delivery of 15 the lowermost article. One of the side walls of the pocket is provided with an adjustable screw 33 which may be turned for the purpose of accurately adjusting the width of the pocket, so that if the machine is to be oper-20 ated by a nickel, the nickel will be retained in place by engagement with the end of the screw, of one side, and the opposite edge of the pocket on the opposite side, while if a smaller coin, such as a dime, or cent, is in-25 serted, it will pass through the pocket and fall into a chute 35, and return to a tray at the front of the machine. After a coin of the proper size has been inserted and the plunger forced in, the coin will be clamped 30 between the end of the plunger and the forward bar 20 of the slide, until the latter reaches the limit of its rearward movement, and when this occurs, the flat leaf spring 37 that is secured to the casing will spring down 35 into position to engage against the forward face of the front bar of the slide, and hold the same from return movement. If the pressure on the plunger is then released, the plunger will be moved outward by means of 40 a tension spring 38, one end of which is secured to the casing, and the other to the plunger, so that the inner end of the plunger will move from contact with the coin and the latter will be free to fall to the bottom of the 45 casing.

Secured to the plunger is a cross bar 42 having a notch 43 through which the locking spring 37 passes, and at a point intermediate the ends of the spring is a downwardly bent 50 portion forming a cam 44 with which the lower wall of the notch engages as the plunger moves forward, so that the spring will be raised from engagement with the front bar of the slide, and the latter will then

•

be free to move to its full forward position 55 for the reception of another article.

From the rear of the slide extends a guide bar 46, the rear end of which passes through a guiding opening formed in a bracket 47 that extends inward from the rear of the me-60 tallic frame. Between the bracket and the slide is arranged a compression spring 48 that is guided by the rod 46, and this spring is placed under stress when the slide is moved inward to discharging position, so 65 that when the plunger is released, the slide is forced forward by the extension of the spring and the parts are restored to initial position.

I claim:—

1. In a vending machine, a reservoir, a delivery slide, a coin receiving pocket adjacent to the forward edge of the slide and provided with alining openings, a plunger arranged to move through the pocket openings, and serv- 75 ing to engage the coin inserted in the pocket, and force the same against the slide for the purpose of transmitting movement to the latter, a cross bar carried by the plunger and provided with a notch, a leaf spring having 80 a downwardly bent portion, the said spring fitting within the notch and having its free end arranged to engage with the forward face of the slide to hold the latter in its rearmost position, a spring for restoring the 85 plunger to initial position, and an independent spring for moving the slide to initial position.

2. In a vending machine, a delivery slide, a leaf spring fixed at one end and having its 90 other end in operative relation to the slide to engage and lock the latter in its delivery position, said spring having an intermediate cam section, a plunger arranged to engage and operate the delivery slide through the 95 intermediary of an inserted coin, and a cross bar carried by the plunger and adapted to engage the cam on the spring, and move the latter out of engagement with the slide on the return movement of the plunger to nor- 100

mal position.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

NOAH N. NEHER.

•

Witnesses:

C. P. Donnell, Frank L. Miller.