

No. 827,105.

PATENTED JULY 31, 1906.

A. F. MACDONALD.  
 HOLDER FOR TICKETS, CHECKS, &c.  
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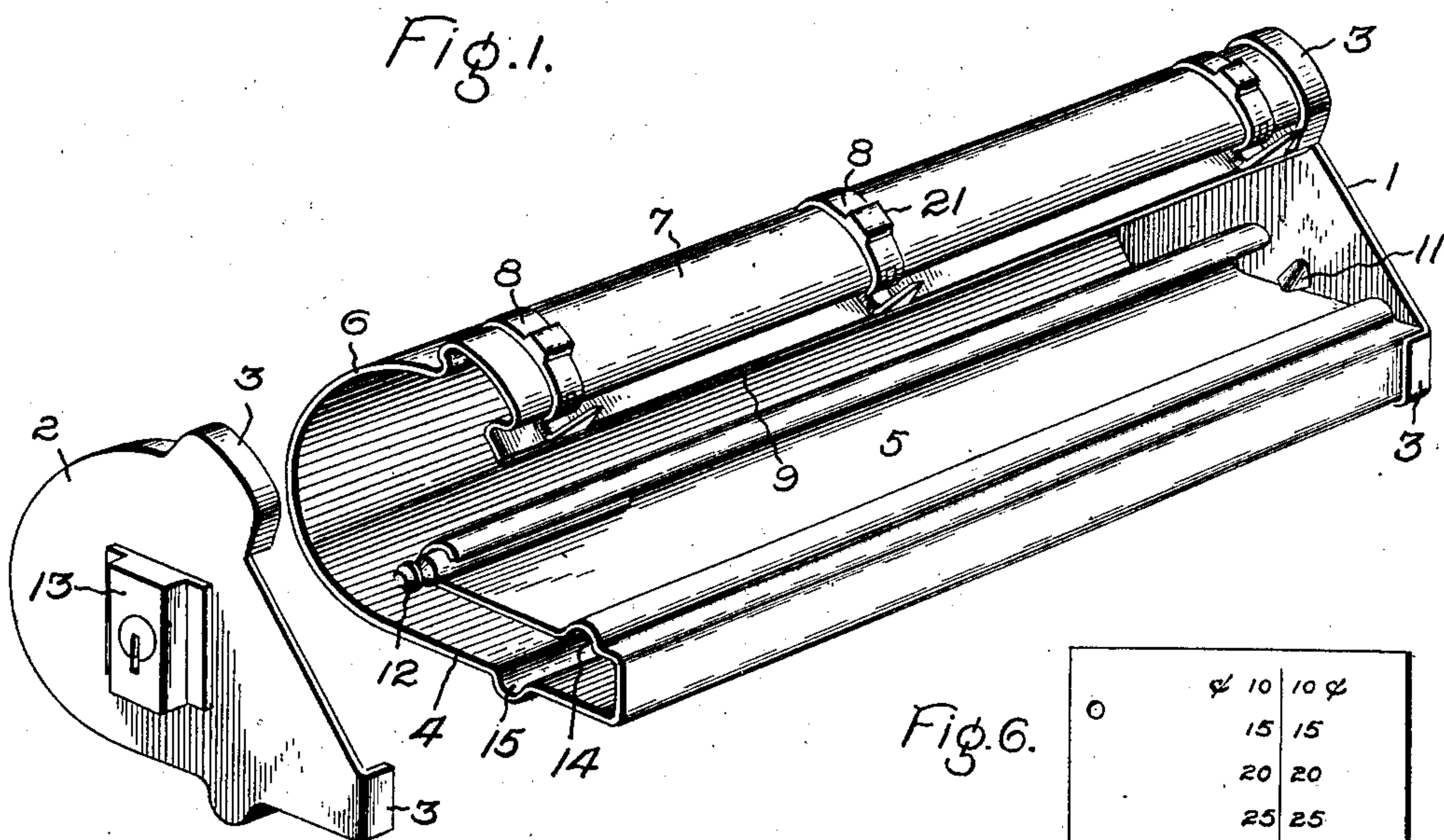


Fig. 6.

0	10	10	0
	15	15	
	20	20	
	25	25	
	Station / Station		
	2	2	
	3	3	
	4	4	
	5	5	
0			0

Fig. 8.

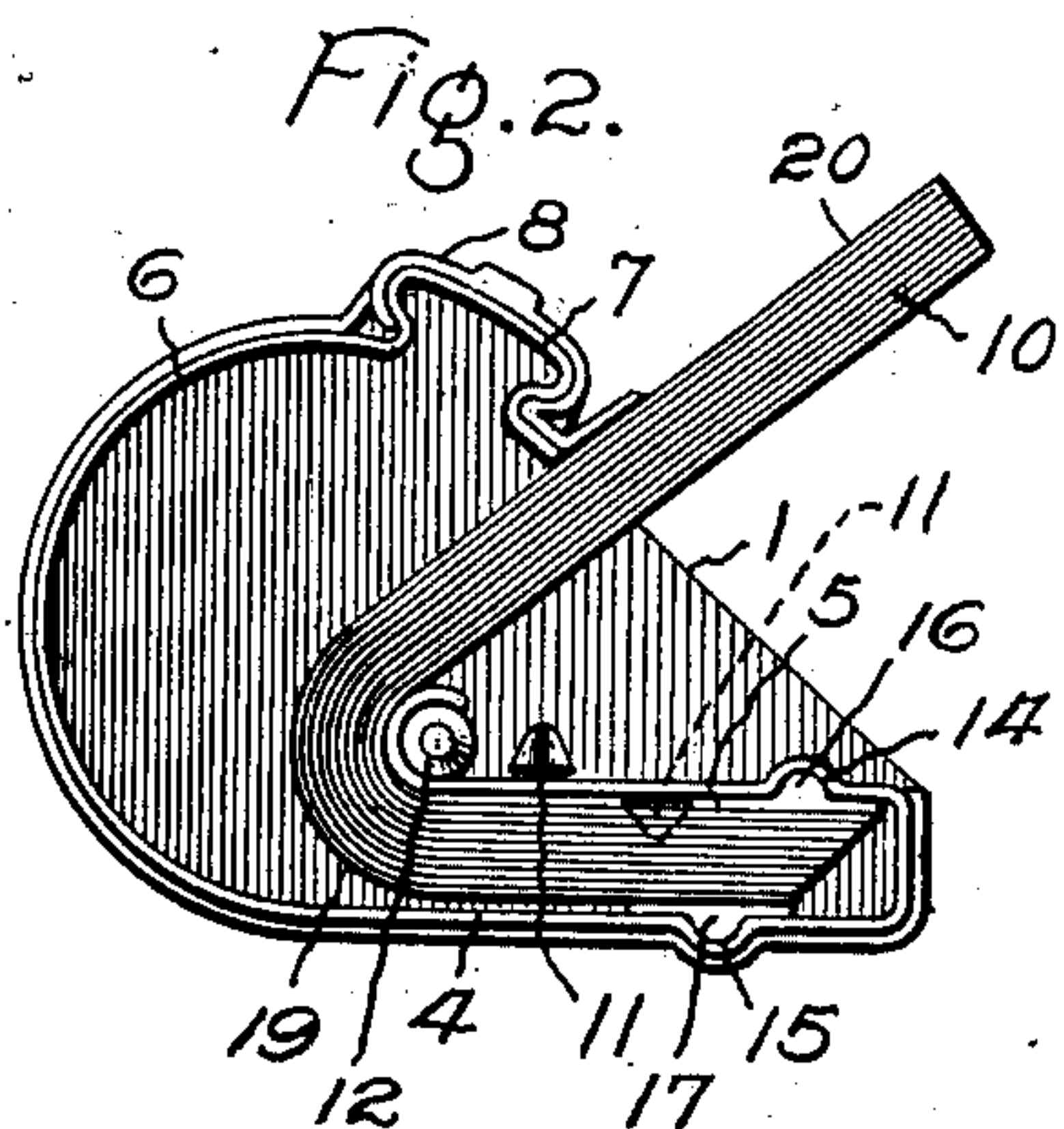
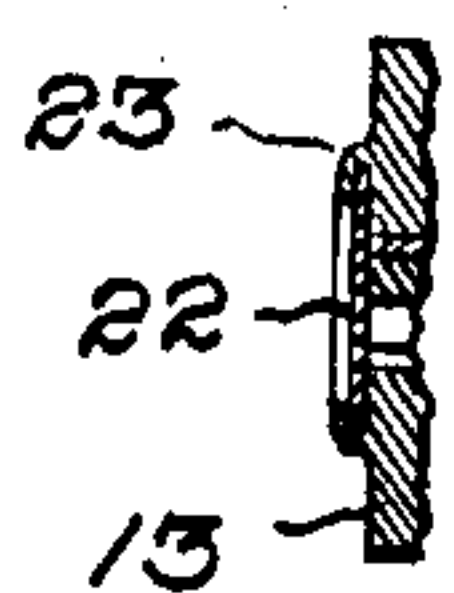


Fig. 7.



Fig. 4.

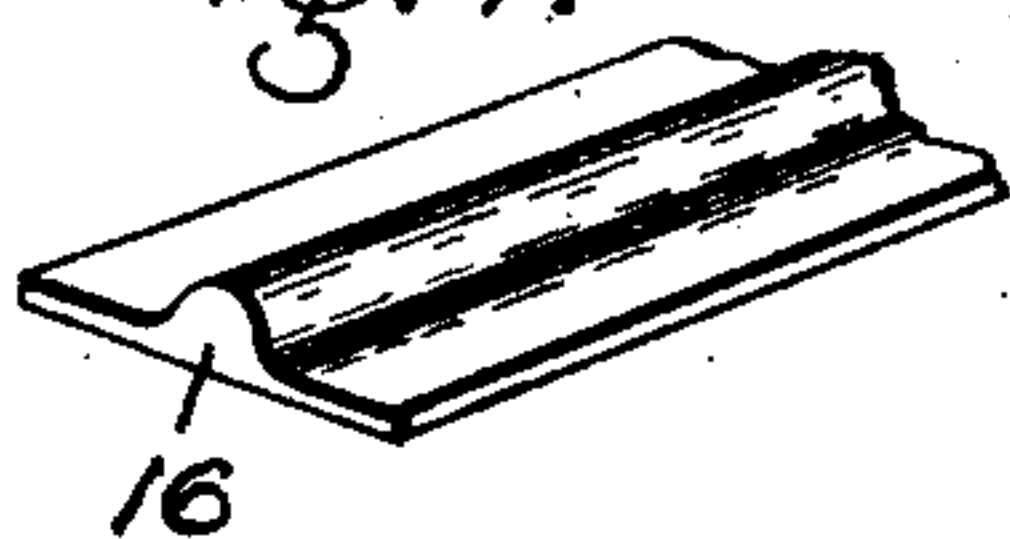


Fig. 3.

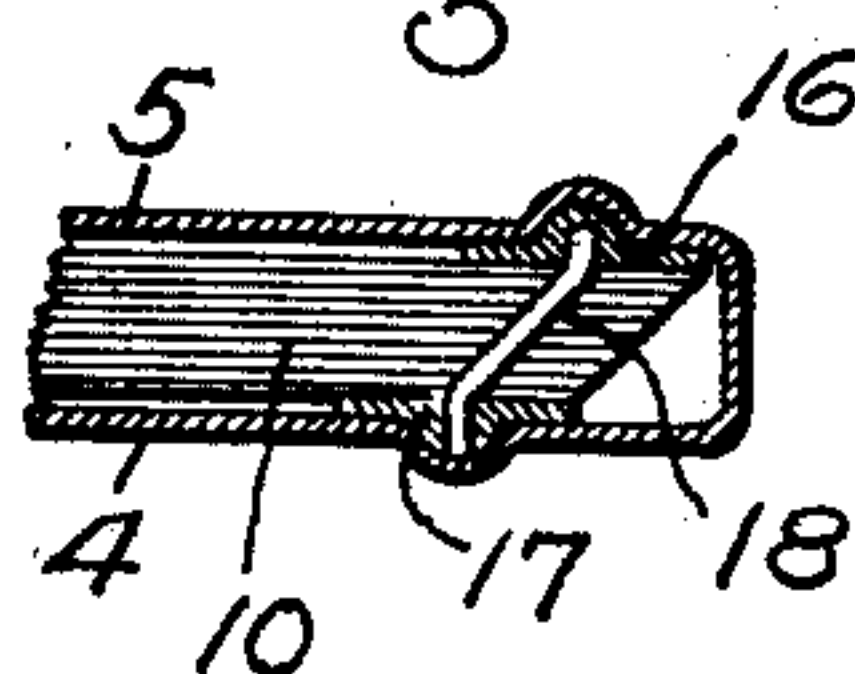
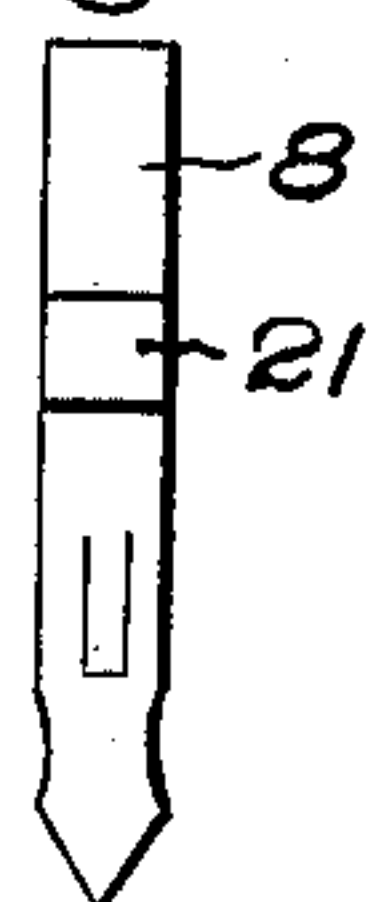


Fig. 5.



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# UNITED STATES PATENT OFFICE.

ALEXANDER F. MACDONALD, OF SCHENECTADY, NEW YORK.

## HOLDER FOR TICKETS, CHECKS, &c.

No. 827,105.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed December 21, 1905. Serial No. 292,707.

*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, Checks, &c., of which the following is a specification.

The present invention relates to holders for tickets, checks, &c., wherein the pad is confined within it in a bent position.

The object of the invention is to improve and simplify the holder and also to dispense with the stitching or fastening together of the sheets of the pad, which has heretofore been found necessary.

In the accompanying drawings, which illustrate one of the embodiments of my invention, Figure 1 is a perspective view of a holder with an end or cover removed. Fig. 2 is a cross-section of the holder, showing the pad in place. Fig. 3 is a detail sectional view of the means for determining the position of the several sheets of the pad relative to each other. Fig. 4 is a detail view of one of the pad-retaining devices. Fig. 5 is a detail view of one of the sliding cutting devices. Figs. 6 and 7 are, respectively, a plan and edge view of a pad before it is bent, and Fig. 8 shows a device for preventing tampering with the lock.

The casing comprises a main or body portion and two ends 1 and 2. The former is soldered, brazed, or otherwise secured to the body, while the latter is detachable and forms a cover. The end and cover are both provided with flanges 3, that engage the body of the casing and assist in holding it in the required shape. The main or body portion comprises a base portion 4, a pad-covering or concealing wall or plate 5, forming a continuation thereof, and a curved portion 6, forming one side and the top. The shape of the casing can be widely varied and particularly that of the pad covering or concealing plate. Extending longitudinally of the casing and forming a part of the curved portion is a rib 7 of dovetail shape in cross-section, adapted to receive and support the cutting devices 8, of which there may be one, two, or more. The rib is purposely made wide, so as to form an ample support for the cutting devices and prevent them from being accidentally bent. It is to be noted that one end of the rib 7 is concealed when the cover 2 is applied and exposed when it is removed. By means of

this arrangement the cutters 8 can be readily mounted in place in the first instance or renewed, in event of its being necessary, without destroying, injuring, or in any way mutilating the box. The curved portion terminates in a severing edge 9, with which the sheets of the pad 10 successively engage as the exposed ends are severed one after the other. The body portion is made of thin sheet metal and is all in one piece, which greatly reduces the cost of manufacture, reduces the number of parts, and obviates the use of separable members, and makes the parts interchangeable. The inner portion of the pad-covering plate or wall 5 terminates in a backward curve and forms the axis or support about which the pad is bent to place the sheets under initial stress or spring tension. At the rear the plate is prevented from springing upward or downward from its position by the projections 11 in the end 1, which are or may be made at the time the said end is stamped out of sheet stock. The cover of the plate is held by the pin 12 entering the cover 2. This pin also serves as a locking-pin that enters the lock 13, secured to the cover. The depth of the flange on the cover should be sufficiently great to rigidly hold the parts together and is preferably of such length that it engages the body portion before the pin enters the lock. In this manner the parts of the lock readily aline, and no difficulty is experienced in closing the casing. The flange 3 of the cover is cut away on the inclined edge, as indicated, so as not to interfere with the pad. The same is also true of the rear end. The cover and rear end are so shaped as to include the rib on the top and prevent the cutting devices from sliding off of said rib. In order to retain the pad in its proper position within the casing and preserve the alinement, two grooves 14 and 15 are provided, one formed in the plate 5 and the other in the base 4. Where the pads are stitched or fastened together, as in the former constructions, the grooves may be directly opposite; but where the pad is composed of separate and unconnected sheets, as in the present instance, it is preferable to offset them with respect to each other by an amount depending upon the bevel of the pad, the advantages of which will appear later. On opposite sides of the pad and located in the grooves when the parts are assembled are parts 16 and 17 of the pad-holder, each part being provided with a flat portion and a



rib or projection that enters the groove and is slidable longitudinally therein. On one or both of the parts are one or more pins 18, preferably two, at opposite ends, which pass 5 through the perforations in the pad and are seated in the other. Where the sheets of the pads are fastened together, the pins may be, and preferably are, straight; but where they are made of loose sheets they should be inclined at an angle to the stub portion of the 10 pad. The grooves 14 and 15 are shown as located well toward the right-hand side to accommodate sheets of standard size; but by locating them nearer the inner end of the plate or wall 5 the size of the pad can be materially reduced, resulting in a considerable 15 saving in paper. By properly inclining the pins each sheet will occupy a position slightly in advance of the preceding one nearer the plate 5. This advance is sufficient to 20 compensate for the difference in radius of curvature of the sheets. Since the sheets are loose, they can be readily threaded over the pin or pins and will always assume the proper position. I have shown each sheet as 25 having two round perforations; but it is to be understood that the shape can be changed—as, for example, slots may be used and the same results attained. The construction of the 30 holder can be varied without departing from the invention.

In Fig. 6 is shown a pad composed of a plurality of sheets, each with a double column of printed items arranged in duplicate. The 35 left-hand portion 19 of each sheet is adapted to be inclosed in the casing and concealed from view and forms the auditor's stub. The right-hand or exposed portion 20 of the stub is provided with a column of items similar to those on the auditor's stub and when 40 severed is given to the passenger or purchaser, as the case may be. The severing edge when the parts are assembled should register with the narrow space between the parallel columns of items. The pad is held in the 45 casing in a bent position, as shown in Fig. 2, and it will be seen that the radius of curvature of the sheets successively increases from the inner edge of the plate 5 toward the left-hand side of the casing. This means that 50 unless the sheets are advanced one with respect to the other, beginning with the one next the plate 5, a comparatively few of the sheets will engage the severing edge at the proper point. Of the remainder, some will 55 be too far to the right and others too far to the left, the error progressively increasing.

With previous constructions the proper alinement of the parts has been attained by 60 making a pad with oppositely-beveled ends and permanently riveting or stitching the sheets together, so that when bent and placed in the casing that portion of each successive sheet between the columns will register with the severing edge as the exposed por-

tions are severed one after the other. This is objectionable for several reasons, of which the following one is the most prominent: A conductor or clerk will almost invariably use a less number of tickets or checks than 70 the holder contains, and the only way the remainder can be used is to split a pad and properly unite the unused with new sheets to form a new pad. This not only requires a certain amount of time and labor, but the resulting pad is not as satisfactory as one 75 which has never been used. It is objectionable to throw the stubs away, on account of the expense. The pads commonly contain as many sheets as the holder will receive, so 80 the new pad either has to be split or the parts of two or more partly-used pads united to form a complete pad. This means that the numbering on the sheets will not be consecutive, resulting in extra bookkeeping. 85

After a pad has been in a holder for a certain length of time the sheets become more or less permanently bent or set, and when in pad form it is somewhat tedious to separate the sheets and ascertain what records the 90 stubs contain. With the loose-leaf arrangement these difficulties disappear. Where ten, more or less, unused sheets are turned in with the holder, they are taken out and the requisite number of new sheets added, after 95 which they are slipped over the inclined pins 18 on the holders and the parts reassembled. The preferable way is to assign a certain number of tickets or checks to a conductor or clerk—say five thousand, for example—and 100 when the holder is turned in with ten unused tickets with the highest number at the bottom ninety new tickets can be taken from those allotted to said conductor or clerk and a new pad made up with the numbering consecutive 105 from start to finish.

When the pad is removed from the holder, the sheets being unattached, it is a simple matter to distribute them in trays according to the indications and by counting the sheets 110 in the trays ascertain how much money should have been turned in, the amount of traffic between points, the character and amounts of sales, or any other data recorded by the stubs.

The cutters 8 may be made of stamped or 115 cast metal, as best suits the requirements. The distance between the sides of the rib 7 is considerably greater than that between the side adjacent to the severing edge and the sharpened end of the cutter, so that the leverage 120 exerted by the person in severing the sheet is small compared with the leverage exerted by the rib. The object of this is to prevent the cutters from being bent. The cutters are in frictional engagement with the 125 rib, and, if desired, a spring may be employed for each and inclosed in the boss 21.

In using the holder the cutters are adjusted to the proper items in the exposed column—such, for example, as the point of starting, 130



the point of destination, and the fare paid. The top sheet is then swung upwardly by hand until the cutters perforate the paper, and by a stroke toward the user the sheet is severed. The stub is then held between the thin severing edge and the body of the pad until it is released by a downward or inward bodily movement of the remaining uncut sheets, and the holder is again ready for use. By practice a person using the device is able to sever a sheet by a continuous movement of the hand, resulting in quick service.

The holder can with advantage be used on trains, electric cars, restaurants, stores, and for general service requiring receipts, tickets or other memoranda.

In order to prevent tampering with the lock, a piece of paper or cardboard 22, having a suitable seal or indication thereon, is either pasted over the slot in the lock or it is retained in place inside of a flanged casing 23, as shown in Fig. 8. In this case the disk 22 is sufficiently larger than the diameter of the opening so that it can only be removed by destroying it.

In accordance with the provisions of the patent statutes I have described the principle of operation of my invention, together with the apparatus which I now consider to represent the best embodiment thereof; but I desire to have it understood that the apparatus shown is only illustrative and that the invention can be carried out by other means.

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, a casing arranged to receive a pad composed of counterpart loose flexible sheets, concealing one portion and exposing the other, a device for bending the pad to place the individual sheets under initial stress, a holder for the pad arranged to receive the loose sheets and successively advance them with respect to each other to compensate for the difference in radius of curvature due to the bend, a severing edge, and one or more devices for making records on the sheets prior to severing.

2. In a device of the character described, a casing arranged to receive a pad composed of counterpart loose flexible sheets, concealing one portion and exposing the other, a device for bending the pad to place the individual sheets under initial stress, a holder on which the loose sheets are threaded one after the other, and successively advanced to compensate for the difference in radius of curvature due to the bend, a means for retaining the holder in the casing, a severing edge, and one or more cutters for making records on the sheets prior to severing.

3. In a device of the character described, the combination of a casing arranged to receive a plurality of loose sheets having data printed thereon in columns, concealing one

portion and exposing the other, a severing edge, a means which holds the sheets in a bent position in the casing and against the severing edge, one or more pins making an acute angle with the plane of the stub portion of the sheets over which the latter are slipped one after the other to successively advance them to compensate for the difference in radius of curvature due to the bend, and one or more cutting devices for making permanent records on the sheets as they are severed.

4. In a device of the character described, the combination of a casing arranged to receive a plurality of loose sheets having data printed thereon in columns, concealing one portion and exposing the other, a severing edge, a means which holds the sheets in a bent position in the casing and against the severing edge, a holder arranged to slip longitudinally into the casing, one or more pins extending from one part of the holder and seated in the other to hold the sheets, and one or more adjustable cutters for making records on the sheets.

5. In a device of the character described, the combination of a casing arranged to receive a plurality of flexible sheets arranged to form a pad, concealing one portion and exposing the other, a plate or wall that engages one portion of the pad, a groove formed in the plate, a second groove formed in another portion of the casing, holders for the pad arranged to fit into the grooves and be retained by the walls thereof, one or more pins passing through perforations in the pad and entering both of the holders, a severing edge with which the sheets successively engage, and one or more adjustable cutters.

6. In a device of the character described, the combination of a casing having a body portion comprising a base, side, top portion, the top portion terminating in a severing edge, and a pad-concealing wall, the said parts being formed of a continuous sheet of metal, an end which is permanently secured to the body portion, and an end or cover which is removable to permit the pad to be inserted by a longitudinal movement, and one or more cutters movable on the body portion to make permanent records.

7. In a device of the character described, the combination of a casing having a body portion comprising a base, side and top portions, the top portion terminating in a severing edge, a pad-concealing plate, and a rib formed on the top portion, all of said parts being formed of one continuous sheet of metal, one or more cutters mounted on the rib, an end permanently secured to the body, a removable cover for the opposite end of the body, and a lock one portion of which is carried by the cover and the other by the concealing-plate.

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

ceive a pad, a severing edge, a longitudinal  
guide carried by the casing, and one or more  
cutters mounted on and held by the guide  
for making permanent records on the pad-  
5 sheets, the distance between the edge of the  
cutter and the adjacent side of the guide be-  
ing less than the width of the guide, a remov-  
able cover for closing the end of the casing  
and preventing the cutter or cutters from

slipping off the guide, substantially as and 10  
for the purpose specified.

In witness whereof I have hereunto set my  
hand this 18th day of December, 1905.

ALEXANDER F. MACDONALD.

Witnesses:

GENEVIEVE HAYNES,  
BENJAMIN B. HULL.