

(No Model.)

J. J. YEATES.
CASE FOR PAPER SHEETS.

No. 526,282.

Patented Sept. 18, 1894.

Fig. 1.

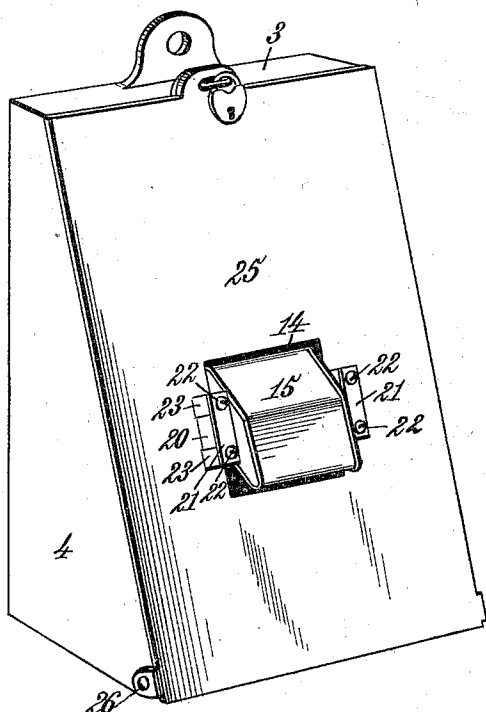


Fig. 2.

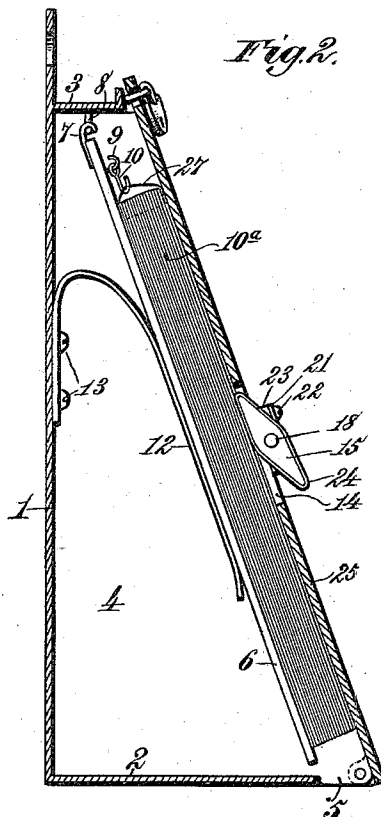
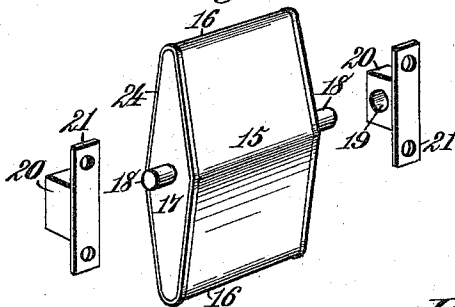


Fig. 3.



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UNITED STATES PATENT OFFICE.

JESSE J. YEATES, OF BIRMINGHAM, ALABAMA.

CASE FOR PAPER SHEETS.

SPECIFICATION forming part of Letters Patent No. 526,282, dated September 18, 1894.

Application filed March 29, 1894. Serial No. 505,632. (No model.)

To all whom it may concern:

Be it known that I, JESSE J. YEATES, a citizen of the United States, residing at Birmingham, in the county of Jefferson and State of Alabama, have invented new and useful Improvements in Cases or Boxes for Paper Sheets, of which the following is a specification.

This invention has for its object to provide a new and improved case or box particularly designed for holding a package composed of thin paper sheets which are to be discharged one at a time whenever desired; and to provide a device which is simple and economical in construction, and convenient, durable and efficient in use.

To accomplish this object my invention consists essentially in a case or box having a sheet discharging slot and a front wall provided with a rectangular opening, a yielding follower or platform pivoted at one end in the case or box and adapted to support a pile of thin paper sheets, and an ejector revoluble in said opening, pivoted at or near its center, and having rounded edges and converging sides extending in opposite directions from its pivoted part, so that the edges of the ejector serve alternately as a finger piece and a sheet discharger or ejector.

The invention also consists in certain other features of construction and the combination or arrangement of parts hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved box or case. Fig. 2 is a vertical central sectional view of the same; and Fig. 3 detail views of the ejector and the devices by which it is supported.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, where it will be observed that the case or box body is composed of a vertical back wall 1, a horizontal bottom wall 2, a horizontal top wall 3, side walls 4, and a front wall which inclines backwardly from the bottom wall to the top wall.

The box body is preferably made of metal, cast or molded into form with a sheet-discharging slot 5 in its bottom wall near the inclined front wall, but the case or box may

be otherwise made of any material suitable for the conditions required. The case or box contains an inclined follower or platform 6 having hooks 7 at its upper edge which engage eyes 8 depending from the top wall 3, whereby the follower or platform is adapted to swing toward and from the inclined front wall 4. The follower or platform is provided near its upper edge with a hook or eye 9, and a loose hook 10 for supporting a package or pile 10^a of thin paper sheets, as usual in this type of devices, in such manner that one sheet at a time is susceptible of being disengaged and discharged or ejected from the case or box through the discharging slot 5. The follower or platform is adapted to yield inwardly and is constantly pressed or forced toward the inclined front wall 4. To accomplish this purpose I preferably employ a leaf-spring 12, one or more, having one end secured to the back wall 1 through the medium of screws 13, or otherwise, while the free end of the spring bears against the follower or platform and acts to press or force the latter toward the inclined front wall of the case or box.

The inclined front wall is provided at or near its center with a rectangular or quadrangular opening 14, in which a sheet-ejector 15 is adapted to revolve. The ejector is rectangular in outline, and is nearly of the same dimensions as the opening 14. The ejector is approximately lozenge-shape, or in the form of a double wedge with horizontal edges 16, which are convex or rounded, and is formed with converging sides extending in opposite directions from its thickened central portion 17, the end portions of which thickened portions are provided with projecting journals 18 mounted in sockets or bearings 19 of journal bearing blocks 20 having flanges 21 which are attached by screws 22 to projecting lugs 23 formed with or provided on the inclined front wall of the case or box at or near the vertical edges of the rectangular or quadrangular opening 14. The sockets or bearing 19 do not extend entirely through the journal bearing blocks 20, and consequently when the parts are in position, the ejector 15 is maintained in the proper position within the opening 14, so that the ejector can have imparted thereto a half revolution

for the purpose of causing one of the convex or rounded edges 16 to act on the front paper sheet and cause it to move downward through the discharging slot 5. The spring 12 forces the follower or platform toward the front of the case box and the pile of paper acts on the lozenge-shape or double wedge ejector to normally maintain it in the position shown in Fig. 2, in such position that the lowermost convex or rounded edge 16 lies away from the front surface of the case or box to enable the thumb or finger to properly engage the ejector for the purpose of imparting a half revolution thereto.

In operating the ejector the thumb is caused to engage the lowermost edge 16 of the ejector, and such lowermost edge is thrown upwardly so that the other convex or rounded edge comes in contact with the paper, forces the follower or platform inwardly against the tension of the spring and produces just sufficient friction to discharge a single sheet of paper from the package or pile. As that end of the ejector which has acted on the paper leaves the latter, the spring-pressed follower moves forward and the ejector is automatically thrown into position, so that the thumb or finger can engage the lowermost convex or rounded edge 16, as before explained.

The vertical edges of the lozenge shape or double wedged ejector are provided with beads 24, which extend continuously around both sides of the ejector and project about one-sixteenth of an inch more or less for the purpose of preventing the ejector slipping on the paper and insuring the discharge of a sheet of paper each time a half revolution is imparted to the ejector.

The pivoted ejector is preferably composed of metal and the surrounding beads 24 are composed of rubber or other elastic or yielding material which will produce considerable friction in acting on the paper sheets. If desired, however, the beads may be omitted, and the entire surface of the ejector covered with rubber or other elastic or flexible material.

My invention provides a very simplified case or box susceptible of being economically manufactured, and which is convenient in use, durable and efficient.

The improved construction and arrangement of parts described and shown effects a great saving in paper, in that a single sheet only will be discharged for every half revolution of the ejector. This result is attained by the combination with the yielding follower or platform of the peculiar ejector arranged in the manner described and shown.

The ejector acts in a large measure like a finger moistened and pressed against a package of paper, and therefore a single sheet is only discharged at each operation, in which respect my invention is advantageous over prior devices for the same purpose.

I have described the case or box as used particularly with reference to thin sheets of

paper, but do not confine myself to this particular use.

In the example illustrated by the drawings, the front wall 25 of the case or box is pivoted at its lower edge, as at 26, to the box body, and the upper end of the front wall is preferably secured by a staple and lock. I do not, however, wish to be understood as confining myself to the particular means shown for supporting the front wall, as it may be otherwise applied and secured without affecting my invention. The packages of paper are usually provided at their upper ends with wire loops or retainers 27, which can be readily engaged with the loose hook 10 which is supported by the eye or hook 9.

Having thus described my invention, what I claim is—

1. The combination with a case or box having a sheet-discharging slot, and a front wall provided with an opening and a yielding follower arranged within the case or box and adapted to support a pile of paper, of an ejector revoluble in the said opening, pivoted at or near its center, and having rounded edges and converging sides extending in opposite directions from its pivoted part so that the said edges of the ejector serve alternately as a finger piece and a sheet discharger or ejector, substantially as described.

2. The combination with a case or box having a sheet-discharging slot, and a front wall provided with a rectangular opening, and a spring-yielding follower pivoted at one end in the case or box and adapted to support a pile of paper, of an ejector revoluble in said opening, pivoted at or near its center and having rounded edges and converging sides extending in opposite directions from its pivoted part so that the said edges serve alternately as a finger-piece and a sheet discharger or ejector, substantially as described.

3. The combination with a case or box having a sheet-discharging slot, and a wall provided with an opening, and a spring yielding follower arranged within the case or box and adapted to support a pile of paper, of journal bearing blocks mounted on the case or box in juxtaposition to the edges of said opening, and an ejector revoluble in said opening, having rounded edges and converging sides and provided with journal bearings mounted in the said journal bearing blocks, substantially as described.

4. The combination of a case or box having a sheet-discharging slot, and a wall provided with a rectangular opening, a spring-yielding follower pivoted at its upper end in the case or box and adapted to support a pile of paper, journal bearing blocks secured to the case or box in juxtaposition to the edges of the said opening, and an ejector revoluble in said opening, having rounded edges and converging sides and provided with journal bearings mounted in said journal bearing blocks, said ejector being acted upon by the spring-pressed pile of paper to throw its lowermost

rounded edge in an outward direction, for the purpose specified.

5 5. The combination with a case or box having a sheet-discharging slot, and a wall provided with an opening, and a yielding follower arranged within the case or box and adapted to support a pile of paper, of an ejector revoluble in said opening, pivoted at or near its center and having rounded edges and
10 converging sides provided with attached rub-

ber or other elastic or flexible material, substantially as and for the purpose described.

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

JESSE J. YEATES. [L. S.]

Witnesses:

A. A. TOWERS,
T. R. SHIELDS.