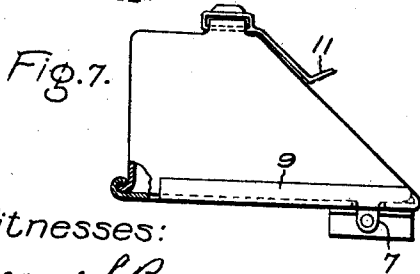
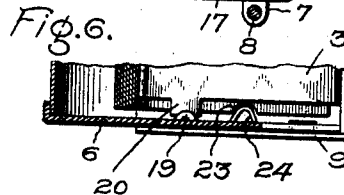
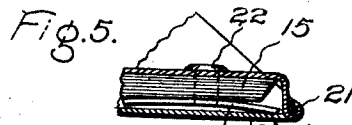
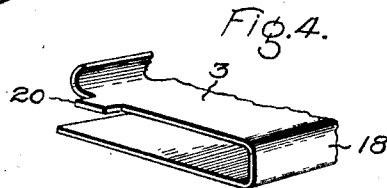
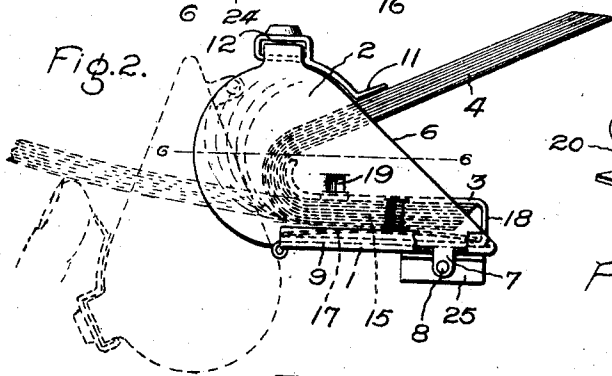
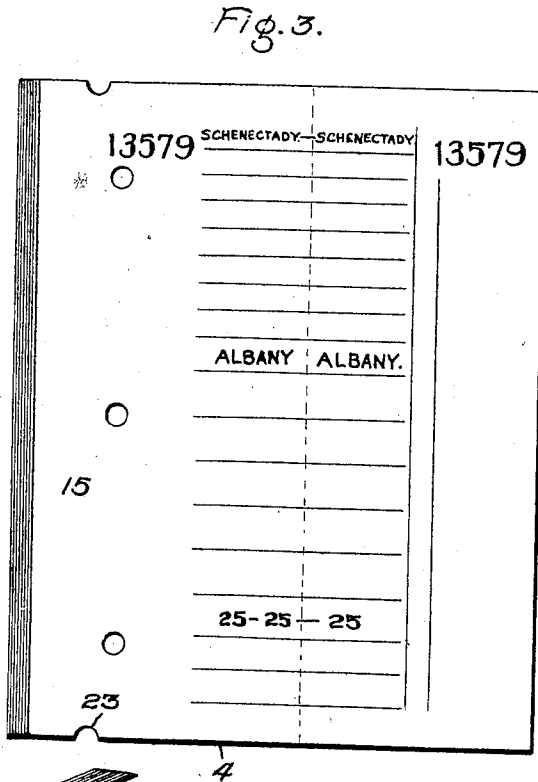
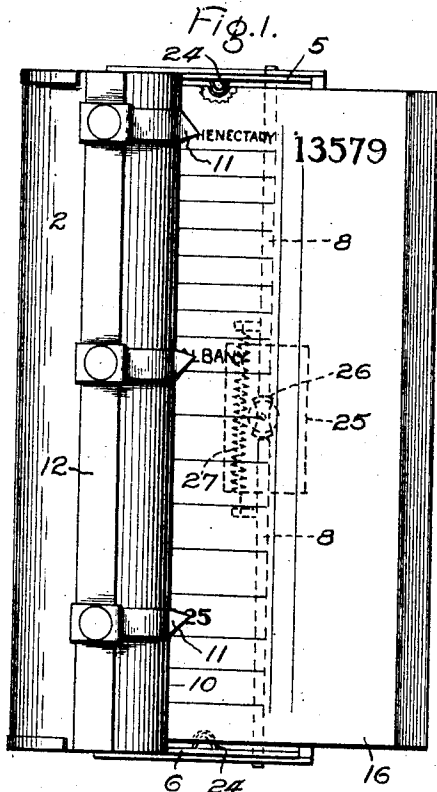


No. 827,104.

PATENTED JULY 31, 1906.

A. F. MACDONALD.
 HOLDER FOR TICKETS, RECORDS, &c.
 APPLICATION FILED NOV. 22, 1905.



Witnesses:
 Marcus L. Byng.
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UNITED STATES PATENT OFFICE.

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HOLDER FOR TICKETS, RECORDS, &c.

No. 827,104.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed November 22, 1905. Serial No. 288,575.

To all whom it may concern:

Be it known that I, ALEXANDER F. MACDONALD, a citizen of the United States, residing at Schenectady, in the county of Schenectady, State of New York, have invented certain new and useful Improvements in Holders for Tickets, Records, &c., of which the following is a specification.

The present invention relates to holders which are arranged to receive a pad of flexible sheets, such as paper, concealing one portion of each sheet and exposing the other, the concealed portion having certain data and forming a record or auditor's stub, the latter having corresponding data and forming a receipt for the passenger or purchaser, as the case may be.

The object of my invention is to provide a holder of improved construction whereby the insertion and removal of the pad is facilitated.

I also aim to produce a holder which is simple in construction, of few parts, and one that can be manufactured at small cost.

In the accompanying drawings, which are illustrative of the invention in one of its forms, Figure 1 is a plan view of a holder. Fig. 2 is an end view with certain parts broken away. Fig. 3 is a plan view of a pad removed from the holder. Fig. 4 is a perspective view of the pad-retaining means. Fig. 5 is a detail view of a modified pad-retainer, showing a spring which assists in holding the pad in place. Fig. 6 shows a means for positioning the pad in the holder. Fig. 7 shows a holder of modified shape.

The holder comprises a casing which is made of two principal parts, a base portion 1 and a hinged or movable portion 2. The hinge may be located at any suitable point and be of any suitable construction. It is important, however, to so arrange the parts that the bolt cannot be slipped out of the hinge by a dishonest person to expose the interior of the box. This can be accomplished by providing small lugs on the casing at the ends of the bolt. The essential feature is to provide a joint between the two parts of the casing capable of permitting them to be opened or separated to remove or insert the pad, and by preference it should be of such character that it does not require any special locking means. The parts may, for example, be arranged similar to the parts shown in Fig. 7—that is to say, one part of the casing may be provided with a tongue or

projection which fits into a groove or recess formed in the other part. The base portion is provided with a pad-retaining device. In the simplest and what I consider the preferred construction this takes the form of a plate 3, which is made by bending or doubling the base back on itself, so as to form a substantially U-shaped receptacle to receive the base end of the pad or that containing the auditors' stubs. The pad-retaining means also forms a part of the right-hand wall of the casing, and between it and the severing edge, to be referred to later, is an opening through which the pad 4 extends, the sheets of the pad being bent in such a way that each of them is placed under initial stress.

The movable or removable part of the casing is provided with ends 5 and 6 for closing the ends of the casing. Each of the ends is common to the hinge and base portion and is provided with a projection 7, that extends through a registering opening in the base. These projections are provided with openings or equivalent means to receive the locking-bolts 8. As an additional securing means the ends of the base are upturned, as at 9, and engage the flat surfaces of the ends when the casing is closed. It will thus be seen that the end portions are located between the edges of the plate 3 and the parts 9, which affords additional support. The portion 2 of the casing may be of any suitable configuration, the essential feature being to provide space within it for the auditors' stubs to spring back out of the way as the receipts or exposed portions of the sheets are severed therefrom. I find that either a semicircular or a substantially triangular form will suffice for the purpose.

Carried by one part of the casing or another is a severing edge 10, by means of which the sheets of the pad can be severed as required. In the present illustration of the invention the severing edge is formed on, and hence moves with, the part 2. On the top, side, or other suitable place on the casing are one, two, or more adjustable devices 11 for cutting the sheets or making suitable indications thereon. In the form of the invention illustrated a guide for said cutting devices is formed by a flat rod 12, secured to the part of the casing which carries the severing edge.

As will be seen in Fig. 3, the several sheets containing the necessary printed matter are fastened together and formed into a pad

which is bent over the retaining-plate or other means 3 in such manner that the top sheet looking down on the holder is pressed into engagement with the severing edge 10 by reason of the spring tension of the paper or other material of which the pad is composed. In the embodiment which I have chosen as illustrative of the invention the pad is so bent that the stub or auditor's portion 15 forms an acute angle with the receipt portion 16, that is adapted to be severed; but it is to be understood that the said portions can be at right angles to each other or at a greater or less angle. The essential feature is to put the sheets of the pad under initial stress, so that they will spring or tend to spring away from the severing edge after the receipt is detached. Under certain conditions the tension on the sheets may be great enough to do this, while in other cases it may be necessary to separate the severing edge and pad to release the stub. In some cases a slight depression of the pad suffices and in other cases a slight bodily and inward movement of the pad is necessary. Where the quality of the paper used in the pad is such that it does not have the necessary amount of spring, additional means may be employed for holding the sheets against the severing edge.

The retaining-plate 3 terminates at its inner end in a straight edge, preferably but not necessarily curved backward to prevent it from cutting the paper and also to improve the spring action of the paper. Since the pad is curved around the end of the plate, it follows that if the printed markings on individual sheets register when the pad is flat they will not when in operative position. To obviate this, the individual sheets are fastened together either by staples, stitching, or the like in such manner that the successive sheets, beginning with the bottom, are slightly advanced. The amount of advance necessary depends upon the radius of curvature of the bend and can be best determined by experiment.

In order to hold the pad against the plate 3 when the latter forms an integral part of the base or is fixedly united therewith, as it may be, if desired, one, two, or more flat springs 17 are provided. As the inner end of the plate may at times have a tendency to spring upward and cause undue strain at the bend 18 or at the joint in case one is provided projections 19 are formed on the ends of the casing which engage the lips 20 on the upper surface of the pad-retainer. Since the ends may be and preferably are formed of sheet metal, it is a simple matter to form the projections when the end is stamped out.

When the pad-retaining device is made in a separate piece from the base and either secured by a tongue and groove, as the part 2 is in Fig. 7, or by a hinge 21, Fig. 5, one or more pins 22 may be provided which enter holes in

the pad. These pins will serve to hold the pad and preserve the proper alinement. Where the pad-holding device is a fixture with respect to the base, the alinement of the pad may be preserved and at the same time held against unauthorized removal by forming the pad with slots or grooves 23, which are engaged by projections 24 on the ends of the casing, the said projections being in the nature of ribs formed by the same dies that cut the end from sheet-stock. The slots and ribs should be of such sizes as not to interfere with the opening and closing of the casing.

With a device of this character it is usually necessary to lock the pad within the holder to prevent unauthorized persons from tampering therewith or to prevent the user from looking at the stubs and accounting only for what they show, one of the features of such a device being to obviate bookkeeping on the part of the user, the latter turning over the holder and the cash at the end of a given trip or after a certain length of time. In order to lock the parts of the casing, a lock 25 is provided of any suitable construction, which may be located on the casing wherever it is the most convenient. This lock controls the action of the locking-bolts 8. A cam 26, mounted on a movable element of the lock, engages the bolts and forces them outwardly, one or more springs 27 being employed to withdraw them from the projections 7 on the sides of the casing. The key for the lock will be kept by the auditor or other authorized person. The tickets of which the pad is composed are printed with the necessary items in double columns, and the dotted line between columns registers with the severing edge when the pad is inserted in the holder.

The action of loading the holder will now be described.

The holder is opened, as shown in dotted lines, Fig. 2, and the pad is inserted in the retaining device in a flat position, as shown by the dotted lines. The holder is then grasped by both hands, with the thumb of the left hand engaging the pad to keep the cutting devices from sticking into the paper and also to assist in putting the sheets under initial stress. The two parts of the casing are now brought together by swinging the part 2 about the hinge, the thumb keeping the pad away from the cutters. When the holes in the projections 7 register with the bolts, the latter lock the parts. It will thus be seen that the act of closing the holder also places the individual sheets of the pad under initial stress, the two actions taking place simultaneously. This, accompanied by the fact that in the preferred form the parts are always united, renders the holder an exceedingly simple one to load. In unloading the reverse operation takes place.

In using the holder the cutters 11 are adjusted along the rod 12 until they register

with the points of travel and the price paid or other data. The top sheet is then grasped by the right hand at a point near the upper edge and moved to a position substantially at right angles to the base. This causes the cutters to perforate the paper, and by a drawing motion across the severing edge the sheet is severed, the stub having in the present illustration three wedge-shaped projections and the detached portion three V-shaped notches. The next step after handing the passenger or purchaser the detached portion is to separate the pad and severing edge and permit the stub to disappear inside of the casing. If the stress on the paper for any reason is not sufficient to do this, a slight bodily and inward movement of the pad will perform the same function.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a device of the character described, the combination of a divided casing arranged to open and receive a pad, concealing one portion and exposing the other when closed, a means for uniting the back and base parts of the casing in such manner that the act of closing the casing also places the sheets of the pad under initial stress, which gives to the stubs a tendency to withdraw from view, and a severing edge by means of which the exposed portions can be severed from the concealed portions.

2. In a device of the character described, the combination of a divided casing arranged to open and receive a pad, concealing one portion and exposing the other when closed, a means for uniting the back and base parts of the casing in such manner that the act of closing the casing also places the sheets of the pad under initial stress, which gives to the stubs a tendency to withdraw from view, a severing edge by means of which the exposed portions can be severed from the concealed portions, and a means for retaining the pad within the casing.

3. In a device of the character described, the combination of a divided casing arranged to open and receive a pad, concealing one portion and exposing the other when closed, a means for uniting the back and base parts of the casing in such manner that the act of closing the casing also places the sheets of the pad under initial stress, which gives to the stubs a tendency to withdraw from view, a severing edge by means of which the exposed portions can be severed from the concealed portions, and one or more devices for making a record on the stub portion of the sheets.

4. In a device of the character described, the combination of a divided casing arranged to open and receive a pad, concealing one portion and exposing the other when closed, a means for pivotally uniting the parts of the casing in such manner that the act of closing the casing also places the sheets of the pad

under initial stress, which gives to the stubs a tendency to withdraw from view, a severing edge by means of which the exposed portions can be severed from the concealed portions, a means for retaining the pad within the casing, and one or more devices adjustable along the plane of the severing edge for making a permanent record on the stubs of the sheets.

5. In a device of the character described, the combination of a divided casing arranged to open and receive a pad, concealing one portion and exposing the other when closed, a holder for the pad that is permanently connected to one portion of the casing, a means for uniting the parts of the casing, the parts of the casing and holder being so arranged that the act of closing the casing flexes the pad and places the stubs under initial stress so that the stubs of the severed sheets have a tendency to disappear from view, and one or more devices for making a record on the sheets prior to being severed.

6. In a device of the character described, the combination of a casing arranged to receive a pad composed of flexible sheets and retain them under stress, concealing the stub portion and exposing the other, a severing means, one or more devices for making a record on the sheets prior to severing, and a holder for the stub end of the pad that forms a permanent continuation of the body of the casing.

7. In a device of the character described, the combination of a casing comprising parts movable with respect to each other, and arranged to receive a pad composed of flexible sheets, concealing one portion and exposing the other when closed, a means for uniting the parts of the casing, end pieces that are carried by one part of the casing, devices carried by the end pieces for securing the parts of the casing, a locking means coöperating with said devices, a pad-retainer, and a severing edge.

8. In a device of the character described, the combination of a casing comprising a base and hinged portion arranged to receive a pad composed of flexible sheets, concealing one part and exposing the remainder when closed, end pieces carried by the hinged portion of the casing, projections on the end pieces which pass through openings in the base, a locking means coöperating with the projections, a pad-retaining plate that forms a continuation of the base and places the sheets of the pad under initial stress, and a severing edge.

9. In a device of the character described, the combination of a casing arranged to receive a pad composed of flexible sheets, concealing one portion and exposing the other, a severing edge, a pad-retaining plate that is formed by bending a part of the casing over the stub or concealed portion of the pad, the

said plate maintaining the top sheet of the pad against the severing edge, and one or more devices for making indications on the successive sheets of the pad.

- 5 10. In a device of the character described, the combination of a casing arranged to receive a pad composed of flexible sheets, concealing one portion and exposing the other, a severing edge, a pad-retainer, projections
10 on the casing which register with slots in the pad to prevent it from being withdrawn by a lengthwise movement, and one or more slidably-supported devices for making indications on the stubs and severed portions of
15 each sheet.

11. In a device of the character described, the combination of a casing arranged to re-

ceive a pad composed of flexible sheets, concealing one portion and exposing the other, a severing edge, a pad-retainer comprising a
20 plate forming a continuation of the base which places the sheets of the pad under initial stress, means which engage the plate and prevent it from bending due to stress on the pad, and one or more slidably devices for making
25 indications on the stubs and severed portions of each sheet.

In witness whereof I have hereunto set my hand this 21st day of November, 1905.

ALEXANDER F. MACDONALD.

Witnesses:

BENJAMIN B. HULL,
GENEVIEVE HAYNES.