

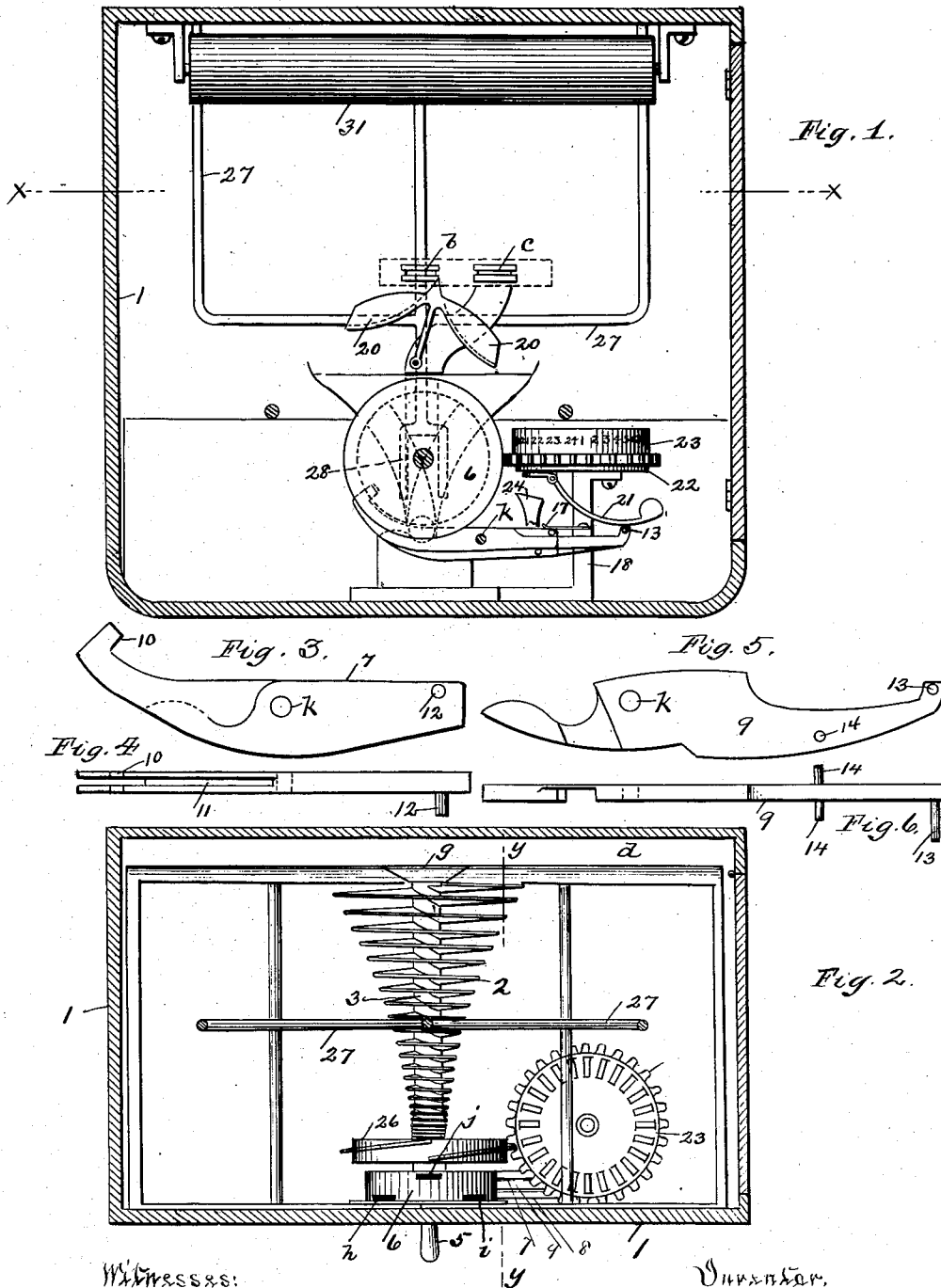
(No Model.)

2 Sheets—Sheet 1.

A. E. DAIN.
NEWSPAPER VENDER.

No. 482,824.

Patented Sept. 20, 1892.



WITNESSES:

James Haslem
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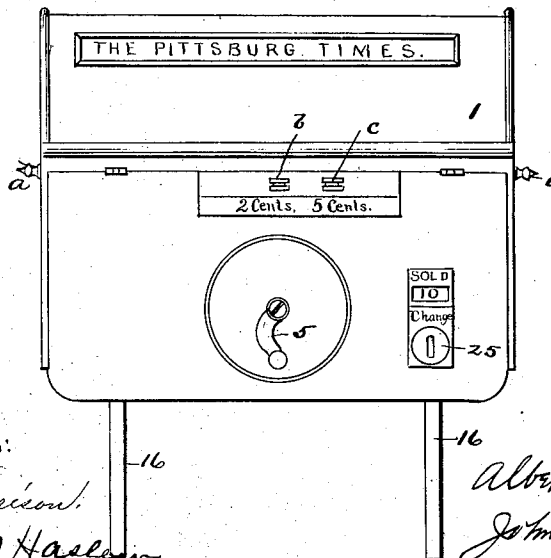
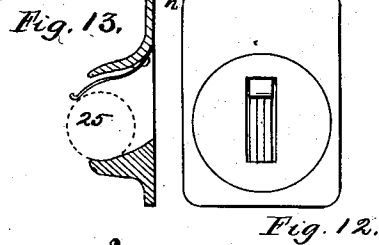
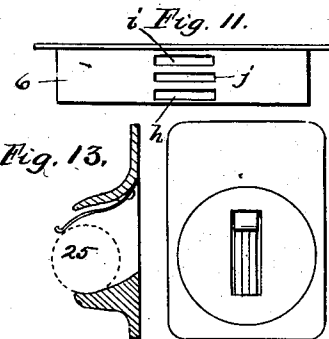
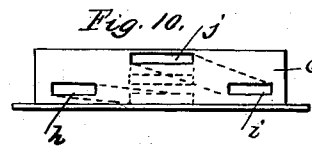
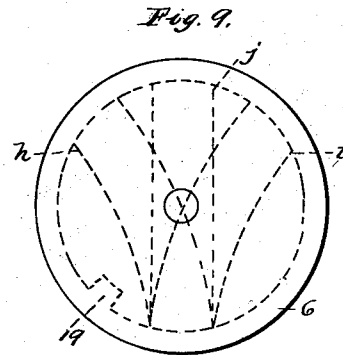
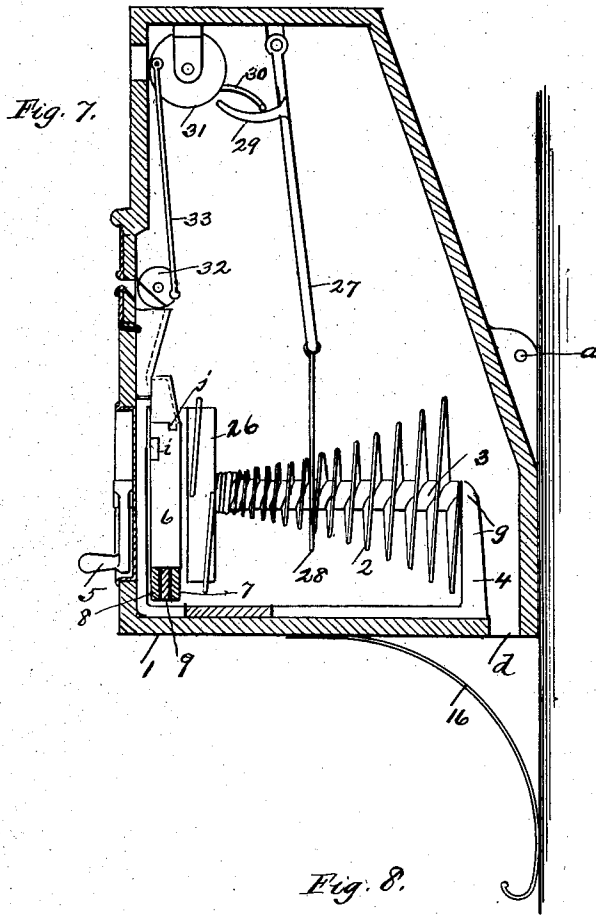
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2 Sheets—Sheet 2.

A. E. DAIN.
NEWSPAPER VENDER.

No. 482,824.

Patented Sept. 20, 1892.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

ALBERT E. DAIN, OF PITTSBURG, PENNSYLVANIA.

NEWSPAPER-VENDER.

SPECIFICATION forming part of Letters Patent No. 482,824, dated September 20, 1892.

Application filed January 8, 1892. Serial No. 417,374. (No model.)

To all whom it may concern:

Be it known that I, ALBERT E. DAIN, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Newspaper-Venders; and I do hereby 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, in which—

Figure 1 indicates a sectional front elevation. Fig. 2 is a sectional plan view on line *x x* of Fig. 1. Fig. 3 is an enlarged side elevation of the inner lock-lever. Fig. 4 is a plan of same. Fig. 5 is an enlarged side elevation of the central lever. Fig. 6 is a plan of same. Fig. 7 is a sectional end elevation on line *y y* of Fig. 2. Fig. 8 is a reduced front elevation. Fig. 9 is a side elevation of locking-disk. Fig. 10 is a plan view of same. Fig. 11 is an inverted plan view of same. Fig. 12 is a front elevation of change-holder. Fig. 13 is a central sectional elevation of same.

My invention relates to automatic newspaper-venders; and my object is to produce a device of this character adapted to be operated by two pennies or cents successively dropped in a slot in the front of the same, or by dropping a nickel in the slot designated "5 cts." the device may be operated and the required change be made accordingly as the price of the paper therein contained.

I will now describe my invention, reference being had to the accompanying drawings, forming part hereof, in which like letters indicate like parts wherever they occur.

Referring to said drawings, 1 is a case adapted to be suspended from the rod *a* and provided with slots *b c* in the front for the reception of the actuating-coin and the slot *d* in the lower rear end longitudinally of the same.

2 is a helix, the rear end of which is, as shown, preferably of greater diameter than the forward end. Said helix is mounted upon or integral with the shaft 3, the rear end of which terminates above the slot *d* and is journaled in the bearing *g*, secured in the upright 4, which is secured to the bottom of said case. The forward end of said shaft projects

through the front of said case, being journaled therein, and is provided with the hand-crank 5. 6 is a disk secured upon said shaft near the forward end thereof, having slots *h, i,* and *j* extending through the same and terminating immediately above the curved or dished portion of the levers or arms 7, 8, and 9, wherein the actuating-coin is adapted to drop, as shown in Fig. 1. Said arms are pivoted upon the short shaft K, which is suitably secured in the front of said case. Said levers 7 and 8 are pivoted on said shaft at either side said lever 9, and terminate at one end in teeth or projections 10, and are provided with grooves 11 for the reception of the actuating-coin, as shown in Fig. 3, and the opposite end thereof is provided with a pin 12. The middle or central lever 9 is curved similarly with said side or lock levers for the reception of an actuating-coin, and its extreme outer end is provided with a pin 13, and rearwardly of the same with a pin 14, which projects from the sides thereof and terminates under the lower side of the levers 7 and 8, whereby when said middle lever is actuated by dropping a nickel through the slot marked "5 cts." in the front of the case and by rotating the disk the downward pressure of the nickel (which passes from said slot through the middle slot in said disk and finally rests, as shown in Fig. 1, in the curved portion of said lever) depresses the short end of said lever and elevates the opposite end thereof, the pin 14 thereon carrying the corresponding end of the side or lock levers 7 and 8 upwardly, thereby forcing the teeth 10 on the opposite end out of engagement with the disk 6, enabling the same to be turned one revolution, thereby feeding a paper carried by the helix toward the slot *d*, through which they are successively dropped and caught between the curved springs 15 and 16, secured upon the bottom of the case and whatever said case may be fastened to. After the nickel has been expelled from said lever the downward pressure of the flat springs 17 and 18, secured upon the bottom of said case upon the pins 12 on the ends of said levers 7 and 8, forces the teeth thereon into engagement with the notch 19 in the periphery of said disk, locking the same. The pressure of two cents suc-

cessively dropped through the slot marked "2 cts." likewise operates said helix without, however, actuating the middle lever, the valve 20, anchor-shaped in elevation, the shank of which is pivoted upon the interior of the door of said case below said slot, whereby pennies dropped therein are alternately dropped into the grooves *h* and *i*, as shown in Fig. 1, after passing through which they rest upon the upper side of said side levers. The rotation of the disk, as heretofore set forth, throws the toothed ends of both said levers out of engagement with said lock-disk, the springs 17 17, as heretofore stated, again locking said disk when pressure is withdrawn from the toothed end of said levers. When said case contains two-cent papers, a nickel dropped in the proper slot actuates the middle lever, as described, the pin 13 upon the extreme outer end thereof coming in contact with the lower weighted end of the arm 21, pivoted upon the under side of the circular plate 22, upon which is pivotally secured the change-receptacle 23, which is mounted to rotate on a short shaft, (see Fig. 2,) which is secured or journaled in the plate 22, (shown in Fig. 1,) said change-receptacle being provided with a series of compartments adapted to contain any required change placed therein, which when the weighted end of said arm 21 is thrown upwardly the inner flat end is depressed, exposing the opening in the bottom of said compartments, permitting the change therein to drop into the chute 24 and thence into the change-holder 25. The weighted end of said arm falling closes said opening. The lower periphery of said change-receptacle is serrated or toothed and adapted to mesh with the threaded disk 26 upon the shaft 3 at the outer end of said helix, whereby when said helix is rotated said change-receptacle is likewise rotated, being pivoted upon the plate 22, which is secured upon the upright to admit of this, thereby bringing the compartments successively opposite the chute.

27 is a feed-blade pivotally secured in the sides of said case at the top thereof and provided with a downwardly-projecting finger 28, which is pivotally secured or hinged thereto and adapted to straddle the shaft 3, as shown in Fig. 1, for the purpose of supporting the papers within said helix. The rear side of said blade is provided with a projecting finger 29, adapted to support a similar finger 30, secured upon the inner side of a roller 31, which is journaled in the top of said case at the front, whereby when said blade is thrown out of vertical by the rotation of the helix the finger on said roller is released, enabling said roller to turn, presenting the words "All sold," the same being visible through the slot in the upper end of the front of the case when the supply of papers is exhausted. The rotation of the roller 31 turns at the same time the roller 32, journaled in the sides of said case and connected to said roller 31 by a shaft 33,

whereby the slots for the admission of coin are closed by the flat side of said roller 32 to prevent the further admission of coin. Said change-receptacle may be provided with a series of numbers on the side, the same to designate the number of papers contained in said case, being, as shown, visible through an opening in the front of the case.

In addition to the words "All sold," the roller 31 may on the reverse side show the name of the paper, which may be visible until the entire number is sold, when, as heretofore stated, said roller is reversed, exposing said words "All sold."

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

1. In a vending apparatus, the combination of a case having a coin-inlet and a delivery-opening, a rotatable shaft having a helix arranged to deliver to the delivery-opening, a disk carried by said shaft and having the spaced converging slots, means, substantially as described, to convey the coins from the inlet-opening in the case to the slots in the coin-disk, and the coin-operated levers adapted to be operated by the coins in said coin-disk to release said levers from engagement with the coin-disk, substantially as described, for the purpose specified.

2. In a coin-actuated vending apparatus, the combination of a case having a coin-inlet and a delivery-opening, a shaft carrying a helix arranged to deliver articles to said delivery-opening, a coin-disk carried by the shaft to receive from the coin-inlet and having the spaced slots for coins of different denominations, a locking-lever arranged in the path of one coin in the coin-disk, another lever adapted to be operated by a coin of different denomination in the coin-disk and having means to release the locking-lever from engagement with the coin-disk, and a change-receptacle arranged to be automatically operated by the last-named lever, substantially as and for the purpose described.

3. In a coin-operated vending apparatus, the combination of a case having coin-inlets and a delivery-opening, a shaft carrying a helix to deliver to the delivery-opening, a coin-disk mounted on the shaft to receive from the coin-inlets and having the converging slots, which are spaced laterally on opposite faces of the disk, the locking-lever arranged to be actuated by a coin of one denomination in the coin-disk, another lever 9, adapted to be operated by a coin of different denomination in the coin-disk and having means for releasing the locking-lever from the coin-disk, a change-receptacle operated directly from the operating-shaft, and means actuated by the lever 9 to release the coin from the change-receptacle and permit the same to be discharged from the machine, substantially as described.

4. In a coin-operated vending apparatus, the combination of a case having coin-inlets

and a delivery-opening, a shaft carrying a helix, a rotatable change-receptacle actuated by rotations of the shaft, a coin-disk carried by the shaft, a lever operated by a coin in the coin-disk, and a detent in the path of the coin-lever and normally confining the coins in the coin-holder, substantially as described,

5 5. In a coin-operated vending apparatus, the combination of a case having the coin-inlets and the delivery-opening, the shaft carrying a helix and a slotted coin-disk, a rotatable coin-holder geared to the shaft and having the discharge-slots, the locking-lever engaging said coin-disk, a releasing-lever arranged to be actuated by a coin of different denomination from the coin required to operate the locking-lever, and the pivoted strip 21, normally closing the slots in the coin-holder and arranged to be operated by the releasing-lever, substantially as described.

6. In a coin-actuated vending apparatus, the combination of a case having the slots, a shaft carrying a delivery-helix, a coin-disk normally locked by a coin-actuated lever, a swinging feeder carrying a trip-arm near its upper end, a roller having an arm sustained by the trip-arm of the feeder, and another roller linked to the first roller and arranged close to the coin-slot of the case, substantially as and for the purpose described.

7. In an automatic newspaper-vending apparatus, the combination of a case having a coin-inlet and a newspaper-outlet opening, a shaft carrying a helix or worm, means for automatically delivering said papers, means for automatically delivering change simultaneously with said papers, and a feed-blade arranged between the divisions of the helix and adapted to be moved forward as the latter is rotated and support the papers carried thereby, substantially as herein described.

8. In an automatic newspaper-vending apparatus, the combination of a case having a coin-inlet and a newspaper-outlet opening, a shaft carrying a helix or worm, means for automatically delivering said papers, means for automatically delivering change simultaneously therewith, means for closing the coin-

inlets when said case is exhausted of papers and exposing the words "All sold," and a feed-blade arranged between the divisions of the helix and adapted to be moved forward as the latter is rotated and support the papers carried thereby, substantially as and for the purpose set forth.

9. In an automatic newspaper-vending apparatus, the combination, with a case having a slot in one side and an opening at the bottom, of a shaft arranged within the case, a helix carried by said shaft and adapted to receive the papers between its several divisions and automatically discharge the same through the opening in the bottom of the case, a circular disk mounted on said shaft and having an opening extending entirely through the same, a spring-actuated lever adapted to lock the disk and release the same when a coin is dropped through said slotted disk and into the lever and the shaft is rotated, and a case to contain change, and means to deliver said change simultaneously with said paper, substantially as herein described.

10. In an automatic newspaper-vending apparatus, the combination, with a case having a slot in one side and an opening at the bottom, of a shaft arranged within said case, a helix carried by said shaft and adapted to receive the papers between its several divisions and automatically discharge the same through the opening in the bottom of the case, a circular disk mounted on said shaft and having an opening extending through the same, a disk having a thread thereon and rotary case containing a number of compartments for change, and means to open the lower end of said compartments to discharge said change simultaneously with said papers, substantially as herein described.

In testimony that I claim the foregoing I hereunto affix my signature this 5th day of January, A. D. 1892.

ALBERT E. DAIN, [L. s.]

In presence of—

CHARLES LARGE,
WALTER REESE.