Nov. 2, 1943. E. H. PHILIPPI 2,333,490

ADVERTISING APPARATUS

Filed March 1, 1941 2 Sheets-Sheet 1

Fig. 1.

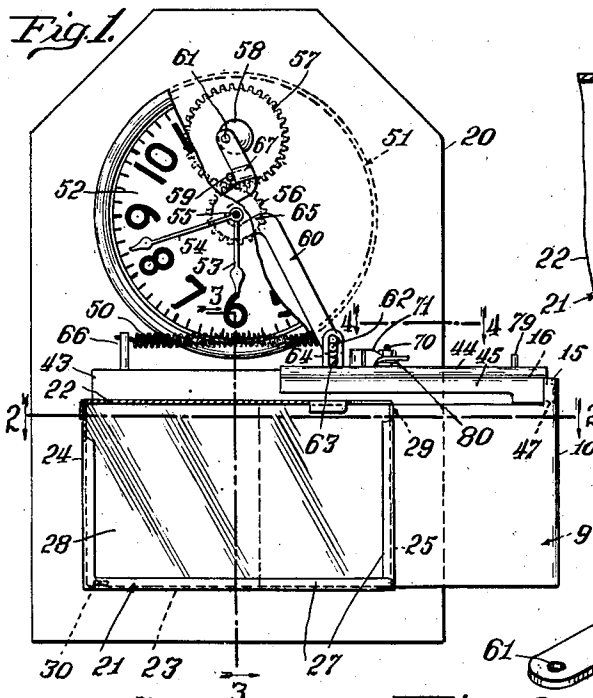


Fig. 4.

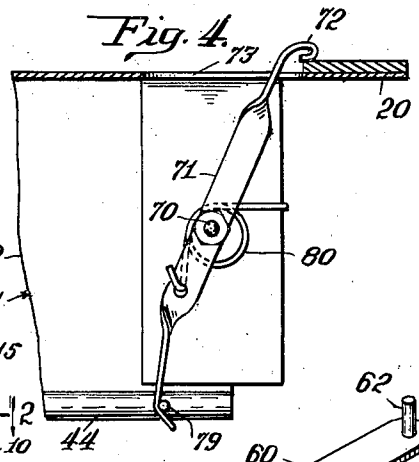


Fig. 7.

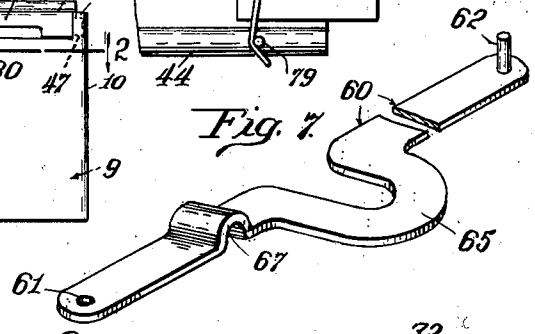


Fig. 2.

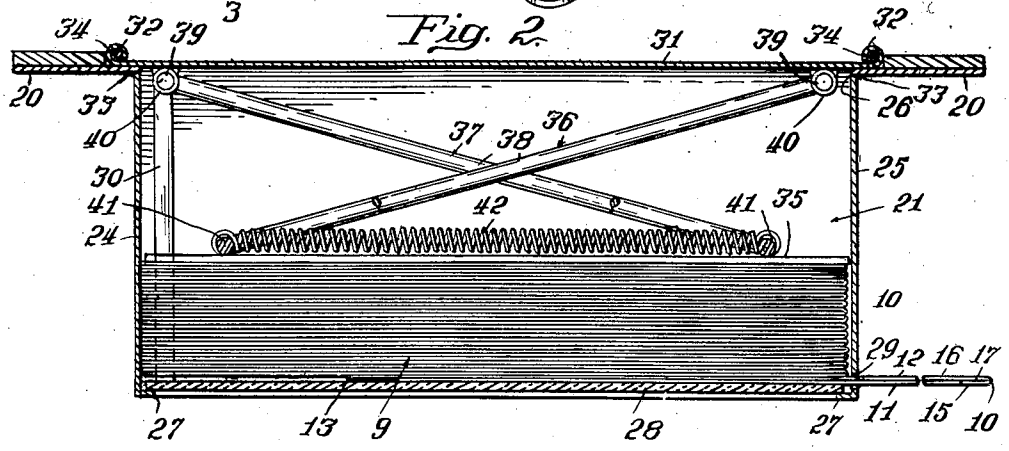
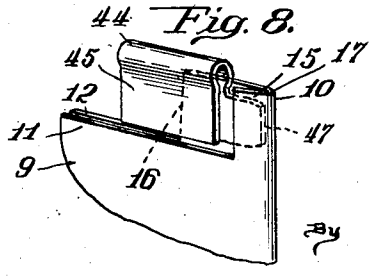


Fig. 8.



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Fig. 3.

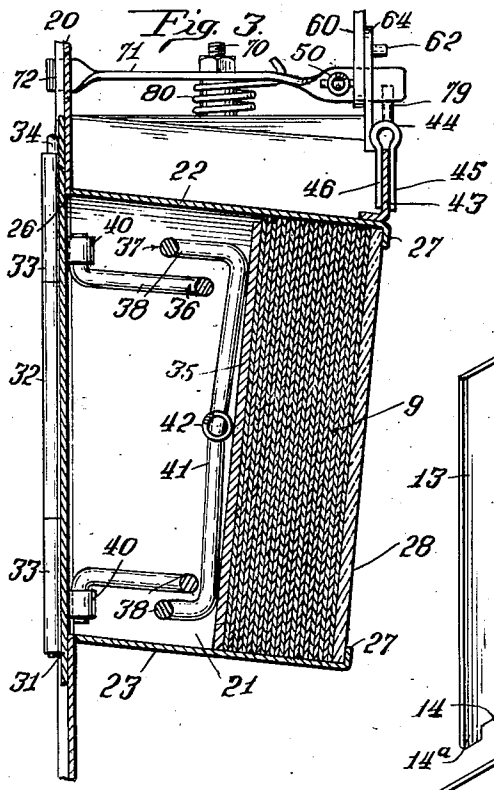


Fig. 5.

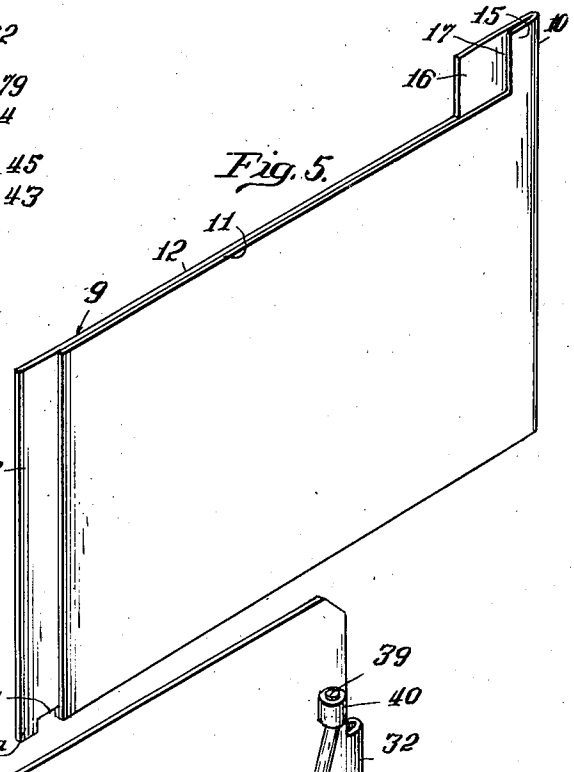
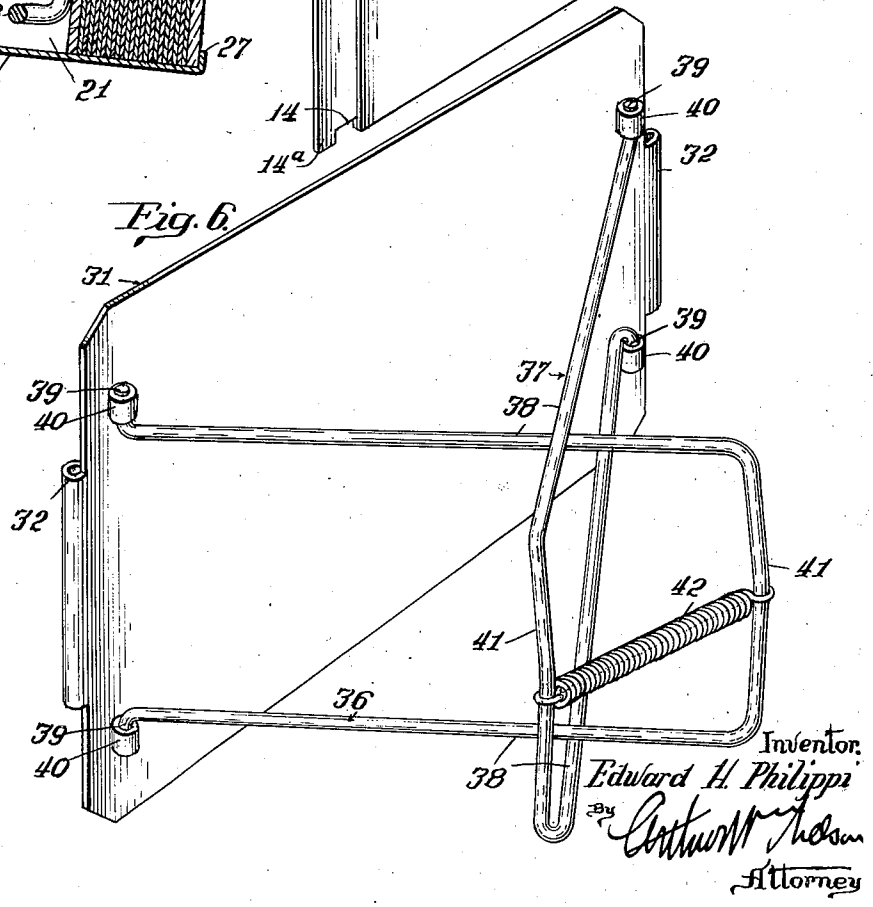


Fig. 6.



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Patented Nov. 2, 1943

2,333,490

UNITED STATES PATENT OFFICE

2,333,490

ADVERTISING APPARATUS

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Application March 1, 1941, Serial No. 381,237

11 Claims. (Cl. 271—2)

This invention relates to improvements in advertising apparatus and it consists of the matters hereinafter described and more particularly pointed out in the appended claims.

The apparatus of the present invention is somewhat similar to the apparatus shown and described in my prior Patent 2,097,090 of October 26, 1937, for dispensing devices of the kind shown and described in my prior Patent 2,080,092 of May 11, 1937.

One of the objects of the present invention is to provide a more simple, inexpensive and efficient apparatus for periodically dispensing devices of the kind shown in my prior Patent 2,030,092, laterally outward from the apparatus, instead of downwardly outward as in the apparatus of Patent 2,097,090 before mentioned.

Another object of the invention is to provide in apparatus of this kind, improved means for pushing the pack of dispensible devices forwardly to dispose the frontmost device in the pack in that position from which it may be dispensed laterally from the apparatus and which means permits of a ready insertion of a new pack of devices when necessary.

A further object of the invention is to provide apparatus of this kind which permits of the use of a more simple dispensible device which is more economical of the use of the sheeted material from which it is made, without detracting from or reducing the effective area of the device.

Again, it is an object of the invention to provide apparatus of this kind which includes means adapted for manual manipulation to dispense one or more than one of the successive dispensible devices laterally from the apparatus when the same becomes necessary.

The above mentioned objects of the invention, as well as others, together with the several advantages thereof will more fully appear as the specification proceeds.

In the drawings:

Fig. 1 is an elevation of an apparatus embodying one form of the invention, as viewed from the front thereof, when removed from the casing of the apparatus, and with certain parts of the apparatus appearing as broken away for a more simple illustration of the invention.

Fig. 2 is a horizontal sectional view through the bottom portion of the apparatus as taken on the line 2—2 of Fig. 1 and on a scale enlarged over that of Fig. 1.

Fig. 3 is a vertical sectional view through the bottom portion of the apparatus as taken on the line 3—3 of Fig. 1 and substantially on the same scale as Fig. 2.

Fig. 4 is a detail horizontal sectional view through a part of the apparatus as taken on the line 4—4 of Fig. 1 and on substantially the scale of Figs. 2 and 3.

Fig. 5 is a perspective view of one of the folded paper devices dispensed by the improved apparatus.

Fig. 6 is a perspective view, on an enlarged scale, of a certain pack pusher mechanism employed in the apparatus, when removed from the position it normally occupies in the apparatus.

Fig. 7 is a perspective view on an enlarged scale of a fragment of a certain lever employed in the apparatus and which will be more fully referred to later.

Fig. 8 is a perspective view of a fragment of one of the dispensible devices and illustrates the manner in which a part of the dispensing member of the apparatus engages in the pocket of said dispensible device in the operation of the apparatus for its intended purpose.

In the present instance, the dispensible device 9 shown in Fig. 5, in general comprises a piece of sheeted material, as for example, paper, folded transversely as at 10 to form front and rear sections 11 and 12 respectively. The rear section is longer than the front section and has a portion 13 that extends beyond the free end edge of the front section 11. In the bottom edge of the extension portion 13 is a notch 14 and outwardly therefrom is a tongue 14a, the purpose of said notch and tongue appearing later. The upper edge of the front and rear sections, at the folded end of the device, is formed with upward extensions 15 and 16 respectively, the extension 16 associated with the rear section 12, being the wider or longer one. These extensions 15 and 16 coact to provide a pocket 17 in what is normally the upper right hand corner of the device and the closed end of the pocket is provided by an extension of the fold 10.

The front and rear sections may contain on their respective obverse and reverse sides, menus, recipes, dates and other matter, such as editorials, news items or other data, or advertising relating to products for following said menus and recipes.

The device shown in Fig. 5 is quite similar to that illustrated and described in my beforementioned patent, but is intended for a right hand lateral delivery or dispensing, instead of a downward delivery or dispensing as in the case of the device of said patent.

Referring now in detail to the apparatus illustrated in the drawings and which is adapted to dispense the device shown in Fig. 5, said apparatus includes an upright back plate 20 (see Fig. 1) that forms the main support for the mechanism of the apparatus. On the front side of said plate, toward the bottom end thereof, is provided a chute-like magazine 21 for holding a pack of the devices shown in Fig. 5. Said magazine includes top and bottom walls 22—23 and upright left and right hand side walls 24—25. The top and bottom walls pitch downwardly and forwardly from an opening 26 in the back plate and through which the magazine is loaded with dispensible devices as will be mentioned later. The front end margins of the top and bottom walls and the left hand side wall include an inturned flange 27, the right hand side wall being devoid of such a flange as best shown in the bottom right hand corner of Fig. 2.

The open front end of the magazine is closed by a pane of glass 28 which engages the inner surface of said flange 27. This pane of glass coacts with the flangeless front end of the right hand side wall 25 in providing the discharge slot 29 (see Fig. 2) and out through which the devices shown in Fig. 5 are dispensed laterally from the right hand side of the magazine 21.

A rib 30 (see Fig. 2) is provided upon the bottom wall 23 of the magazine, adjacent to and parallel with the left hand side wall 24. This rib is straddled by the notches 14 of all of the dispensible devices in the pack when in the magazine 21 and not only keeps the devices in the pack in alignment but holds the next to the frontmost device in place during the dispensing of said frontmost device from said pack out through the slot 29. As apparent from Fig. 3, by reasons of the downward inclination of the top and bottom walls of the magazine, a relative slippage or facial movement between the devices in the pack is possible, as said pack is moved forwardly in the magazine as will now appear. This relative facial movement assures a better separation between adjacent devices in the pack for an easier dispensing of the devices, one at a time.

The opening 26 in the back plate 20 and through which the magazine is replenished with dispensible devices when necessary, is normally closed by a door 31. This door is provided at the side edges with rolled ears 32—32 to fit between similar ears 33 on the rear side of the back plate 20. Pins 34 extend through the aligned ears 32—33 at each lateral end of the door and one of said pins is removable. When the removable pin 34 is removed, the door may be swung about or upon the other pin to expose and to thereafter close the opening 26.

The door 31 provides a convenient normally stationary part upon which to mount a means which normally urges the pack forwardly against the glass pane 28 at the front end of the magazine. In the present instance, said means is of the spring pressed folding type, somewhat on the order of a pantograph, and coacts with a relatively stiff follower plate 35 engaged against the rearmost dispensible device in the pack.

Said means, which is best illustrated in perspective in Fig. 6, includes a pair of U-shaped elements 36 and 37. Each element includes upper and lower arms 38—38 each formed at one end with a right angled extension 39, that is pivotally engaged in an associated ear 40 on the inner face of the door. The other ends of the arms 38 of each element are connected together by a bar 41 and which bars are connected together by a contractible spring 42. The bars 41 are offset outwardly at their midportions as appears in Fig. 6 and it is these midportions to which the ends of the spring 42 are attached.

The element 36 is narrower than the element 37, when considered vertically, so that its outer or free end may pass through the like end of the element 37. With the arrangement described, the top and bottom end parts of the bars 41—41 engage the back of the follower plate 35. As the spring 42 is a normally contractible one, it tends to swing the bars 41—41 forwardly and toward each other and then to normally "open" and as said bars 41—41 are engaged against the follower plate 35, said plate and the pack of dispensible devices, in front of the same, are normally urged forwardly against the glass pane 28 to dispose the frontmost dispensible device into the plane of the slot 29 before mentioned. When the door 31 is opened, as before mentioned, the pack pusher means is removed from the magazine and when the door is being closed, it is reentered into the magazine.

Along the front end of the top wall 22 I mount a rail or guide 43 disposed substantially in the plane of the slot 29. An elongated dispensing member 44 has a sliding, guided engagement on said rail and which member includes front and rear flange-like sides 45 and 46 that engage the top as well as the front and rear sides of the guide rail. The right hand end of the rear flange-like side 46 of said dispensing member is provided with a finger-like extension 47 that normally engages upon the exposed part of the extension 16 of the frontmost dispensable device in the pack. When said dispensing device is moved to the right, as in Fig. 1, the finger 47 enters the pocket 17 of said frontmost device and engages the fold thereof as appears in Fig. 8 for a dispensing of said frontmost device. After a dispensing of said frontmost device, the dispensing member 44 is returned to its normal position, by means of a spring 50, see Fig. 1 and which will be more fully referred to. In the return movement of the dispensing element to normal position, the finger 47 rides over the extension 15 of the now frontmost member in the pack so as to come to rest upon the exposed area of the extension 16 of said frontmost member.

The forth and back movement of the dispensing member 44 may be imparted thereto, at periodic timed intervals. When the dispensable devices each carry successive dates, it is preferred that such intervals be once a day. Therefore, in connection with the structure described, I provide a clock for this purpose and which clock is supported upon the back plate 20 above the magazine 21. Said clock includes a mechanism enclosing casing 51, a dial 52 and associated hour and minute hands 53—54, said hands being arranged coaxially with the hour shaft 55 of said mechanism as appears in Fig. 1.

It is preferred that the clock be an electric motor driven clock and on the shaft 55 thereof I mount a pinion 56. This pinion so meshes with a gear 57, journalled on a fixed stud 58, as to be driven one complete revolution each twenty-four hours. The gear 57 carries a projecting pin 59 on its front face. The parts above mentioned

appear in Fig. 1. If it is desired to dispense more than one device 9 in a twenty-four hour period, then said gear will be provided with the appropriate number of such pins 59.

A power transmitting lever 60 disposed to the rear of the dial 52, is pivotally mounted at one end as at 61, on the stud 58 but off center with respect thereto. The other end of said lever carries a stud 62 (see Figs. 1 and 3) that has a sliding engagement in a slot 63 in an upright extension 64 toward the right hand end of the dispensable member 44. In the swinging movement of the lever, in one (counterclockwise) direction, it swings past the twelve hour shaft and to accommodate the same, said lever is provided with a lateral loop-like offset 65 (see Figs. 1 and 7). The lever 60 provides a convenient part to which one end of the return spring 50 before mentioned may be attached and the other end of said spring may be attached to an upright pin 66 on the top wall of the magazine near its left hand side wall 24 as appears in Fig. 1.

In the operation of the device, the twenty-four hour gear 57 is driven counterclockwise and when the pin 59 thereof is in the downward part of its movement, it will engage the left hand edge of the top end portion of the lever 60 (above the offset 65) and will cause said lever to swing to the right and expand the spring 50. The lever 60 reaches the end of its ejecting or dispensing stroke, as the pin approaches or nears the end of its downward swing and is about to enter its upward swing. At this time, a channel 67 (see Fig. 7) in the lever registers with the path of the pin 59 on the gear 57 so that the pin disengages and parts from lever 60 which swings to the left (clockwise) and returns to its normal position under the contraction of the spring 50, the channel 67 permitting the lever 60 to pass over said pin.

As the lever returns to its normal position, it causes the dispensing member 44 to slide on the rail 43 and return to its normal position, leaving the dispensed dispensable member in a position projecting from the right hand end of the pack and supported in this position by reason of its left hand end being held between the now frontmost dispensable device in the stack and the glass pane 28. It is to be understood that the structure thus far described is enclosed from the front by a suitable casing (not shown) and that the major portion of the dispensed device projects a suitable distance outwardly from the casing through a slot therein which aligns with the slot 29 in the right hand side wall of the magazine 21. The dispensed device is now in a convenient position to be manually moved.

In the initial part of the dispensing movement of the frontmost dispensable device of the pack, the tongue-like part 14a of the rear section 12 of the device being dispensed, pulls over the rib 30, and therefore while said part of all the devices in the pack function collectively to hold the devices remaining in the pack in position, and preventing the dispensing of more than one device 9 at a time, said part 14a of the device being dispensed offers substantially no resistance to the dispensing of the device.

It is pointed out that by so locating the gear 57 on its pivot 58 with respect to the gear 55, the angular position of the pin 59 in its path of circular movement may be determined and thus the desired time of day, at which the dispensing movement occurs may be readily selected. Preferably the parts are so set that the dispensing movement of the frontmost dispensible device is initiated at about midnight.

When the front section of the dispensible device bears a date, it is apparent that should the clock mechanism before mentioned stop for some reason or other and remain stopped, say for more than a day, the frontmost device in the pack must be removed so as to make the date on the next device to be dispensed, accord with the current calendar date. I have provided manual means whereby the dispensing member 44 may be caused to dispense the frontmost device in the pack and such means are as follows:

At the right hand side of the top wall 22 of the magazine is an upright post 70. A lever 71 is journalled on said post and one end 72 of said lever extends out through a slot 73 in the back plate 20 above the opening 21 therein. The other side of said lever engages behind an upright pin 79 on the right hand end of the dispensing member 44. These parts best appear in Fig. 4. A spring 80 is associated with the lever 71 and post 70 so that this spring normally tends to swing in a clockwise direction as when viewed in Fig. 4. By grasping that part of the first mentioned end 72 of lever 71 exposed through the slot 73, said lever may be swung in a counterclockwise direction, and cause the other end of said lever to slide the dispensing element 44 on its rail 43 and cause the same to move the frontmost dispensible device into such position as to be readily grasped manually for removal.

When the lever 71 is released, after a manual dispensing of the frontmost dispensible device, said lever returns to its normal position, as shown in Fig. 4 ready for the next operation, either automatically or manually.

The apparatus is simple in construction and is positive and trouble-free in its operation for its intended purpose.

In describing the invention, I have referred in detail to the form, arrangement and construction of the parts involved, the same is to be considered only in the illustrative sense so that I do not wish to be limited thereto except as may be specifically set forth in the appended claims.

I claim as my invention:

1. Apparatus of the kind described embodying therein, in combination with a pack of vertically edgewise disposed dispensible devices, each comprising a folded piece of sheet material having top and bottom horizontal edges and side edges and each including an open marginal pocket projecting from one of said horizontal edges, a movable dispensing member arranged adjacent said one of said horizontal edges and disposed to enter said pocket of the frontmost device in the pack in the initial part of its movement in one direction and to move said frontmost dispensible device from its place in the pack in the plane of said horizontal edges in another part of its movement in said direction, means with which the other of said horizontal edges of said devices engage, said means and said last mentioned edges of said devices being formed with interengaging parts which function to hold the devices of the pack in alignment and to hold the next to the frontmost device of the pack in place during the dispensing of said frontmost device, and means operable to impart movement to said dispensing member.

2. Apparatus of the kind described embodying therein, in combination with a pack of vertically edgewise disposed dispensible devices, each comprising a folded piece of sheet material having

top and bottom horizontal edges and side edges and each including an open marginal pocket projecting from its top horizontal edge, a movable dispensing member arranged adjacent said top edge and disposed to enter said pocket of the frontmost device in the pack in the initial part of its movement in one direction and to move said frontmost dispensible device from its place in the pack in the plane of said horizontal edges in another part of its movement in said direction, means with which the bottom edges of said devices engage for support, said means having a shoulder thereon for engagement in recesses in said bottom edges of said devices of the pack to hold them in alignment and to hold the next to the frontmost device in the pack in place during the dispensing of said frontmost device, and means operable to impart movement to said dispensing member.

3. Apparatus of the kind described embodying therein, means for supporting a pack of vertically edgewise disposed dispensible devices, each comprising a folded piece of sheet material having top and bottom horizontal edges and side edges and each including an open marginal pocket projecting from one of said horizontal edges, said means comprising a magazine having top and bottom walls with which the top and bottom edges of said devices are engaged for support so that said devices are capable of a forward movement thereon as a group and from which the frontmost device of the part is capable of being moved laterally, guide means arranged parallel with the top horizontal edge of said frontmost device, a dispensing member movable on said guide means and having a portion disposed to enter said pocket of the frontmost device in the pack in one part of its movement on said guide means in one direction and to move said frontmost dispensible device from its place in the pack in the plane of said horizontal edges in another part of its movement on said guide means in said direction, and means operable to impart movement to said dispensing member forth and back upon said guide means.

4. Apparatus of the kind described embodying therein, means for supporting a pack of vertically edgewise disposed dispensible devices, each comprising a folded piece of sheet material having edges and an open marginal pocket projecting from one of said edges, a movable dispensing member arranged adjacent said edge having said pocket projecting therefrom and disposed to enter said pocket of the frontmost device of the pack in one part of its movement in one direction and to move said frontmost device from the pack in another part of its movement in the plane of said edge having the pocket projecting therefrom, means for imparting a forth and back movement to said dispensing member and including a motor, a pivoted member continuously rotated thereby and including a projection, and a pivotally mounted lever having one portion operatively connected to said dispensing member and having another portion disposed to be engaged by said projection on said pivoted member in a part of rotation and to clear the same in another part of its rotation.

5. Apparatus of the kind described embodying therein, means for supporting a pack of vertically edgewise disposed dispensible devices, each comprising a folded piece of sheet material having top and bottom horizontal edges and side edges and each including an open marginal pocket projecting from one of said horizontal edges, a movable dispensing member arranged adjacent said one of said horizontal devices and disposed to enter said pocket of the frontmost device in the pack in one part of its movement in one direction and to move said frontmost dispensible device from its place in the pack in the plane of said horizontal edges in another part of its movement in said direction, and means operating to impart movement to said dispensing member, said means including a motor, a pivoted member continuously rotated thereby and including a projection, and a pivotally mounted lever having one portion operatively connected to said dispensing member and having another portion disposed to be engaged by said projection on said pivoted member in a part of its rotation and to clear the same in another part of its rotation.

6. Apparatus of the kind described embodying therein, means for supporting a pack of vertically edgewise disposed dispensible devices, each comprising a folded piece of sheet material having top and bottom horizontal edges and side edges and each including an open marginal pocket projecting from one of said horizontal edges, guide means arranged adjacent to and parallel with said one of said edges, a dispensing member movable on said guide means and having a portion disposed to enter said pocket of the frontmost device in the pack in one part of the movement on said guide means in one direction and to move said frontmost dispensible device from its place in the pack in the plane of said horizontal edges in the final part of its movement on said guide means in said direction, a continuously rotating member carrying a projection thereon, a pivotally mounted lever having one portion operatively connected to said dispensing member and having another portion disposed to be engaged by said projection on said pivoted member in a part of its rotation and to clear the same in another part of its rotation.

7. Apparatus of the kind described embodying therein, means for supporting a pack of vertically edgewise disposed dispensible devices each comprising a folded piece of sheet material having top and bottom horizontal edges and side edges and each including an open marginal pocket projecting from one of said horizontal edges, a movable dispensing member arranged adjacent said one of said horizontal edges and disposed to enter said pocket of the frontmost device in the pack in one part of its movement in one direction and to move said frontmost dispensible device from its place in the pack in the plane of said horizontal edges in another part of its movement in said direction, and means operating to impart movement to said dispensing member, said means including a rotatively driven member carrying a projection in its face, a pivot member for said rotatively driven member, a lever pivoted at one end eccentrically on said pivot member and operatively connected toward its other end with said dispensing member, said lever being engageable by said projection on said rotatively driven member for a part of its rotation so as to impart a swinging movement to said lever, said lever having a portion thereof so formed that at another part of rotation of the driven member, said projection may pass the said lever.

8. Apparatus of the kind described embodying therein, means for supporting a pack of vertically edgewise disposed dispensible devices, each comprising a folded piece of sheet material having top and bottom horizontal edges and side edges and each including an open marginal pocket pro-

jecting from one of said horizontal edges, a movable dispensing member arranged adjacent one of said horizontal edges and disposed to enter said pocket of the frontmost device in the pack in one part of its movement in one direction and to move said frontmost dispensible device from its place in the pack in another part of its movement in said direction, power means for imparting movement to said dispensing member in said one direction in a dispensing operation, and manually operable means for imparting movement to said dispensing member in said one direction independently of said power means.

9. In apparatus of the kind described, means for holding a pack of relatively flat separable dispensible devices, a follower element engaged with the rearmost device in the pack, a stationary member spaced rearwardly from said pack of dispensible devices, means in said space between said pack and said member and including link-like parts pivotally connected to said member for a folding and unfolding swinging movement toward and away from said member, means carried by said link-like members and normally tending to unfold said linkage means and urge said follower element and pack forwardly and away from said first mentioned member.

10. In apparatus of the kind described, means for holding a pack of relatively flat separable dispensible devices, a follower element engaged with the rearmost device in the pack, a stationary member spaced rearwardly from said pack of dispensible members, means in said space between said pack and said stationary member and including parts pivotally connected at one end to said member, and extending therefrom so as to cross each other for a folding and unfolding swinging movement, means carried by the other end of said pivotally connected parts and engaged with said follower element, and contractible means connecting the last mentioned end of said parts and normally tending to swing said parts into the unfolded position so as to urge said follower element and said pack forwardly and away from said first mentioned member.

11. In apparatus of the kind described, means for holding a pack of relatively flat separable dispensible devices, a follower element engaged with the rearmost device in the pack for normally urging the device of the pack forwardly, said means including walls engaged by the edges of the devices of the pack, certain of said walls being so formed as to cause a relative movement between the engaged faces of said devices in the plane of certain of the edges thereof.

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