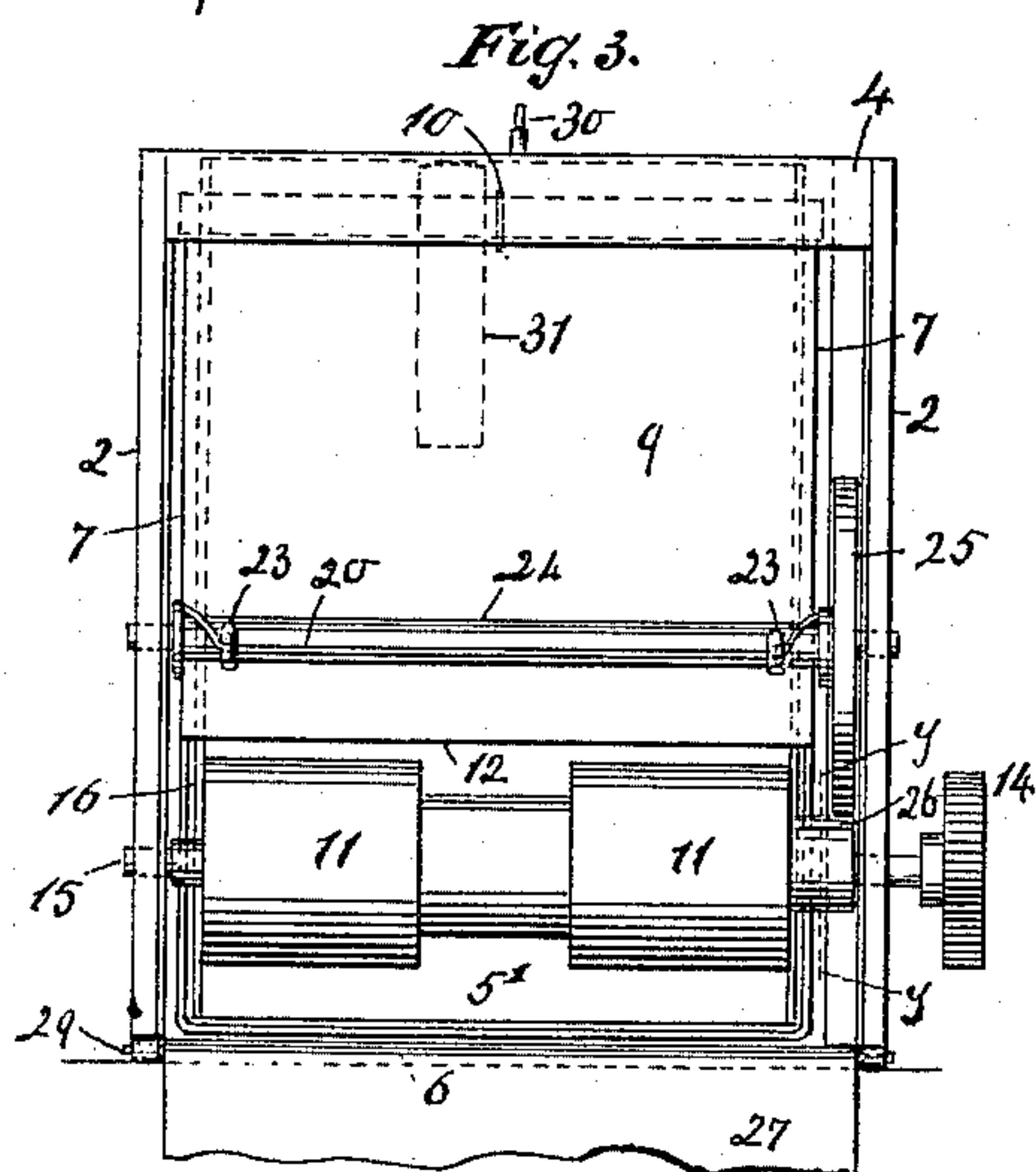
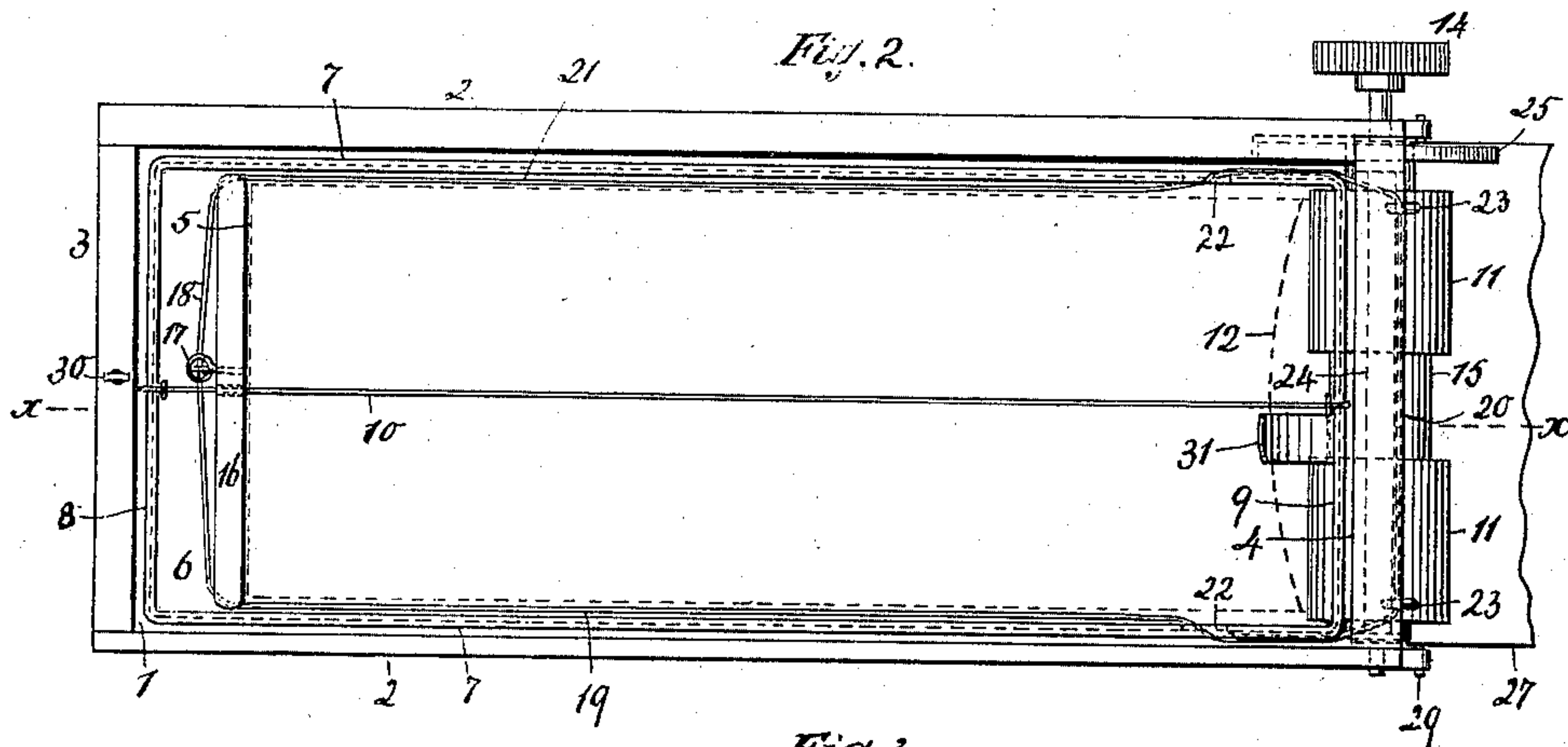
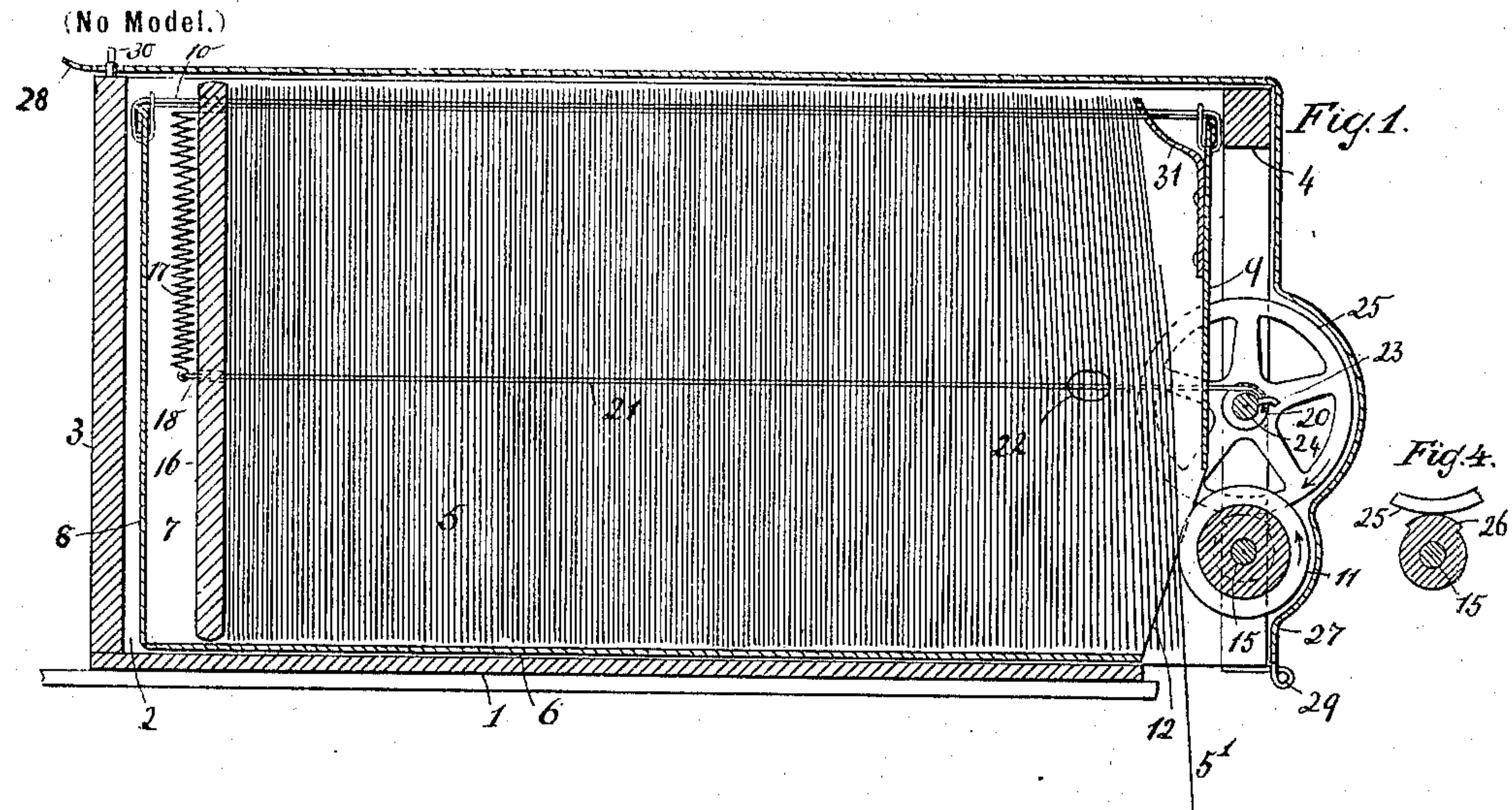


No. 639,238.

Patented Dec. 19, 1899.

J. T. HOYT.
PAPER CABINET.

(Application filed Dec. 15, 1898.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES T. HOYT, OF NEW YORK, N. Y., ASSIGNOR TO EMILY C. HOYT, OF
SAME PLACE.

PAPER-CABINET.

SPECIFICATION forming part of Letters Patent No. 639,238, dated December 19, 1899.

Application filed December 15, 1898. Serial No. 699,373. (No model.)

To all whom it may concern:

Be it known that I, JAMES T. HOYT, a citizen of the United States, residing at New York, in the county and State of New York, have
5 invented new and useful Improvements in Cabinets or Paper-Cases, of which the following is a specification.

This invention relates to a cabinet or case suitable for toilet-paper, and by means of
10 this invention the cabinet can be readily supplied with paper and can be made to contain a large supply of paper, and the latter can be made to readily feed or pass from the cabinet, as required.

15 The invention is set forth in the following specification and claims and illustrated in the annexed drawings, in which—

Figure 1 is a side elevation of the cabinet sectioned along $x x$, Fig. 2. Fig. 2 is a plan
20 view of the cabinet with the cover open and partly broken away. Fig. 3 is a front elevation of the cabinet with the cover open and partly broken away. Fig. 4 shows a gear sectioned along $y y$, Fig. 3.

25 In the drawings is shown a cabinet with the bottom 1, sides 2, and back 3. The top of the cabinet is open, as is also the front, the sides at the front being held or braced in position by a cross-piece 4. The open front under
30 the cross-piece 4 gives access to the cabinet, as hereinafter explained. The paper 5 is shown in a receptacle comprising the bottom 6, sides 7, back 8, and front 9. The top of the receptacle is open, so that it can be
35 readily filled or charged. The sheets 5, resting an edge on bottom 6, can have their upper edges engaged by a retainer 10 at the top or upper part of the receptacle. A wire strung or pierced through the sheets and se-
40 cured to the receptacle at its front 9 and back 8 will form a suitable retainer. A strip of sheet metal with its sharp edge facing upward or away from bottom 6 can be made to act as a paper-retainer.

45 When the receptacle 6 9 is slipped or put into the cabinet, the leading or front sheet 5' comes into contact with ejector 11, the receptacle having a suitable cut-away portion or opening at 12 sufficiently large or extended to
50 give the ejector access to the contents 5 and prevent the ejector contacting with the re-

ceptacle. The ejector can be suitably formed by a roller or cylinder carried by or journaled in the cabinet and having a handle or actuator 14. This ejector as known is usually
55 formed by a roller which is split or in two sections and fixed to or turning with axle 15 and button 14. The cut or opening 12 is receding or such that the ejector 11 will not contact with the receptacle 6, while the paper
60 5 is free to move into contact with the ejector, and the receptacle will not contact with any movable part of the mechanism. As the front sheets are fed off or ejected the pack 5 or remaining sheets are moved forward or to the
65 ejector by a suitable feeder. In the drawings is shown a feeder-plate composed of a back piece 16, set against the rear of pack 5 and having a spring or yielding connection 17 with a loop or wire 18, 19, 20, and 21. The
70 branches 19 and 21 are shown running alongside the pack 5 a certain distance, but do not contact with the front sheets of the pack, but pass out of the receptacle near the front 9 through openings 22 in the sides 7. The
75 front sheets of the pack are thus not obstructed by the loop parts or connections 19 and 21 in passing to ejector 11, as the loop is not in contact with such pack front or is outside the receptacle 6 9 at the front of the pack. 80

The front branch 20 of the loop or wire is caught by studs or hooks 23 on a rotary shaft 24, having gear 25 engaging gear 26 on ejector-shaft 15. As the ejector 11 is rotated the actuating-gear 26 drives gear 25 with shaft
85 24 to wind up or actuate the connection 18 21 and move pack 5 toward the ejector. The feed can be made intermittent by suitable means. By making the gear 25 and 26 or one of them intermittent or broken excessive feed
90 or compression of the sheets or pack 5 can be prevented, as on the actuating-gear 26 releasing the driven gear 25 the latter, with shaft 24 and connection 18 21, are freed, so that the back 16 can be moved back by the action
95 of spring or springs 17 or by the expansion of pack 5 or the joint action of all these parts if excessively compressed or fed forward. The active gear portion 26, as also shaft 24, could be made of small size, so that but a slight de-
100 gree of feed is effected on each turn of the ejector. The size or diameter of gear 25 can

also be so chosen as to insure no more than the required degree of feed, and by making the ejector 11 of larger or smaller diameter a less or greater rotation of the ejector will be required to start or move a sheet. If the feed is so set as never to be excessive, intermittent gears or intermittent release of the feed is unnecessary. Friction-gears, as shown at 25 and 26, are thought preferable to tooth-gears, as the teeth might jam or catch.

The interior paper-holding receptacle 6 9 is unattached to the exterior cabinet, and when empty the said receptacle can be readily removed by detaching or unhooking the wire or connection 20 from shaft 24 or its studs 23 and a fresh receptacle when in the cabinet can readily have its wire 20 hitched or connected to such shaft. The open front of the cabinet gives access for making the connection or disconnection between wire 20 and shaft 24.

The open front and top of the cabinet can be closed by a cover, which comprises the front portion 27 and top portion 28. This cover can be formed of one piece of material and permanently or detachably jointed or connected at 29 to the cabinet, so that when the padlock or securing device at 30 is freed or open the cover can open or come off.

The cabinet-bottom 1 being interrupted or stopped short of the front will leave an exit or mouth for the ejection of the leading sheet 5'. The front 9 of the removable and replaceable receptacle is provided at its top portion with an inclined holdback flange or lip 31, which prevents the leading sheet from jamming or contacting against front 9, whereby such sheet would be prevented from being detached or moved by the ejector.

The cabinet can be secured in a suitable place, as on a shelf or by a side 2 being suitably attached.

A side or portion of the cabinet or cover, or both, can be made transparent or of broken work to allow a view of the receptacle or its contents while preventing access to or tampering with the latter as long as the cover 28 is locked. The cabinet can be of suitable length to accommodate a receptacle with a large supply of paper. The removable receptacle can be of suitable material, and if made cheap, as of pasteboard or the like, such receptacle when exhausted could be cast aside if not to be refilled. The ejector 11, with feeder-axle 24, being carried by the cabinet, will remain in place on the removal of the receptacle. The receptacle or its bottom 6 holds or supports the contents 5 clear of or out of contact with the bottom of the cabinet, and by making the bottom 6 smooth the paper can readily feed or slide on such bottom for the ejector to engage or eject the contents 5 or to rip the leading sheet from the retainer 10. In practice it has been found advisable to have the feeder 18 21 act in proximity to or near the level of the ejector 11, so as to keep the successive leading sheets in operative contact with the ejector or to enable the

ejector to secure the proper grip or friction for starting a sheet from the retainer 10 and out of the receptacle and cabinet. The hold-back flange or lip 31 is shown on the receptacle, but could be arranged elsewhere, as on the cabinet or front brace 4. The ejector 11 is customarily provided with means, such as ratchet and pawl, to prevent retrograde rotation; but this feature is no part of this invention. The receptacle is out of contact with gear 25 or this gear is set sufficiently to one side or out of the way to not contact with or hinder the action of the feed-wire 18 21. The cabinet can have a side suitably cut away or recessed for housing or setting aside the gear 25. The cabinet being suitably fixed or placed, the receptacle can be inserted into or removed from the cabinet or have its feed connection 18 21 hitched or unhitched, as required.

The spring 17, arranged as shown, tends to draw the loop-shank 18 toward the upper edge of back board 16, thus throwing said shank 18 into an upwardly-curved loop when the winding-axle 24 is loose or free. Supposing the ejector 11 to be operated when the pack 5 or its front is already jammed up forcibly or rests firmly against the ejector, the connection 18 to 21 can in such case give or yield by the stretch of spring 17 when the ejector 11 rotates shaft 24, so that the pack 5 remains stationary while the ejector takes off sheets. As a new or heavy pack may have been set against ejector 11 sufficiently close for the ejector to take off two or more successive sheets without the pack having to be fed, the yielding connection allows the connection 18 to 21 to give while the pack remains at rest. Said spring 17 also keeps the loop or wire 18 to 21 taut between the roller 24 and the point where the loop or wire is attached to the spring, such spring tending to draw the loop away from this roller or winding-shaft 24.

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

1. The combination with an exterior cabinet designed to be secured to a support, of a removable and replaceable interior paper-receptacle held immovable when in the cabinet and provided at its top portion with a paper-retainer, a movable paper-feeder plate located in and removable with the interior receptacle and means substantially as described connected to or carried by the exterior cabinet for operating the feeder-plate, said interior receptacle serving to hold the paper from contact with the bottom of the exterior cabinet, substantially as described.

2. The combination with an exterior cabinet designed to be secured to a support and having an opening and closing cover, of a paper-holding receptacle having a paper-retainer at its top portion and held immovable when in the cabinet but removable and replaceable while said cabinet remains stationary with its cover open, said receptacle serving to hold the paper from contact with the bottom of the exterior cabinet, a movable

paper-feeder plate located in and removable with the interior cabinet, feeder-plate-operating devices at one end of the cabinet, and a connection between the feeder-plate and
 5 said feeder-plate-operating devices, said connection being detachably engaged with said feeder-operating devices, substantially as described.

3. The combination with an exterior cabinet
 10 net designed to be secured to a support, and having an opening and closing cover, of an interior paper-receptacle having a paper-retainer at its top portion and held immovable when in the cabinet but removable and re-
 15 placeable while said cabinet remains stationary with its cover open, a movable paper-feeder plate located in the interior receptacle and removable therewith, and means substantially as described connected to or car-
 20 ried by the exterior cabinet for actuating the paper-feeder plate, substantially as described.

4. The combination with an exterior cabinet designed to be secured to a support and having an opening and closing cover, of an
 25 interior paper-receptacle having a paper-retainer at its top portion and held immovable when in the cabinet but removable and replaceable while said cabinet remains station-
 30 ary with its cover open, a movable paper-feeder plate located in the interior receptacle, and removable therewith, means for actuating the paper-feeder plate, and a paper-ejector mounted on the cabinet and constructed and
 35 arranged to eject the paper from one end of said interior receptacle, substantially as described.

5. The combination with an exterior cabinet designed to be secured to a support, of a removable and replaceable interior paper-re-
 40 ceptacle held immovable when in the cabinet and provided at its top with a paper-retainer and at one end with a cut-away or recessed portion, a paper-feeder plate located in the receptacle and removable therewith, means
 45 for actuating the paper-feeder plate, and a paper-ejector mounted on the cabinet and projecting into the said cut-away or recessed end portion of said receptacle, substantially as described.

6. The combination with a cabinet designed to be secured to a support, of a removable and replaceable paper-receptacle arranged in
 50 said cabinet, a paper-feeder plate movable within said receptacle and removable there-
 55 with, and means substantially as described connected to or carried by the cabinet for advancing the paper-feeder plate in the receptacle, substantially as described.

7. The combination with a cabinet having
 60 a paper-ejector at one end, of a removable and replaceable receptacle arranged in the cabinet and having side walls provided in proximity to one end with openings, a paper-feeder plate movable within said receptacle, a loop
 65 engaging the paper-feeder plate and having its branches passing through the side open-

ings of the receptacle, and a winding device with which said branches are connected, substantially as described.

8. The combination with a cabinet, of an in-
 70 terior paper-receptacle having a paper-retainer at its top portion, a paper-feeder plate movable longitudinally of and within the said receptacle to press the paper forward and
 75 mechanism connected with and actuating said paper-feeder plate to alternately feed and release the paper, substantially as described.

9. A paper-cabinet provided with a station-
 80 ary or immovable receptacle, an ejector, and a feeder, said cabinet having an actuator provided with a hook or catch for releasably engaging the feeder substantially as described.

10. The combination with a cabinet, of a removable and replaceable paper-receptacle
 85 arranged in said cabinet and provided with a paper-feeder plate movable longitudinally thereof, a winding-shaft, a loop connected with the winding-shaft and engaging the pa-
 90 per-feeder plate, and a spring connected with said loop and made to keep the loop taut between the winding-shaft and spring, substantially as described.

11. The combination with a cabinet, of a paper-receptacle arranged therein, an ejector
 95 mounted on the cabinet and constructed and arranged to eject the paper from one end of said receptacle, a winding-shaft carried by the cabinet, a paper-feeder plate movable in
 100 the receptacle, and a loop engaging the feeder plate and connected with said winding-shaft, substantially as described.

12. The combination with a cabinet, of a paper-receptacle arranged therein and pro-
 105 vided with a paper-retainer, a paper-feeder plate and a loop or wire connected to the paper-feeder plate, and a winding-shaft on the cabinet to which the loop or wire is connected, substantially as described.

13. A paper-cabinet provided with a recep-
 110 tacle, an ejector, a back piece for the paper, a spring or yielding connection at the back piece, a wire or loop connected to the spring, and a shaft for engaging the wire or loop to
 115 move the back piece toward the ejector said spring being made to keep the loop taut between the shaft and the spring substantially as described.

14. A paper-cabinet provided with a recep-
 120 tacle, an ejector, a feeder, and an actuator or driving-shaft for the feeder, said cabinet having a door or opening for the insertion of the receptacle, and an end open for the passage of the feeder said feeder being made to be
 125 connected to and disconnected from its actuator substantially as described.

15. A paper-receptacle adapted to be in-
 130 serted in a cabinet and provided with a paper pack and a paper-retainer, a feeder-plate and a loop or wire engaged with the feeder-plate and held out of contact with the front portion of the paper pack, said loop or wire being

adapted for connecting with an actuator or shaft on the cabinet for operating the feeder-plate in said receptacle substantially as described.

5 16. The combination with a cabinet, of a paper-receptacle arranged therein and provided with a paper-retainer, a paper-feeder plate and a loop or wire engaged with the feeder-plate and held out of contact with the
10 front portion of the paper pack and a device on the cabinet with which the loop or wire connects, for operating the feeder-plate in the said receptacle, substantially as described.

15 17. The combination of a paper-receptacle provided with a paper-retainer, a paper-feeder plate, a winding-shaft, and a yielding connection comprising a spring 17 and a loop 18

21 between the feeder-plate and the said shaft, substantially as described.

18. The combination with a cabinet, of a 20 paper-receptacle arranged therein and provided with a paper-retainer, a paper-feeder plate in the receptacle, a winding-shaft mounted on the cabinet, and a yielding connection comprising a spring 17 and a loop 18 25 21 between the paper-feeder plate and the said shaft, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JAMES T. HOYT.

Witnesses:

W. C. HAUFF,

CHAS. E. POENSGEN.