July 11, 1939. W. S. BOWSER 2,165,609

SORTING DEVICE

Filed Nov. 17, 1937

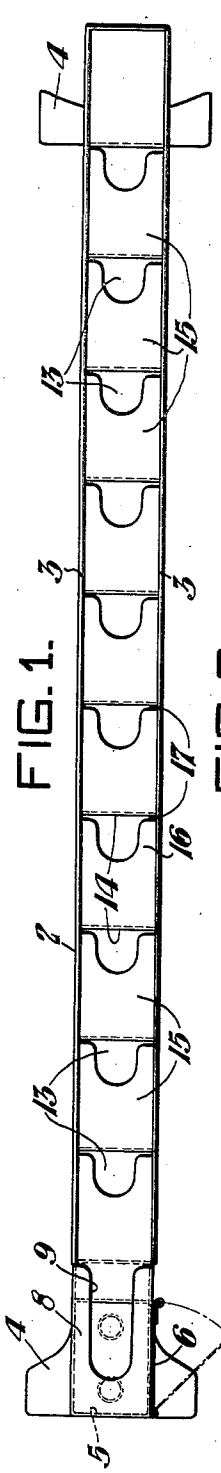


FIG. 1.

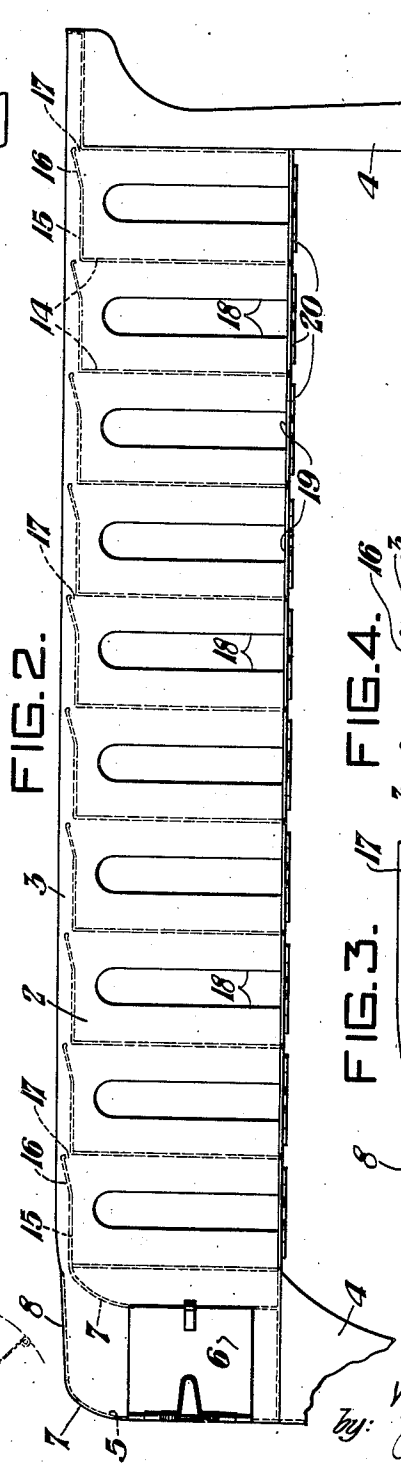


FIG. 2.

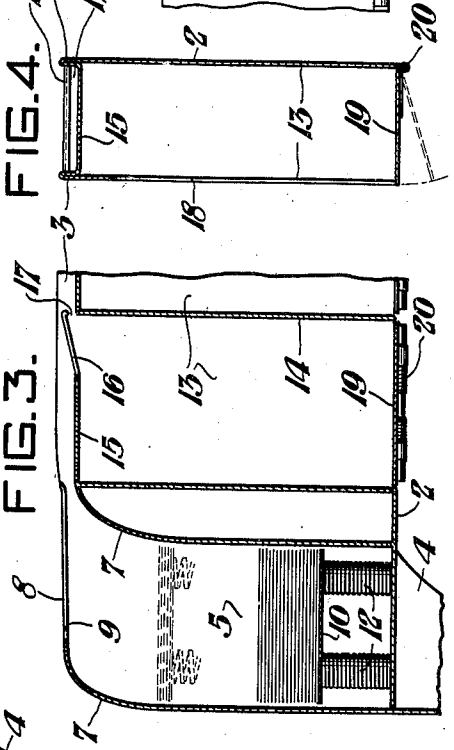


FIG. 3.



FIG. 4.

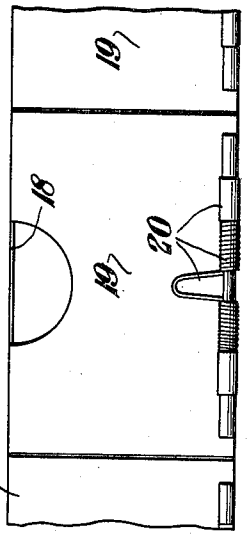


FIG. 5.

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# UNITED STATES PATENT OFFICE

2,165,609

## SORTING DEVICE

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Application November 17, 1937, Serial No. 175,103

3 Claims. (Cl. 312—103)

This invention relates to a sorting means, and particularly to a device for facilitating the sorting of tickets, coupons and the like.

It is often desirable to sort tickets bearing serial numbers, letters, or a combination thereof, such as telephone tickets, bond coupons, etc., for identification purposes, into their proper numerical or alphabetical order or sequence. It is rather difficult and tedious to manually segregate such tickets without the aid of some mechanical device. Various devices or mechanisms have been suggested and used to facilitate such sorting, but they usually required excessive handling of the tickets and were not very efficient or advantageous in their use.

It is an object of this invention to provide an improved device for sorting tickets and the like which will greatly facilitate the sorting of such tickets, and reduce to a minimum the manual handling thereof.

It is another object of this invention to provide such a device that will increase the rate at which such tickets can be sorted, and which is simple in its operation and construction.

Various other objects and advantages of my invention will more fully appear during the course of the following specification, and will be particularly pointed out in the appended claims.

In the accompanying drawing I have shown, for the purpose of illustration, one embodiment which my invention may assume in practice.

In the drawing:

Figure 1 is a plan view of the improved ticket sorting device of my invention;

Figure 2 is a side elevational view of the same;

Figure 3 is a longitudinal sectional view through a portion of the device;

Figure 4 is a cross-sectional view through one of the ticket-receiving compartments; and

Figure 5 is a bottom view of one of the compartments of the device.

According to the invention, as shown in the drawing, there is provided a longitudinally extending main body portion 2, preferably made from sheet metallic material but which may be made from any other suitable material, having vertical parallel side-walls terminating in upper longitudinally extending guide flange portions 3 and supported by legs 4 of any desirable length. At one end of this body portion there is provided a magazine compartment 5 of slightly larger dimensions than the tickets to be sorted in which the unsorted tickets are adapted to be placed, preferably through an opening in the side-wall thereof which is normally closed by a spring-hinged door 6. This magazine compartment has vertical parallel end-walls, having straight lower portions which terminate in curved upper portions 7, and a top portion 8 with a slot or opening 9 under the inner edge thereof. There is provided within the magazine compartment 5 a platform 10 which is supported preferably on a pair of compression coil springs 12.

The remainder of the body 2 is divided into a plurality of compartments 13 also having dimensions slightly larger than the tickets to be sorted which are separated from each other by the walls 14. Each of these compartments 13 is provided with a cover or top portion 15 which has a slightly turned-up edge or lip 16 at its inner side which provides a slot or opening 17 between that edge of the cover and the wall 14 through which the tickets are to be inserted as they are sorted. Also, each compartment has an opening 18 in the side-wall thereof extending substantially the depth of the compartment to facilitate the manipulation of the sorted tickets therefrom through an opening in the bottom thereof having a door 19 thereon which is normally maintained closed by the action of a spring-hinge 20.

In operation, the platform 10 in the magazine compartment 5 is manually forced to the bottom of the magazine against the action of the springs 12 and a stack of unsorted tickets placed thereon. The platform is then released and the springs force the platform together with the tickets upward, bringing the topmost tickets into contact with the curved upper portion 7 of the outer end-wall of the magazine, urging the edge of the top ticket out through the slot 9. The number or other identifying mark or marks on the ticket is noted by the operator and the ticket is removed from the magazine and moved forward longitudinally of the device by a finger movement of the operator over the tops or covers of the compartments 13 between the extending guide portions 3 to a position opposite the slot 17 in the corresponding compartment in which it is to be deposited. The ticket is then slipped into the slot in the compartment by a backward motion of the finger, and the movements repeated for each ticket to be classified.

It will be understood that the number of compartments employed is governed by the classification desired. For sorting tickets numerically, it appears that a device having ten ticket-receiving compartments would be most satisfactory. A unit of twenty-six compartments would be used, of course, for alphabetically classifying and sorting tickets.

While I have in this application specifically shown and described an embodiment of my invention, it will be understood that this embodiment is merely for the purpose of illustration and description and that various other forms may be devised within the scope of the invention as defined in the appended claims.

I claim:

1. A device for sorting tickets and the like comprising a longitudinally extending box-like body member, a plurality of compartments successively arranged in said body member throughout substantially the length thereof, one of the endmost of said compartments being adapted for use as a magazine compartment and the remaining compartments adapted to receive the tickets as they are removed therefrom and sorted, each of said compartments having an opening in the top thereof for inserting the tickets therethrough, means arranged in said magazine compartment for urging the topmost tickets therefrom through the opening therein and means arranged along the top of said body member and extending at least from said magazine compartment along said ticket receiving compartments throughout substantially the length of said body member for guiding the tickets in their movement thereover as they are being sorted.

2. A device for sorting tickets and the like comprising a longitudinally extending box-like body member, a plurality of spaced-apart parallel members arranged in said body member so as to provide a series of aligned compartments therein, each of said parallel members having an outwardly bent portion adapted to form a top for the next succeeding compartment and extending to a point adjacent the next parallel member in line so as to provide an opening therebetween in the top of each of the compartments for inserting the tickets therethrough, one of the endmost of said compartments being adapted for use as a magazine compartment to hold a quantity of tickets to be sorted and the remaining compartments adapted to receive the tickets as they are removed from the magazine compartment and sorted, said parallel members forming said magazine compartment having parallel upper curved portions, means associated with said magazine compartment for forcing the tickets therein upwardly against the curved portion of the outer parallel member which, in turn, is adapted to force successively the topmost ticket in the magazine out through the opening therein, and means arranged in the bottom of said ticket receiving compartments for removing the sorted tickets therefrom.

3. A device for sorting tickets and the like comprising a longitudinally extending box-like body member, a plurality of compartments successively arranged in side-by-side relation in said body member throughout substantially the length thereof, at least one of said compartments adapted for use as a magazine compartment and the remaining compartments adapted to receive the tickets as they are removed from the magazine compartment and sorted, each of said compartments having an opening in the top side for inserting the tickets therethrough, an upwardly extending flanged guide portion arranged along the top of said body member at each side thereof, said flanged portions adapted to guide the tickets as they are moved along the top of the body member to be sorted, and means for urging the tickets successively through the opening in said magazine compartment at the top of said body member for sorting the same.

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