

Dec. 3, 1940.

W. A. PETERS ET AL  
CARD SELECTING MECHANISM

2,223,966

Filed July 1, 1938

3 Sheets-Sheet 1

*Fig. 1.*

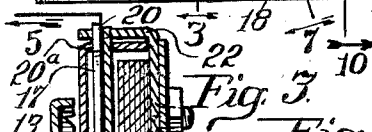
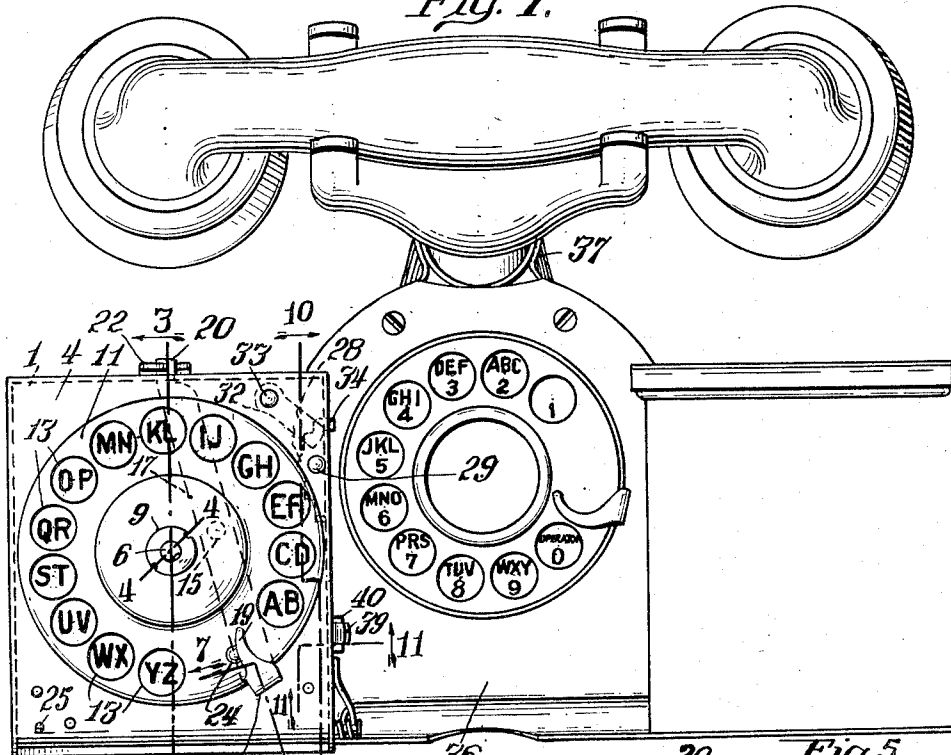


*Fig. 4.*

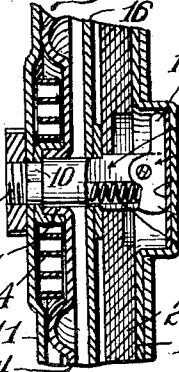
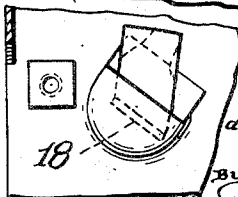
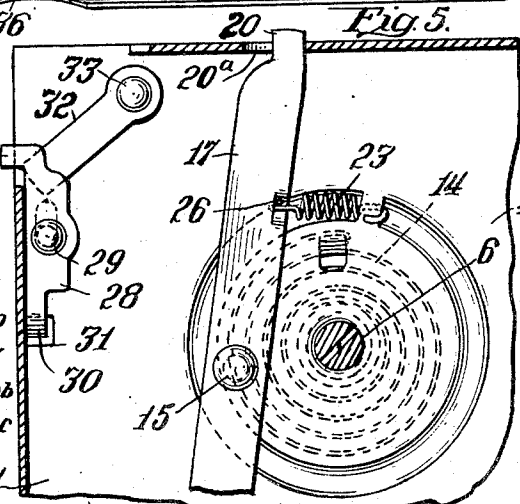
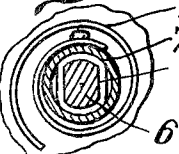


*Fig. 6.*



Inventors

*William A. Peters*  
and  
*Leonard J. Stone*  
By *Rudolph M. Ziegler*  
Attorney.

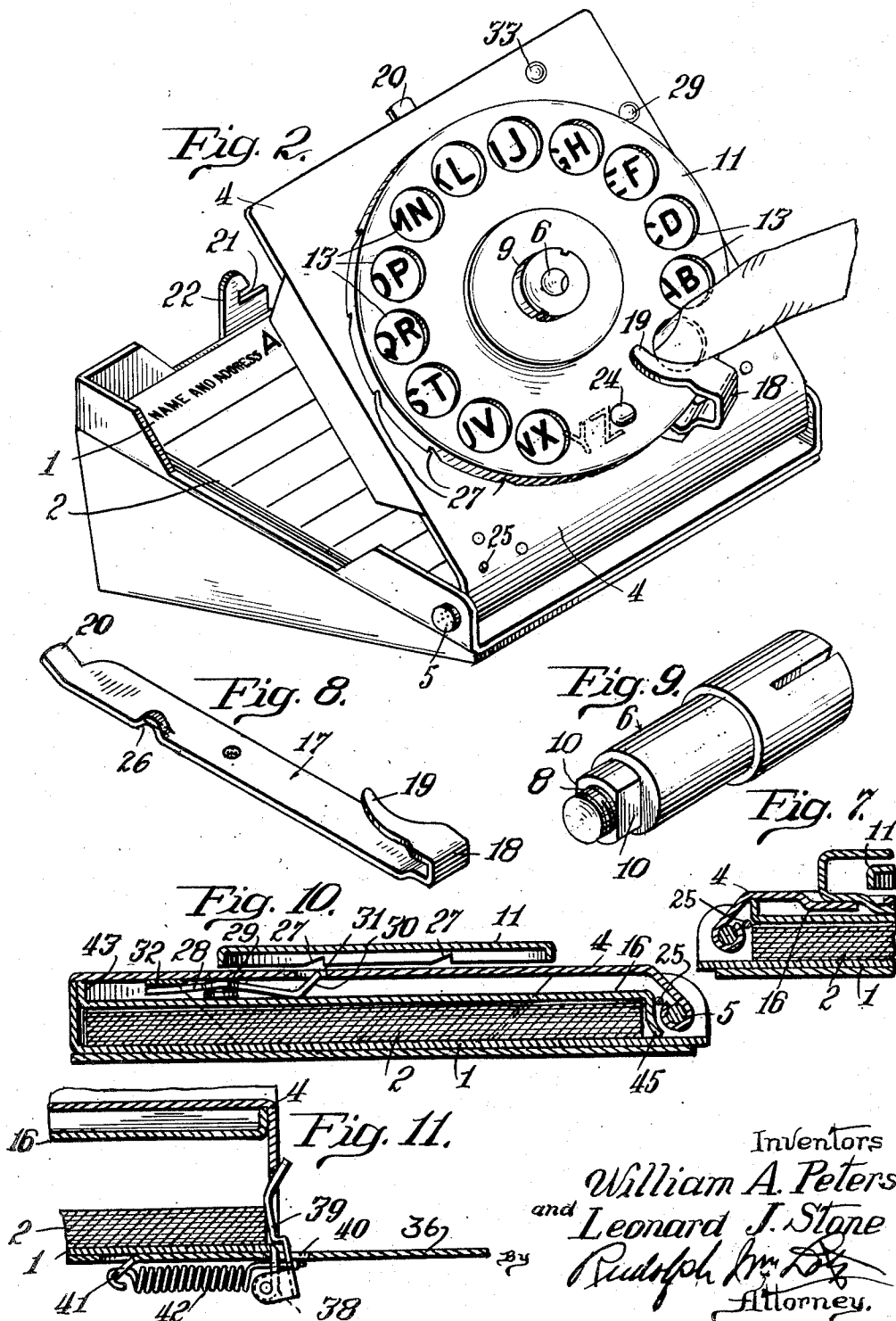
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3 Sheets-Sheet 2



Inventors  
William A. Peters  
and Leonard J. Stone  
Rudolph M. Lutz  
Attorney.

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3 Sheets-Sheet 3

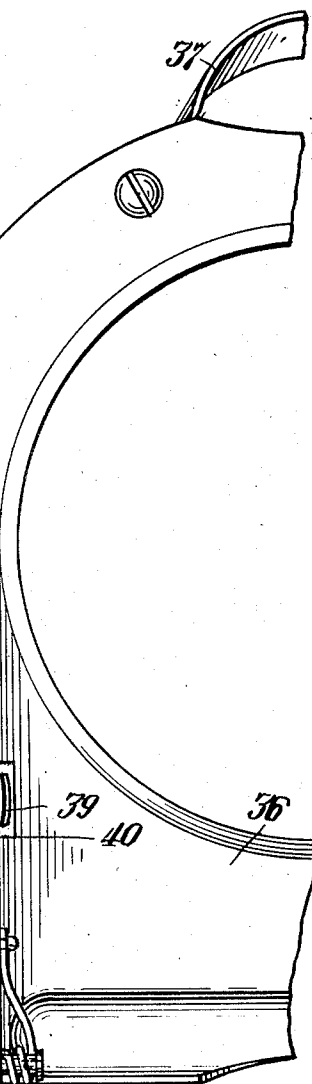
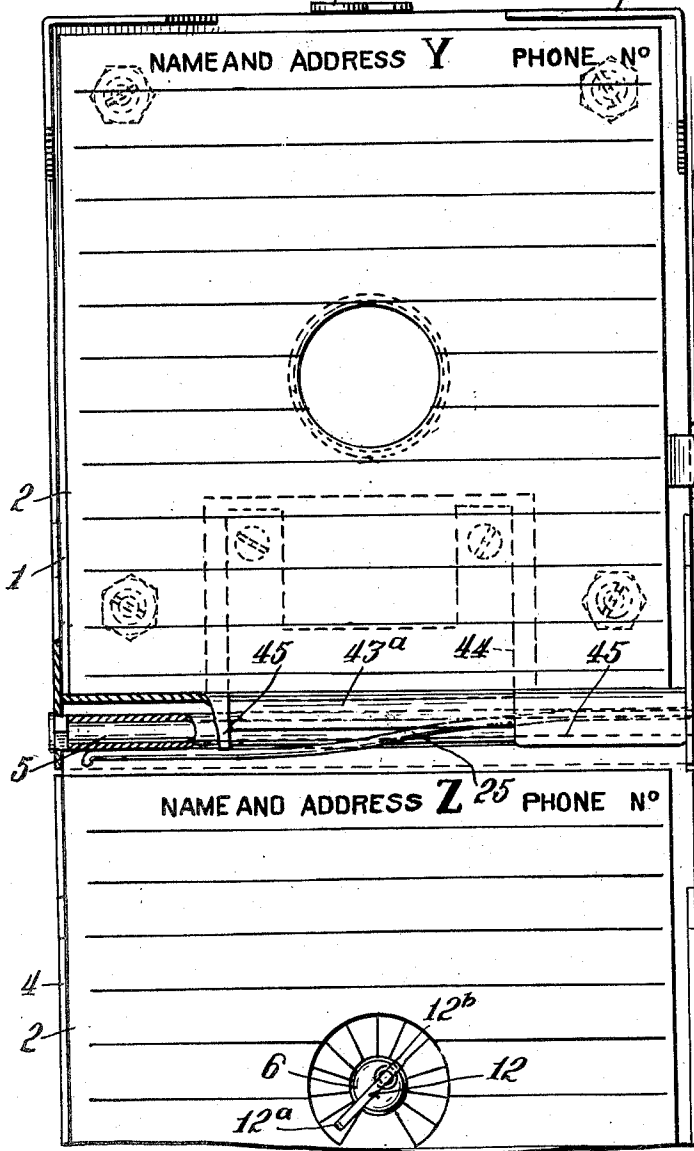
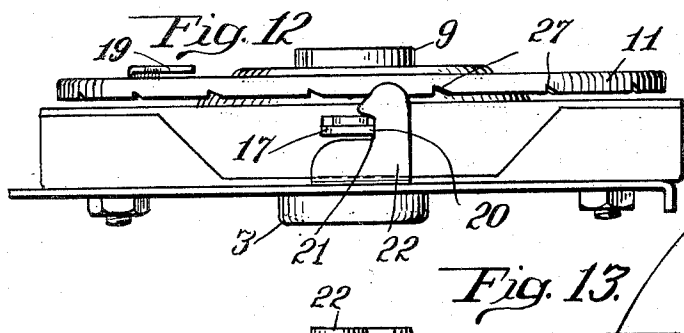


Fig. 14 Fig. 15 Fig. 16  
Inventors  
William A. Peters  
and  
Leonard J. Stone  
By *Rudolph M. Loe*  
Attorney.

## UNITED STATES PATENT OFFICE

2,223,966

## CARD SELECTING MECHANISM

William A. Peters and Leonard J. Stone, Chicago, Ill., assignors to The Bates Manufacturing Company, Orange, N. J., a corporation of New Jersey

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19 Claims. (Cl. 40—104)

The present invention has for its main object to provide a digitally operable mechanism for causing a pack of information bearing cards to be opened to expose to view any selected card of the pack.

A further object of the invention is to provide a mechanism of the type specified which is very compact, can be produced at low cost and which is operable in a very simple manner.

Another object of the invention is to provide a mechanism of the type specified which includes a receptacle for the pack of cards aforesaid which, in turn, includes a closure latch operatively associated with a card selecting means for causing the said latch to be released simultaneously with completion of the operation of said selecting means for effecting opening of the receptacle with the selected card in view by further movement of the selecting means following conclusion of the card selecting movement thereof.

Another object of the invention is to provide means for automatically maintaining the card selecting means in the position to which it has been moved, as set forth in the next preceding paragraph, so long as the receptacle is open and for automatically causing said selecting means and said latch to be restored to initial positions by effecting closure of the receptacle.

Another object of the invention is to provide a mechanism of the aforesaid type which is so compact as to be capable of being embodied as an attachment to a desk telephone instrument of any of the several types commonly used.

Other objects of the invention will be pointed out in or readily understood from the following description.

A suitable embodiment of the invention is illustrated in the accompanying drawings, wherein,

Fig. 1 illustrates in plan view, a mechanism constructed in accordance with the invention embodied as a part of an attachment secured to a telephone instrument of a conventional type, the same being disposed at the left-hand side of said attachment.

Fig. 2 is a perspective view of the mechanism of this invention showing the cover plate thereof in partly open position.

Fig. 3 is a central vertical sectional view of the device on an enlarged scale, taken on the line 3—3 of Fig. 1.

Fig. 4 is a fragmentary detail vertical sectional view on the same scale as Fig. 3, taken on the line 4—4 of Fig. 1.

Fig. 5 is a fragmentary plan sectional view taken on the line 5—5 of Fig. 3.

Fig. 6 is a fragmentary detail sectional view taken on the line 6—6 of Fig. 3.

Fig. 7 is a fragmentary detail sectional view taken on the line 7—7 of Fig. 1.

Fig. 8 is a perspective view of a latch releasing lever of the mechanism.

Fig. 9 is a perspective view of the stud shaft of the mechanism.

Fig. 10 is a sectional view taken on the line 10—10 of Fig. 1.

Fig. 11 is a fragmentary detail sectional view taken on the line 11—11 of Fig. 1.

Fig. 12 is an end elevation of the mechanism.

Fig. 13 is a fragmentary view of the mechanism showing the receptacle in open position to expose to view a selected card of the pack.

Figs. 14, 15 and 16 are face views of the central portions of the information bearing cards embodied in the device.

The mechanism includes a rotatable member disposed over a dial bearing indicia which is very similar to that of a conventional modern automatic telephone system desk instrument, said member being rotatable clockwise by insertion of a finger tip into an opening thereof until the finger tip engages a stop member projecting over said rotatable member, said stop member being thus moved slightly and thereby releasing the latch of the receptacle containing the card pack at the same instant that the desired card of the pack has been selected.

The mechanism is so constructed that the opening of the receptacle causes a stop device to become disposed in position to prevent reverse rotation of the rotatable member, which is spring-returned to its initial position following closure of the receptacle.

The foregoing brief description will render the following specification more readily comprehensible to those skilled in the art, than if disposed to follow the detailed description of that form of the invention shown in the drawings.

Referring first to Fig. 3, it will be noted that the mechanism includes a receptacle 1 for a pack of cards 2, the number of cards in the pack being fourteen normally, though that large a number of cards is not shown.

The receptacle 1 is rectangular as are also the cards 2, each of the latter being equipped with a substantially central opening, all of said openings being co-axial and disposed concentrically of a central pocket 3 in the bottom of the receptacle 1.

The cover member 4 is pivotally secured to the lower end wall of the receptacle 1 by means

of the hinge 5, the receptacle 1 being disposed at an incline, in the instance illustrated, and said hinge and contiguous parts of the receptacle and cover plate being so arranged as to limit the opening movement of the cover member 4 to an arc of slightly less than 180 degrees.

The shaft 6, shown in detail in Fig. 9 is journaled in a bearing 7 of the cover member, which bearing is axially aligned with the pocket 3 of the receptacle when the latter is closed. The normally upper end portion of the shaft 6 is threaded, as at 8, to receive a nut 9, and the next adjacent portion of said shaft is equipped with flat sides 10. This flat-faced portion of the shaft is engaged telescopically in the similarly shaped and flange-bordered opening in a circular member 11 which is thus rotatably engaged with the cover member 4. The flanges bordering the opening in the member 11 cooperate with the nut 9 and the shoulders bordering the flat sides 10 of the shaft 6 to secure said shaft rigidly to the said member 11.

The body portion of the shaft 6 inwardly of the bearing 7 is of such length that when the receptacle is closed, the inner end of said shaft extends substantially to the bottom wall of the pocket 3.

The innermost end portion of the shaft 6 is bifurcated and equipped with a diametrically disposed cross-member or bar 12 which is disposed entirely within the pocket 3 when the receptacle is closed. One arm 12a of the member 12 is adapted to describe an arc of a circle of slightly less radius than the circular opening of the bottom card of the pack 2 and is free to pass through said opening as the cover member is swung to its open position. The other arm 12b of said member is engaged with one end of a compression spring 12c, which is disposed in a short bore of the shaft 6 spaced from its axis.

Mounted, or otherwise disposed upon the outer face of the cover member 4, is an indicia bearing dial or a set of indicia which, in the instance illustrated, comprises the letters of the alphabet disposed in pairs of consecutive order. The several pairs of letters are disposed in a series of separate, spaced-apart areas opposed to openings 13 in the rotatable member 11 when the latter is disposed in its normal spring-held position, shown in Fig. 1. A clock-spring 14 secured at one end to the bearing 7 and at its other end to the member 11, in any suitable manner, and which is normally tensioned to resist digital rotation of said member 11 in a clockwise direction and maintain the latter engaged with a stop, is disposed between the central portions of the members 4 and 11 as shown in Figs. 3 and 4.

Pivotally mounted between its ends on the pivot member 15 offset and spaced from the shaft 6 between the top plate of the cover member 4 and an inner plate 16 parallel therewith, is a latch-lever 17 equipped at one end with an over-turned flange 18 terminating at one end portion in a shallow hook-like projection 19 which overhangs the member 11 and is disposed in the path of a finger tip inserted into an opening 13 of the member 11. Said lever 17 projects at said end portion and also at its other end portion 20 through slots, one of which indicated at 20a in Figs. 3 and 5 is in the cover member 4 and the other of which is in the lower end wall of the chamber formed between the plate 16 and the outer wall of the cover member, the

said slots defining the limits of rocking movements of said latch lever.

The last-named end portion of the latch lever 17 is slightly inclined upwardly from the body thereof, and is disposed to engage in the recess 21 of the latch-member 22 rigid with the rear wall of the receptacle and struck out of and offset outwardly of the said rear wall. A tension spring 23 maintains said last-named end portion of the lever 17 normally engaged in said 10 recess 21.

The projection 19 of the lever 17 is disposed in the path of a projection 24 rising from the top surface of the member 11 and cooperates with the latter projection to limit the rotation 15 of said member 11 by the tensioned spring 14, the adjacent end portion of said lever 17 being biased to engagement with the wall of the slot through which it projects, by the said spring 23, or being incapable of being moved by the projection 24 in the latter's spring-urged direction because the other end portion is engaged with the innermost wall of the recess 21.

Pressure of a finger engaged in an opening 13 of the member 11 against the projection 19 of the lever 17 upon completion of a rotative movement of the member 11 will cause the other end of the lever 17 to be disengaged from the latch member 22 and permit the cover member to be swung to open position. This swing is effected 30 automatically by a spring 25 (Fig. 13) suitably associated with the receptacle and cover and with the pintle of the hinge connecting the same in a well-known manner.

The lever 17 is equipped at one side with an 35 integral loop formation 26 with which one end of the spring 23 is engaged.

The member 11 is equipped with a shallow annular flange which, as shown in Figs. 2, 3, and 12, is equipped with recesses 27, which correspond in number with (and which are spaced from each other equidistantly) the openings in said member 11. Each of these recesses has one wall disposed perpendicularly to the plane or face of said member 11 and is adapted to cooperate with a pawl 28 for preventing spring-urged return rotation (anti-clockwise) of said member 11 after the same has been rotated 45 digitally against the action of the spring 14 to a position wherein the latch lever 17 is released 50 from the latch member 22 and the cover member is disposed in open position.

The pawl 28 is illustrated in Figs. 5 and 10 and is located in the upper right hand portion of the chamber of the cover member. Reference being had first to Fig. 10, said pawl 28 is shown to consist of a slightly bowed strip of sheet metal pivotally secured between its ends to a pivot member 29 mounted in the outer wall of the cover member adjacent a side wall of 60 the said chamber, and also as having an upwardly inclined terminal tongue 30 which projects through an opening 31 in the outer wall of said chamber.

A flat spring 32 secured at one end to the 65 upper or outer wall of the said chamber by means of the rivet 33 is disposed with its other end portion overlying the end of said pawl opposite the tongue end thereof, said spring 32 being shaped to cause it to maintain the tongue 30 70 normally engaged with the edge of the annular flange of the member 11, so that said tongue will spring into the recess 27 which is opposed thereto the instant that the cover member moves away from the receptacle toward open position. 75

A projection 34 extending from one side of the spring-engaged end portion of the pawl 28 projects laterally outwardly through a slot in the side wall of the cover chamber and, when the cover member is moved to closed position, the said projection 34 bears upon the edge of a side wall of the receptacle and effects retraction of the tongue 30 of the pawl 28 to the position shown in Fig. 10, thereby releasing the member 11 for spring-return to its normal position at substantially the instant that the lever 17 is re-engaged with the latch member 22 to retain the cover member in closed position.

As shown in Fig. 4, wherein one arm of the slot of the shaft 6 in which the member 12 is pivotally mounted is broken away, there is disposed in the bottom of the pocket 3 of the bottom wall of the card pack receptacle, a hardened wear-disk 35 to save the bottom wall of the receptacle from wear due to contact of the member 12 therewith.

Fig. 11 shows the cover member 4 in a partially open position, said figure being illustrative of the lower right hand corner portion of the device as indicated by the section line 11-11 of Fig. 1.

The receptacle 1 is shown as mounted upon the plate 36 which is provided with an opening to receive the dial portion of a desk telephone instrument of a conventional type, and which is also equipped with a collar 37 adapted to receive and be firmly secured to the stem of said instrument. Said plate 36 is also equipped at its right hand end portion with means for securing a memorandum pad thereto, said plate structure being merely exemplary of a suitable means for associating the above-described mechanism with a desk telephone instrument.

At a point in the right-hand edge portion of the receptacle, spaced from the hinge 5, the bottom wall of the receptacle is equipped with a downwardly extending bracket 38 which is pivotally connected with the lower end of a rocking arm 39. The said bracket 38 and lower end portion of the arm 39 project through a slot 40 in the plate 36, the latter being also equipped with projection 41 to which one end of a very high tension spring 42 is attached, the other end of said spring 42 being engaged with the arm 39 between the ends thereof.

The upper end portion of the arm 39 is very slightly V-shaped, the lower portion of said V-shaped end being spring held to bear normally against the right hand side edge of the card pack and maintain the latter in contact, along its left hand edge with the left hand side wall of the receptacle 1, as shown in Fig. 13. Plate 16 is provided with a spacing flange 43, one end of which abuts the top plate of cover member 4.

The lower or front edge of the card pack lies in contact with the flange 43a of a U-shaped plate 44 secured to the lower face of the bottom wall of the receptacle 1, in the instance illustrated, which flange projects upwardly through a slot in the bottom wall of the receptacle to provide a stop for the lower front edge of the card pack. This flange cooperates with the left hand side wall of the receptacle and the arm 39 to maintain the cards of the pack in the position relatively to the shaft 6 wherein the axes of the central openings of the cards are axially aligned with said shaft when the receptacle is open and the same is being closed.

The upper part of the V-shaped end of the arm 39 is disposed in the path of the right hand

side wall of the chamber of the cover member which moves the arm out of contact with the card pack when the receptacle is closed.

The shape of the arm 39 and the pressure of the spring 42 are such that practically no resistance is offered to the upward swing of the cards with the cover member.

As shown in Fig. 10, the bottom plate 16 of the cover member is equipped along its lower front edge with projections 45 which are disposed normally at opposite sides of the flange 43a and are substantially arcuate concentrically with the pintle of the hinge 5.

As the cover member is moved to its open position the shaft 6 and arms 12a and 12b move upwardly through the central openings in the cards of the pack until the said arm 12a engages an inwardly extending projection from the wall of the opening of one of the cards.

Referring to Figs. 4, 13, 14, 15 and 16, it will be noted that the inner larger end portion of shaft 6 is of such diameter as to fit loosely within the smaller radius portions of the central openings in all the cards 2 except the bottom card. These openings, except those in the top and bottom cards, are bordered respectively by arcuate recesses which progressively increase in arcuate length from the card next the uppermost card to that next the bottom card, by an amount which corresponds to the fraction of a complete circle determined by the number of said cards. The walls at one end of said recesses lie in a plane which includes the axis and a radius of the shaft 6, and the arrangement is such that when the shaft 6 and member 12 are held or turned (by spring 14) about the axis of said shaft to their normal or biased positions, the arm 12a may (if not restrained by engagement of member 12 with the wear plate 35) move upwardly through all the cards except the uppermost or "B" card. However by turning member 11 the shaft 6 and member 12 may be moved about the axis of said shaft from such normal positions to bring the arm 12a to a position in which it will directly underlie an arcuate wall portion of any card desired adjacent the arcuate recess of that card; and if the cover 4 is then permitted to move to open position, the spring 12c will move member 12 about its pivot and bring the arm 12a thereof into firm engagement with the nether face of such wall portion of the said desired card, and as the cover opens the arm 12a will therefore raise said card (and all cards above the same) to expose the top face of the next lower card. The spring-pressed arm 12a will act to maintain all the cards which are raised thereby as the cover is opened, firmly against the inner plate 16 and in close compact relationship. The arm 12b of member 12 is of such length that its outer end will not in any position of said member about its pivot in which the arm 12a thereof firmly engages any of the cards 2, project beyond the outermost circumferential surface of shaft 6 and therefore will not engage the nether surface portion of any of the cards when the said shaft and member are moved upwardly with respect to the cards through the central openings thereof. The relative positions of the portions of the several cards disposed in the path of the arm 12a when the member 11 has been manipulated to effect opening of the cover and separation of the cards for exposure of the top face of the lowermost card, are shown at the lower portion of Fig. 13. It is to be noted that the spring 12c, tends to move member 12 about its pivot in a contraclock-

wise direction from the position shown in Figs. 3 and 4 to an inclined position in which the arms 12a and 12b are respectively in acute and obtuse angular relations to the axis of shaft 6. With the cover 4 in closed position, as shown in Figs. 3 and 4, member 12 is engaged by the wear plate 35 and maintained thereby, against the action of spring 12c, in a position at right angles to shaft 6; but as the cover is released and moves to open position, it will carry shaft 6 and member 12 away from the bottom of pocket 3 and the spring 12c will immediately act to move or tilt said member about its pivot. The degree of pivotal movement thus imparted to member 12 before its arm 12a can engage the nether surface of any of the cards 2 is sufficient to effect movement of the arm 12b of said member from the position shown in Figs. 3 and 4 (in which the end of said arm projects beyond the outermost periphery of shaft 6) to a position in which it (the arm 12b) lies wholly within the contour of the larger end portion of the shaft. Pivotal movement of member 12 under the action of spring 12c is limited by engagement of the end of arm 12a with the central portion of the uppermost or "B" card, or if no cards are present, then by the engagement of the end of said arm with the cover plate 16; and the construction and arrangement are such that this engagement will take place before the said spring is fully extended and while it still bears firmly against the arm 12b of member 12.

It has been previously pointed out that the lowermost card of the pack is provided with a circular opening of such diameter that the arm 12a may pass through it at any point in its rotation. This card bearing letter "Y" may be termed the "Y" card of an alphabetical pack which, in this instance, will comprise fourteen cards.

That face of the next upper card which is normally opposed to the top face of the "Y" card will bear the letter "Z," and the other face of this "Z" card will then be disposed upon the back of the remainder of the pack as shown in Fig. 13.

The said other and normally top face of the "Z" card will bear the letter "W."

Thus the "Y" and "Z" cards are paired with respect to their opposed faces when the pack is opened in the manner of a book along the lower meeting edges of said bottom cards. The "W" face of the "Z" card is similarly paired with the "X" face of the next succeeding card, the "U" face of which is, in turn, paired with the "V" face of the next succeeding card.

The central opening in each of the cards of the pack except the top and bottom cards, includes an arcuate portion of the same radius as the opening of the "Y" card and an arcuate portion of smaller radius. The arcuate length of these smaller radius portions increases as the cards progress upwardly in the pack, the uppermost card of the latter being equipped with a circular opening of a radius equal to the smaller radius portions of the openings of the cards disposed between the top and bottom cards.

As shown at the lower end of Fig. 13, the smaller radius portions of the intermediate cards of the pack are so disposed relatively to each other that the arm 12a when turned to any one of twelve positions responsively to rotation of the member 11, will have a part of a card of the series disposed in its path of upward movement as the cover member swings to its open position and thus all

of the cards, including the last-mentioned one, disposed between the arm 12a and the inner wall of the cover chamber, will be swung simultaneously to expose to view the bottom face of the card engaged by the arm 12a and the top face of the next lower card.

Thus the smaller radius portion of the "Z" card will have an arcuate length of almost thirty degrees; the next higher card almost thirty degrees more, the next higher almost thirty degrees more than the latter, and so on.

The flexibility of the cards permits the top card of the pack to be readily disposed upon the shaft 6 and the lower face of that card will bear the letter "B," the opposed face of the next lower card bearing letter "A," in the present exemplary illustration. Similarly, the lower face on the "A" card will bear letter "D" and the top face of the next lower card will bear letter "C."

In Figs. 14, 15 and 16, there are illustrated the middle portions of the "A" card, the "C" card and the "E" card to further illustrate the difference in arcuate lengths of the smaller radius portions of the openings in said cards, said arcuate lengths decreasing progressively towards the bottom of the pack.

The operation of the mechanism, as illustrated herein and hereinabove described, will be readily understood without further detailed description, and it will be obvious, of course, that the drawings illustrate only an exemplary embodiment of the invention as adapted to a specific use without limitation as to such changes in structural details as may be required to adapt the same to other uses, except as limited in and by the appended claims.

We claim as our invention:

1. A mechanism of the kind specified comprising a support for a pack of cards equipped, respectively, with spaced apart formations disposed in predetermined relative positions, a cover plate for the pack, latch means on said support and cover plate for holding the latter normally on the pack, manually operable means on the cover plate selectively engageable with the said formation of any selected card of the pack for opening the latter to expose a face of the selected card and for simultaneously releasing said latch means and permitting the cover plate to be moved to card exposure position, a releasable device associated with said manually operable means for retaining the same in its last-named position so long as the cover plate is in its last-named position, and means for automatically releasing said device as said cover plate is restored to its normal position, thereby to permit said manually operable means and latch means to be restored to their normal positions.

2. A mechanism of the kind specified comprising a support equipped with a hinged cover plate, a pack of cards, each equipped with a formation disposed in spaced relation to the similar formations of the remaining cards, disposed between said support and cover plate, a spring-urged latch normally maintaining said plate and support in card pack confining relation, a manually operable device on the cover plate equipped with a card formation engaging device movable selectively to position for engaging the formation of any selected card for opening the pack to expose a face of said card as the plate is turned to open position, means for causing release of said latch as said device attains its selected position to permit pivotal movement of said plate, and a spring-

urged latch device operating to retain said manually operable device in its last-named position so long as said plate remains out of card confining position.

3. A mechanism of the type specified comprising a pack of cards equipped, respectively, with formations disposed in relatively spaced apart relation for selective engagement to open the pack for exposure of a face of a selected card, a support for the pack, a cover plate for the pack pivotally secured to the support, said cover plate being spring-biased to open position, a spring-urged latch mechanism normally maintaining the plate disposed on the pack, a manually operable, self-restoring device on the cover plate equipped with a card formation engaging device and movable selectively to a position to effect opening of the pack to expose a face of any selected card as the cover plate swings to open position, the movement of said device to its selected position simultaneously effecting release of the latch mechanism, and a spring-urged device associated with the support and the manually operable device for retaining the latter in its last-named position so long as the plate is in its last-named position.

4. A mechanism of the type specified comprising a receptacle, a pack of cards disposed within the latter and maintained thereby against lateral movements, said cards equipped with concentric openings, such openings in a plurality of the cards each having concentric arcuate walls of different radius, the portions of said openings of smaller radius of successive cards being disposed in relative positions to provide a series of successive offset surface portions opposed to the bottom wall of the receptacle, a cover plate hinged to the receptacle and normally disposed to close the latter, a digitally rotatable member mounted upon the cover plate and including a shaft extending axially through the openings of the cards of the pack, and a radial projection on said shaft adapted to be positioned selectively to underlie any desired one of said surface portions for engagement therewith to open the pack at any point for exposing a face of a selected card of the pack as said member is rotated through a predetermined arc, said cover plate equipped with indicia coordinated with said card surface portions and affording a guide to determine the arc of rotation of said member to effect opening of the pack to expose a face of a selected card.

5. A mechanism of the type specified comprising a receptacle for a pack of cards, a pack of cards disposed in said receptacle, each of successive cards of the pack equipped with a formation spaced from a similar formation of the next adjacent card and engageable to effect opening of the pack to expose a face of said card, a swingable cover plate for the receptacle spring-biased to open position, a spring-urged latch mechanism normally maintaining said plate in closed position, said plate equipped with a series of indicia, and a digitally operable member mounted on said cover plate and equipped with a series of digitally engageable formations disposed in coordinate relation to said indicia, the latter being coordinated respectively with the said card formations to determine the movement of said member required to open the pack to expose a face of a selected card, said member equipped with a device underlying the pack and moving responsively to movement of said member to a position to effect opening of the pack as said

cover plate swings to open position, a member of said latch mechanism being disposed in the path of the finger actuating said member for causing said latch mechanism to assume the release position coincidentally with completion of the said movement of said member and thereby causing opening of the pack at the desired point responsively to opening movement of said cover plate.

6. A mechanism of the type specified comprising a receptacle, a pack of cards disposed within the latter and maintained thereby against lateral movements, said cards equipped with openings having concentric arcuate walls of different radius, the portions of said openings of smaller radius of successive cards being disposed in relative positions to provide a series of successive surfaces opposed to the bottom wall of the receptacle, a cover plate hinged to said receptacle, said cover plate being spring-biased to open position and equipped with a series of indicia coordinated with said surfaces of said cards, a spring-urged latch lever pivotally secured to the cover plate and normally engaged with a companion latch element on the receptacle to maintain said cover in closed position, a shaft journaled in a bearing in said cover plate and projecting axially through the openings in the cards of the pack, a radial projection at the inner end of the shaft adapted to be positioned selectively to oppose a said surface of any selected card of the pack, and a member rigid with said shaft and equipped with a series of finger tip engaging formations coordinated with said indicia of said plate, a portion of said latch lever being disposed in the path of a finger tip disposed at a selected one of said last-named formations as the latter attains the position incident to rotation of said member to cause the projection of the shaft to be disposed in opposed relation to the said surface of the selected card and thereby release the latch so as to cause the cover plate to be moved to open position and the pack to be opened book-wise to expose a face of the selected card.

7. A mechanism of the type specified comprising a receptacle, a pack of cards disposed within the latter and maintained thereby against lateral movements, said cards equipped with openings having concentric arcuate walls of different radius, the portions of said openings of smaller radius of successive cards being disposed in relative positions to provide a series of successive surfaces opposed to the bottom wall of the receptacle, a cover plate hinged to said receptacle, said plate being spring-biased to open position and equipped with a series of indicia coordinated with said surfaces of said cards, a spring-urged latch lever pivotally secured to the cover plate and normally engaged with a companion latch element on the receptacle to maintain said cover in closed position, a shaft journaled in a bearing in said cover plate and projecting axially through the openings in the cards of the pack, a radial projection at the inner end of the shaft adapted to be positioned selectively to oppose a said surface of any selected card of the pack, a member rigid with said shaft and equipped with a series of finger tip engaging formations coordinated with said indicia of said plate, a portion of said latch lever being disposed in the path of a finger tip disposed at a selected one of said last-named formations as the latter attains the position incident to rotation of said member to cause the projection of the shaft to be

disposed in opposed relation to the said surface of the selected card and thereby release the latch so as to cause the cover plate to be moved to open position and the pack to be opened book-wise to expose a face of the selected card, a spring for restoring said member to normal position and automatic means on said member and said cover for cooperation with said last-named spring to maintain said member in the position to which it has been moved so long as said cover plate remains in its open position.

8. A mechanism of the type specified comprising a receptacle, a pack of cards disposed within the latter and maintained thereby against lateral movements, said cards equipped with openings having concentric arcuate walls of different radius, the portions of said openings of smaller radius of successive cards being disposed in relative positions to provide a series of successive surfaces opposed to the bottom wall of the receptacle, a cover plate hinged to said receptacle, said plate being spring-biased to open position and equipped with a series of indicia coordinated with said surfaces of said cards, a spring-urged latch lever pivotally secured to the cover plate and normally engaged with a companion latch element on the receptacle to maintain said cover in closed position, a shaft journaled in a bearing in said cover plate and projecting axially through the openings in the cards of the pack, a radial projection at the inner end of the shaft adapted to be positioned selectively to oppose a said surface of any selected card of the pack, a member rigid with said shaft and equipped with a series of finger tip engaging formations coordinated with said indicia of said plate, a portion of said latch lever being disposed in the path of a finger tip disposed at a selected one of said last-named formations as the latter attains the position incident to rotation of said member to cause the projection of the shaft to be disposed in opposed relation to said surface of the selected card and thereby to release the latch so as to cause the cover plate to be moved to open position and the pack to be opened book-wise to expose a face of the selected card, a spring for restoring said member to normal position, automatic means on said member and said cover for cooperation with said last-named spring to maintain said member in the position to which it has been moved so long as said cover plate remains in its open position and a formation on the receptacle disposed for cooperation with said automatic means to release the latter and permit spring-urged return of said member to its normal position as said cover plate is restored to receptacle closing position.

9. In a mechanism of the character described; a pack of superposed relatively separable cards; a selecting device associated with said pack and manipulatable to select any desired point of separation of the cards; means operable to move a number of said cards, determined by such a selected point of separation, relatively to the rest of said cards; and means for preventing operation of said moving means; said selecting device and preventing means being so relatively arranged that the same manipulation which causes the selecting device to select the said point of separation is adapted to cause said preventing means to be rendered ineffective.

10. A mechanism of the character described comprising a support; a plurality of superposed cards mounted for movement towards and away from said support; a member mounted for movement towards and away from said support, said

member being biased away from said support; selecting means movable selectively to connect any desired number of said cards to said member for movement therewith; and releasable holding means for maintaining said member positioned adjacent said support; said selecting means and said holding means being so associated that the release of the latter is adapted to be effected in and substantially at the conclusion of the operation of moving the selecting means to the position thereof wherein a desired number of cards is connected to said member.

11. A mechanism of the character described comprising a support; a plurality of superposed cards mounted for swinging movement towards and away from said support; a cover member for said cards mounted for swinging movement relative to said support and biased away from the latter; latching means for holding said cover member positioned adjacent said support; and a selecting device mounted on said cover member for rotary movement selectively to connect any desired number of cards to such member for movement therewith; said selecting device and latching means being so associated that the latter is adapted to be released in and substantially at the conclusion of rotary movement of such device to the position thereof wherein a desired number of cards is connected to the cover member.

12. A mechanism of the kind specified comprising a support for a pack of cards, said cards being equipped, respectively, with spaced apart formations disposed in predetermined relative positions, a cover member for the pack, latch means on said support and cover member for holding the latter normally on the pack, and manually operable means on the cover member selectively engageable with the said formation of any selected card of the pack for opening the latter to expose a face of the selected card and for simultaneously releasing said latch means and permitting the cover member to be moved to card exposure position.

13. A mechanism of the character described comprising a support; a plurality of superposed cards mounted for movement towards and away from said support; a member mounted for movement towards and away from said support, said member being biased away from said support; selecting means movable selectively to connect any desired number of said cards to said member for movement therewith; releasable holding means for maintaining said member positioned adjacent said support; said selecting means and said holding means being so associated that the release of the latter is adapted to be effected in and substantially at the conclusion of the operation of moving the selecting means to the position thereof wherein a desired number of cards is connected to said member; and means associated with said selecting means for maintaining the latter in the last-named position thereof when said member is positioned away from said support.

14. A mechanism of the character described comprising a support; a plurality of superposed cards mounted for movement towards and away from said support; a member mounted for movement towards and away from said support, said member being biased away from said support; selecting means biased to a certain position and movable therefrom selectively to connect any desired number of said cards to said member for movement therewith; releasable holding means for maintaining said member positioned adjacent said support; said selecting means and said hold-

ing means being so associated that the release of the latter is adapted to be effected in and substantially at the conclusion of the operation of moving the selecting means to the position thereof wherein a desired number of cards is connected to said member; a releasable device associated with said selecting means for maintaining the latter in the last-named position thereof when said member is positioned away from said support; and means whereby said device is released when said member is restored to its position adjacent said support.

15. A mechanism of the character described comprising a support; a pack of relatively separable cards mounted for movement towards and away from said support, said cards being provided with registering openings, the openings of successive cards having wall portions in spaced apart relation angularly of the openings for selective engagement to open the pack for exposure of a face of a selected card; a member mounted for movement towards and away from said support; and a device mounted on said member for rotary movement and adapted selectively to connect any desired number of the cards to such member for movement therewith, said device including a shaft extending through the openings in the cards, said shaft having a part projecting laterally therefrom and adapted by rotary movement of said member to be positioned selectively to underlie any desired one of said wall portions.

16. A mechanism of the character described comprising a support; a pack of relatively separable cards mounted for movement towards and away from said support, said cards being provided with registering openings, the openings of successive cards having wall portions in spaced apart relation angularly of the openings for selective engagement to open the pack for exposure of a face of a selected card; a member

overlying said pack and movable towards and away from said support; and a device for selectively connecting any desired number of said cards to said member for movement therewith, said device comprising a shaft mounted for rotary movement and extending through the card openings and an arm movably supported by the inner end of said shaft and projecting laterally from the shaft adapted upon rotary movement of the latter to be positioned selectively to underlie any one of said wall portions, said arm being spring-biased for movement with respect to the shaft towards the overlying cards.

17. A pack of cards for use in a selective mechanism of the character described, said cards being provided with registering openings, successive cards of the pack being respectively provided with formations which constitute wall portions of the respective card openings, the said formations of successive cards being disposed in relatively offset positions angularly of the card openings.

18. A pack of cards for use in a selective mechanism of the character described, said cards being provided with registering openings, said openings of successive cards having wall portions which extend about the respective openings in progressively increasing lengths from one side of the pack to the other whereby such wall portions of adjacent cards are in overlapping relation.

19. A pack of cards for use in a selective mechanism of the character described, said cards being provided with concentric generally circular openings therethrough, said openings of successive cards having arcuate wall portions of progressively increasing arcuate lengths from one side of the pack to the other whereby such wall portions of adjacent cards are in overlapping relation.

WILLIAM A. PETERS.  
LEONARD J. STONE.