

UNITED STATES PATENT OFFICE.

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APPARATUS FOR DISPENSING POSTAGE-STAMPS AND PAPER STRIPS.

991,738.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH MORRIS, a citizen of the United States, and resident of Chelsea, county of Suffolk, State of Massachusetts, have invented an Improvement in Apparatus for Dispensing Postage-Stamps and Paper Strips, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention has for its object the production of a simple and convenient apparatus for dispensing postage-stamps, ticket strips or the like from a roll, and it is particularly adapted for use in post-offices or other places where large numbers of stamps of a number of different denominations are called for and sold.

My apparatus is also well adapted for use in the mailing departments of large business houses, as the stamps of different denominations are held in convenient form for detachment in desired numbers.

At the present time the stamp-selling department of large post-offices is usually provided with a tray having compartments for the different denominations of stamps most frequently called for, and not only is time consumed in separating the stamps from the sheets to fill the compartment, but often in rush periods one or more compartments are quickly emptied, and then the clerk must stop and replenish them or take stamps from the large sheets. This latter procedure leads to confusion and delay, and often stamps are torn, while with a compartment tray two or more stamps will often stick together when only one is wanted, and then they must be separated.

By my present invention the strip from which the stamps are to be detached is wound into roll form of any convenient size, and rolls of stamps of different denominations are inserted loosely in suitable cells, the strip being drawn from the roll in required lengths and severed by being drawn across a cutting or severing device, to be described.

I have provided means to retain each roll loosely in its cell and to permit the roll to

revolve when the strip is drawn forward, and a tension device common to all of the cells exerts the requisite drag on a strip, the free end of the strip always being positioned so that it can be readily grasped by the fingers when again necessary.

The various novel features of my invention will be fully described in the subjoined specification and particularly pointed out in the following claims.

Figure 1 is a front elevation, centrally broken out, of a stamp or strip dispensing apparatus embodying one form of my invention, one of the cells being shown loaded with a stamp-roll; Fig. 2 is a left-hand end elevation of the apparatus, showing the free end of the strip in readiness to be grasped and drawn forward; Fig. 3 is a vertical sectional view on the line 3—3, Fig. 1, showing the strip about to be severed.

In the present embodiment of my invention an elongated base 1 suitably supported on legs 2, in practice screwed to a shelf, table or other firm support, has along its rear edge a box-like stand 3 fixedly mounted thereon and running lengthwise of the base from end to end, the table or other support being indicated at 4. The front edge of the base is provided with a frontwardly and downwardly inclined extension 5, strengthened and stiffened at its lower longitudinal edge by a bar 6 in which is set an upturned cutting blade or separator 7 having preferably a serrated or toothed edge, as shown in Fig. 1. The bar 6 is beveled or rounded in front of and below the cutting edge of the separator 7, as at 8, Figs. 2 and 3, to permit the strip to be drawn down at a rather sharp angle over the separator, to facilitate the cutting or severing action. Along the front longitudinal edge of the base 1 I mount a retractor, herein shown as a rib or bar 9 extending the length of the bed and attached thereto by screws 10, the smooth top of the retractor being convexed or rounded, at 11. Upon the stand 3 I fixedly mount a series of upright and open roll-receiving cells, arranged side by side, each cell comprising upright and parallel side walls 12, shown as substantially circular in shape, each pair

of side walls being connected by a curved strip of metal forming a bottom 13 and back 14 for the cell. The side walls are spaced apart sufficiently to receive easily and
 5 freely between them a strip-roll, the latter resting upon the concaved bottom 13 of the cell, and being held therein at the back by the upcurved continuation 14 of the bottom, as clearly shown in Fig. 3. At its front edge
 10 the bottom 13 is curved over, at 15, and just above such curved portion a horizontal rod 16 is fixedly attached to the side walls, the clearance beneath the rod forming a delivery throat or passage through which the
 15 strip passes. Arms 17 are pivoted at 18 to the centers of the outer side walls of the endmost cells of the series, as shown in Fig. 1, the free ends of said arms being connected by a tension bar 19 which normally rests
 20 upon the upper faces of the several strips just behind the retractor 9, and depresses the strips upon the base 1. The strip of stamps, tickets or the like is wound into a roll 20, and in Fig. 1 I have shown a roll of post-
 25 age stamps separated by transverse perforations 21.

To load the cells the tension bar 19 is swung up and back, see dotted lines Fig. 2, and a roll is dropped into each cell, or into
 30 as many of the cells as may be required, the free end of each strip being passed down under the combined strip-guide and roll detent 16 and through the delivery throat, passing over the convex part 15 and then
 35 over the convex top of the retractor 9. When the cells are loaded the tension bar is swung back into operative position, Figs. 1 and 3, and as shown in full lines Fig. 2, the weight of the bar 19 pressing the strips 22 down
 40 upon the base 1. Each strip thereby has a bend formed in it just back of the retractor, such bend, in conjunction with the retractor, lifting or retracting the free end of the strip well above the inclined extension 5,
 45 as clearly shown in Fig. 2.

To sever any desired length from a strip the operator grasps the free end of the strip, draws it forward (the roll 20 rotating freely over the bottom 13 of the cell) and when the
 50 proper length has been drawn past the separator 7 the strip is pulled down against the cutting edge of the latter and severed.

In Fig. 3 the strip is shown in engagement with the separator and in readiness to be
 55 cut or severed thereby by a downward pull.

When postage-stamps or tickets are being dispensed the transverse lines of perforations indicate to the eye of the operator just where the severing is to be effected, and
 60 with very little practice the eye and hand work is in such harmony that the downward pull to sever the strip is practically a continuation of the forward or feeding pull on the strip. The severed part of the strip

of course remains in the fingers, and immediately the free end of the strip is elevated
 65 by the combined action of the tension bar 19 and the retractor 9, as shown in Fig. 2, so that it can be grasped readily for the next operation. The tension bar acts upon all of
 70 the strips and sufficient friction is provided between the base 1 and said bar to exert a proper drag or tension when a strip is drawn forward.

By inclining the extension 5 not only is
 75 ample room left for the fingers to grasp the free end of a strip when in lifted or retracted position, but it also prevents the toothed edge of the separator from injuring the fingers or hand of the operator. As the
 80 separator is upturned and in plain sight at all times there is no danger of severing a strip at an improper place. The bottoms of the cells are so pitched or positioned that the roll 20 has some tendency to move back-
 85 ward away from the combined guide and detent 16 whenever the strip is pulled forward from the front of the roll, said detent keeping the roll in the cell and also exerting a slight friction upon it and upon the
 90 strip, preventing too free rotation of said roll but not retarding it sufficiently to break the strip at any of the lines of perforations 21.

It will be seen that the loading of a cell is
 95 a very simple matter, for the roll is just dropped into it and the end of the strip passed through the delivery throat, the tension bar having first been swung back, and it will also be seen that I have eliminated
 100 journals or pivots for the roll, the latter resting loosely upon the bottom of the cell and rolling or rotating thereover when the strip is pulled forward.

My dispensing apparatus is particularly
 105 adapted for use with postage-stamps, for any or all denominations can be used; the tension is the same on a strip at all times whether the roll be a new one or one nearly
 110 exhausted, and the refilling of an empty cell is the work of a moment. At the same time the handling of perforated stamp strips is effected with all necessary delicacy, and it is impossible for two or more stamps to become stuck together by rapid handling.
 115

When a strip is drawn forward it passes over the smooth convex top 11 of the retractor and is curved or flexed thereover when the strip is depressed onto the severing blade or separator 7, the flexing of
 120 the strip over the retractor and the combined action of the latter and the tension bar 19 insuring a quick upward movement of the free end of the strip after the desired length has been severed therefrom, as shown
 125 in Fig. 2.

Various changes or modifications may be made in different details of construction or

arrangement without departing from the spirit and scope of my invention as set forth in the annexed claims.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In apparatus of the class described, a series of upright, open roll-receiving cells arranged side by side, a detent at the front of each cell, to retain the roll therein when its end is drawn forward, a swinging tension member coöperating at all times with the strips from all of the cells to exert friction upon and prevent improper movement of a strip, and an upturned separator fixedly mounted at a distance in front of said tension member and extended lengthwise of the cells, to sever a strip transversely when drawn forward and downward upon the separator.

2. In apparatus of the class described, an upright cell permanently open at its front and top and adapted to receive loosely a strip-roll, the cell having parallel side walls and a concave bottom, a transverse detent crossing the open front of the cell, to retain the roll therein and guide the strip as it is drawn from the roll and under the detent, a separator fixedly mounted in front of and below the cell, to sever the strip transversely, and means between said separator and the cell to lift the end of the strip from the separator when a portion of the strip is severed therefrom, said means comprising a fixed member and an adjacent gravity-actuated member, said members acting upon opposite sides of the strip.

3. In apparatus of the class described, a series of open cells each adapted to receive loosely a strip-roll, and having a delivery throat through which the end of the strip is passed, an upturned separator in front of the series of cells, to sever a strip when drawn down thereupon, and a pivotally mounted, gravity-actuated tension device to act continuously upon all of the strips between the cells and the separator.

4. In apparatus of the class described, a series of open cells each adapted to receive loosely a strip-roll and having at its front a transverse, combined strip guide and roll-detent under which the strip passes, a separating blade extended in front of the cells at a distance therefrom, and a pivotally mounted tension member adapted to act upon and retard movement of all of the strips, said tension member normally being positioned between the cells and the separating blade and being movable manually above and back of the cells when the latter are to be loaded.

5. In apparatus of the class described, a series of open cells each adapted to receive loosely a strip-roll and having at its front

a transverse, combined strip guide and roll-detent under which the strip passes, a separating blade extended in front of the cells at a distance therefrom, a retractor extended lengthwise of the cells between them and the blade and above the latter, and a gravity-actuated tension member to coöperate with the strips and exert friction thereupon behind said retractor, said tension member coöperating with the retractor to lift the free end of a strip after a portion has been severed therefrom by the blade.

6. In apparatus of the class described, a base, an open cell thereon having upright side walls and a fixedly attached concave bottom and back, to receive loosely therein a strip-roll, means crossing the front of the cell to guide the strip when drawn thereunder from the roll, and to retain the latter in the cell, a separator in front of the cell, and a gravity-actuated tension device to operate continuously with and exert friction upon the strip at a point between the cell and said separator.

7. In apparatus of the class described, a base, a cell thereon permanently open at its front and top and having upright side walls and a concave bottom and back, to receive loosely therein a strip-roll, means to extend across and guide the strip when drawn from the top of the roll and to retain the latter in the cell, a separator having an upturned, toothed edge located in front of and below the cell, to sever the strip transversely, and means between said separator and the cell to elevate the free end of the strip away from the separator after a portion of the strip has been severed thereby, said means comprising a fixed member and an adjacent pivotally mounted member coöperating with the strip at opposite sides thereof.

8. In apparatus of the class described, a roll-receiving cell permanently open at its front and top and comprising upright, parallel side walls and a fixedly connected concave bottom and back, a transverse detent connecting the side walls near the front edge of the cell bottom, forming therewith a delivery throat for the strip from the roll, the latter resting upon the bottom of the cell, the strip passing beneath the said detent, a swinging tension member to rest upon and exert friction upon the strip after it has passed from the cell, and a separating blade in front of and below the tension member to sever the strip transversely.

9. In apparatus of the class described, a flat base having a downwardly inclined extension at its front edge, a fixed separator extended longitudinally of said extension at the lower edge thereof, a series of upright, permanently open cells mounted side by side on the base and each adapted to receive loosely a strip-roll, a guide at the front of

each cell to direct the strip drawn there-
under from the roll in such cell, and a piv-
otally mounted tension member normally
adapted to rest upon all of the strips and
5 press them upon the base in front of the
cells between the latter and the separator,
to exert friction upon said strips and pre-
vent improper advance thereof.

In testimony whereof, I have signed my
name to this specification, in the presence 10
of two subscribing witnesses.

JOSEPH MORRIS.

Witnesses:

JOHN C. CONNERS,
FREDERICK S. GREENLEAF.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
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