Dec. 21, 1948. J. S. CLACHKO 2,456,677

CHART CARRIER

Filed Oct. 17, 1947

3 Sheets-Sheet 1

FIG. 1.

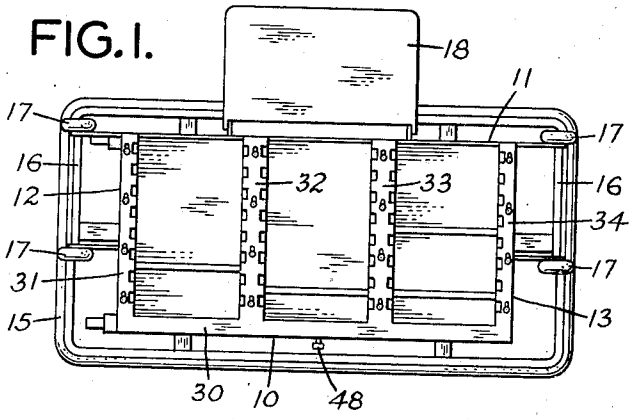


FIG. 2.

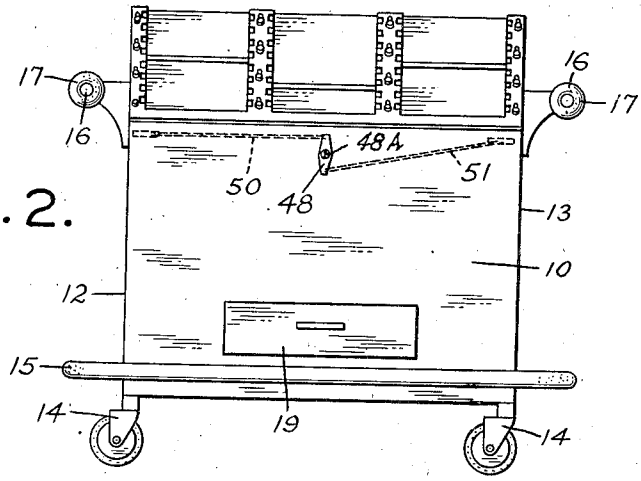
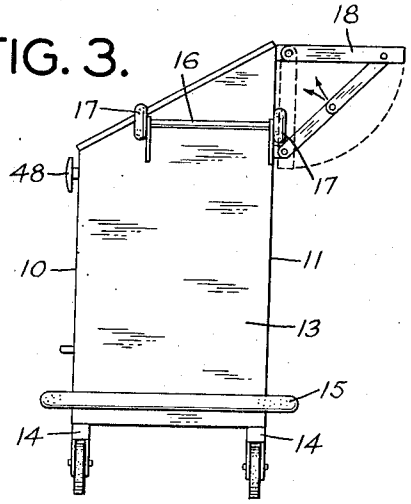


FIG. 3.



INVENTOR.
JOSIAH S. CLACHKO
BY E. W. Marshall
ATTORNEY.

Dec. 21, 1948. J. S. CLACHKO 2,456,677

CHART CARRIER

Filed Oct. 17, 1947 3 Sheets-Sheet 2

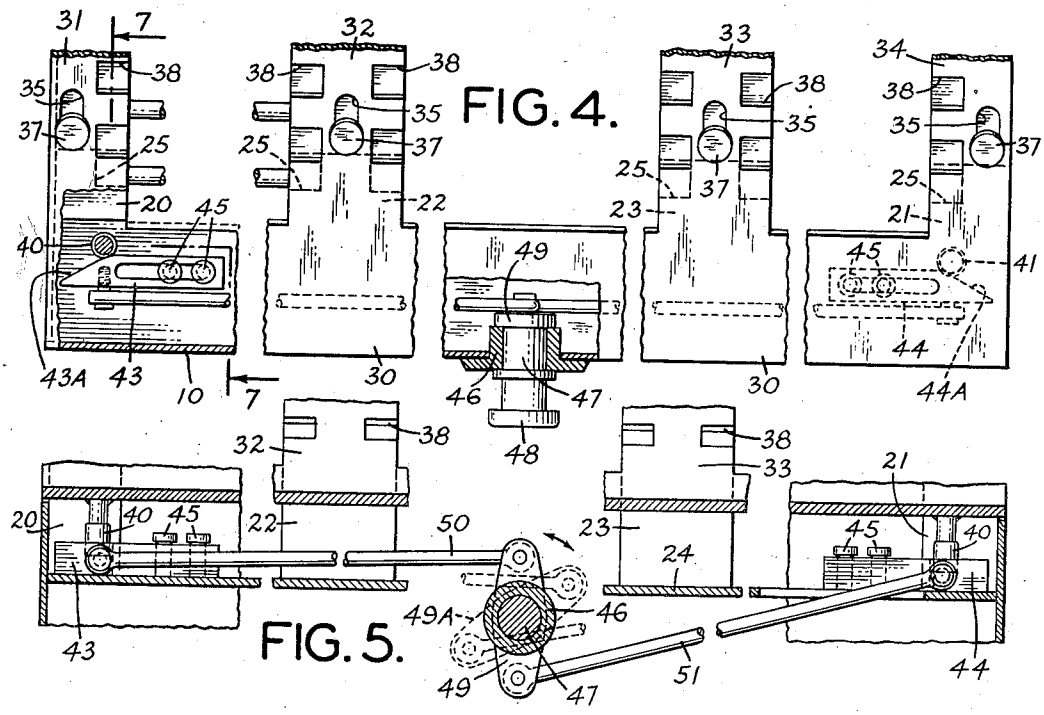


FIG. 4.

FIG. 5.

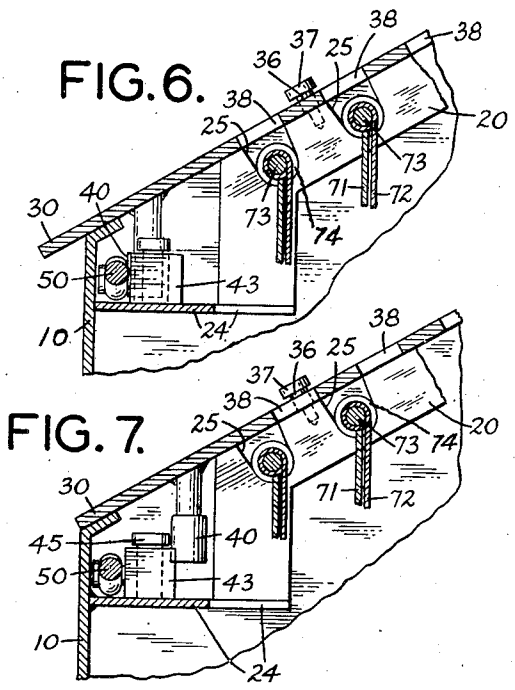


FIG. 6.

FIG. 7.

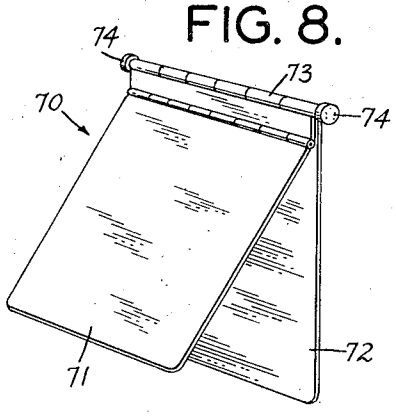


FIG. 8.

INVENTOR.
JOSIAH S. CLACHKO
BY E. W. Marshall
ATTORNEY.

Dec. 21, 1948. J. S. CLACHKO 2,456,677

CHART CARRIER

Filed Oct. 17, 1947 3 Sheets-Sheet 3

FIG.9.

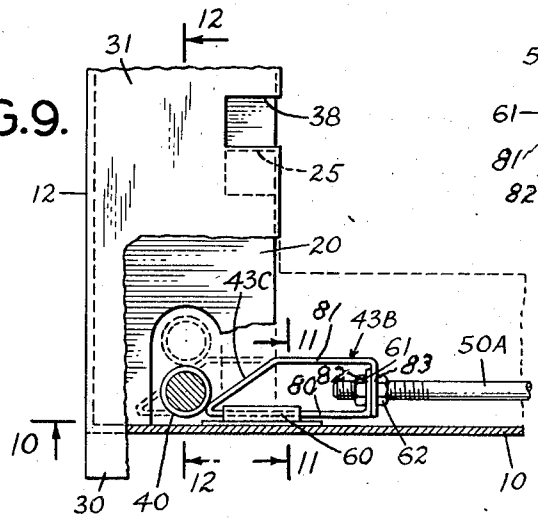
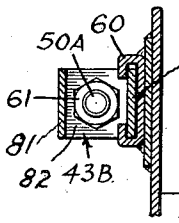


FIG.11.



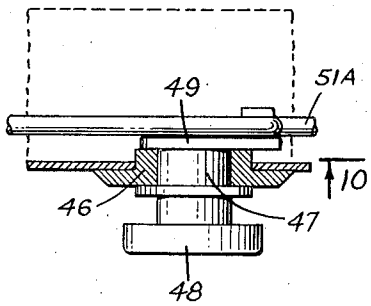
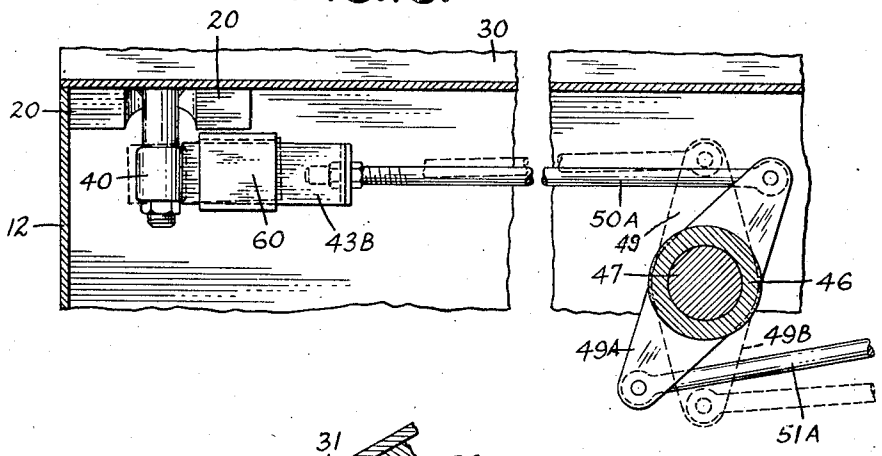


FIG.10.



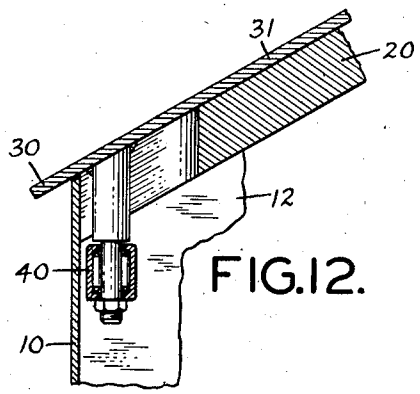


FIG.12.

INVENTOR.
JOSIAH S. CLACHKO
BY
E. W. Marshall
ATTORNEY.

Patented Dec. 21, 1948

2,456,677

UNITED STATES PATENT OFFICE

2,456,677

CHART CARRIER

Josiah S. Clachko, Ridgefield Park, N. J., assignor to S. Blickman, Inc., Weehawken, N. J., a corporation of New York

Application October 17, 1947, Serial No. 780,369

1 Claim. (Cl. 45—2)

1

This invention relates to improvements in chart carriers, and its object is to provide a compact movable cabinet of attractive appearance for holding a large number of hospital charts or the like in visible and readily accessible positions but against removal by unauthorized persons.

The carrier, according to my invention, is mounted upon cushion-tired casters and is surrounded by a continuous cushioned bumper. It is provided with projecting handles by means of which it may be moved about easily and noiselessly, and with cushioned knobs affixed to the ends of the handles.

To increase the utility of this device, it may have a slidable drawer subdivided into suitable compartments, in which record papers, memorandum blanks, etc., may be kept. A drop-down shelf hinged to the cabinet forms a suitable surface for writing upon the charts, without taking up room when not in use.

The chartholders are of book form, each comprising a pair of flat plates hinged at one of their edges by a transverse pin which projects beyond the lateral edges of the plates, with rubber bumpers on their projecting ends. Rubber bumpers are also affixed to one of the plates of each pair.

Across the top of the cabinet are inclined racks having spaced notches therein to receive the projecting rubber-covered ends of the hinge pins of the chartholders. A locking frame having notched edges corresponding to the notches in the racks is slidably mounted upon and supported by the racks. Suitable mechanism is provided for moving this frame to bring its notches into and out of registration with the notches of the inclined racks. This mechanism preferably is controlled by a key lock.

I will describe my invention in the following specification and point out its novel features in the claim.

Referring to the drawings,

Fig. 1 is a plan view of a preferred form of a chart carrier which is made according to and embodies my invention;

Fig. 2 is a front elevation of the structure shown in Fig. 1;

Fig. 3 is a side elevation of the structure shown in the preceding figures;

In Figs. 1 and 3 a drop-down shelf is shown in its raised position in full lines, and in Fig. 3 it is shown in broken lines folded down against the back of the cabinet;

Fig. 4 is an enlarged plan view of a portion of the structure, with parts broken away to show the construction;

2

Fig. 5 is a sectional front elevation of some of the parts shown in Fig. 4;

Fig. 6 is a sectional side elevation of some of the parts shown in Figs. 4 and 5;

Fig. 7 is a view similar to Fig. 6, with some of the parts in different relative positions. The section in the latter figure is taken on the line 7—7 of Fig. 4; and

Fig. 8 is a perspective view of one of the chartholders;

Fig. 9 is an enlarged plan view of what I now consider a preferred form of the actuating mechanism, with parts broken away and other parts shown in section.

Fig. 10 is a sectional front elevation of the mechanism shown in Fig. 7, the section being taken on the line 10—10 of the latter figure;

Fig. 11 is a sectional side elevation taken on the line 11—11 of Fig. 9; and

Fig. 12 is a similar section taken on the line 12—12 of Fig. 9.

The carrier comprises a rectangular box-like cabinet, the front of which is designed by the reference numeral 10, and the back by 11. Its sides are designated respectively by the numerals 12 and 13. The top of this casing is open except for the arrangement for supporting and locking the chartholders. The back 11 is higher than the front 10, so that the open top on the chart-supporting arrangement is inclined from the horizontal. This structure is mounted upon casters 14, the wheels of which are cushion-tired.

15 is a cushioned bumper, which is spaced from and surrounds the lower part of the casing and is suitably affixed thereto. Handles in the form of horizontal rods 16 are spaced from and affixed to the upper parts of the sides 12, 13 by suitable brackets. Resilient knobs 17 on the ends of these rods outside of the brackets are in substantially vertical alinement with the bumper 15.

18 is a drop-down shelf pivotally supported on the back 11 of the casing near its upper edge. 19 is a drawer in the lower part of the casing, which may be suitably subdivided into desired compartments.

20, 21 are racks affixed respectively to the sides 12, 13 of the casing. Intermediate racks 22, 23 extend from the back 11 to a shelf 24 affixed to the rear of the front 10 of the casing. The distance between adjacent edges of the racks 20, 22; 22, 23; and 23, 21 are equal, and notches 25 are provided in all of the racks. These notches are equally spaced from one another and are longitudinally alined.

A locking plate comprises a longitudinal por-

tion 30, which lies across the lower front edge of the casing, and transverse arms 31, 32, 33 and 34, which lie over the racks 20, 22, 23 and 21 and are slidable thereon. Slots 35 are formed in each of these arms, through which pass pins 36, which are affixed to the racks and which have heads 37 extending over the arms. Notches 38 formed in the edges of the arms correspond in number and position to the notches 25 in the racks. When the locking plate is in its lower position, as shown in Fig. 6, the notches 38 are alined with the notches 25. When the locking plate is in its upper position, as shown in Figs. 4 and 7, the notches 25 in the racks are covered by solid portions of the locking plate between the notches 38 therein.

70 designates a chartholder, which comprises two flat rigid plates 71, 72, which are interconnected at one end by a rod 73 which projects slightly beyond the edges of the plates 71, 72, on the ends of which are rubber bumpers 74. These are arranged to be dropped through the slots 38 in the locking plate into the slots 25 in the racks when the locking plate is lowered to the relative position in which it is shown in Fig. 6. After these chart holders have been inserted into the notches 25, the locking plate may be raised to its Fig. 7 position.

I will now describe the mechanism shown in Figs. 4–7 for moving the locking plate. 40, 41 are rollers mounted on pins which extend downwardly vertically from opposite sides of the lower part 30 of the locking plate. 24 is a horizontal shelf affixed to the rear of the front 10 of the cabinet. 43, 44 are slides mounted on this shelf, having beveled ends 43A, 44A, which respectively engage the rollers 40, 41. The slides are slotted and are guided by headed pins 45 which extend through them from the shelf 24.

In the center of the front 10 of the casing, near the upper part thereof, is a bushing 46, in which a stub-shaft 47 is rotatably mounted 48 in a handle affixed to the stub-shaft outside of the cabinet. 49 is a lever affixed to the stub-shaft inside of the cabinet. 50, 51 are connecting rods respectively connecting the upper part of the lever 49 with the slide 43, and the lower part of the lever with the slide 44. When the lever is in the vertical position shown in full lines in Fig. 4, the slides 43, 44 are pushed outwardly and, by the engagement of their beveled ends 43A, 44A with the rollers 40, 41, the locking plate is moved upwardly into the position shown in Fig. 7. If any of the chart-holders have been placed in the cabinet with the projecting ends 74 in the notches 25 of the racks, these ends will be covered by the solid portions of the locking plates between its notches 38, so that the chart-holders cannot be removed from the cabinet. A key-actuated lock (not shown) is provided in the stub-shaft for locking the parts in this position, thereby making it impossible for unauthorized persons to remove the chart-holders. The line 48A in Fig. 2 represents a key-hole, through which a key may be inserted for actuating the lock.

When unlocked, the stub-shaft can be rotated to bring the lever into the inclined position shown by broken lines at 49A in Fig. 5. The slides 43, 44 will then be retracted away from the rollers 40, 41 and the locking plate will be free to move down to the position shown in Fig. 6, with its notches 38 in alinement with the notches 25 in the racks. Any desired chart or charts may then be removed.

In the construction shown in Figs. 9–12, most of the parts are the same form and arrangement as those previously described. In this case, however, the slide 43B is formed of sheet metal, bent to form a beveled end 43C and with portions 80, 81 parallel with the frame plate 10 of the cabinet. Its ends 82, 83 overlap and the connecting rod 50A passes through them and is connected to the slide by nuts 61, 62, the end of the rod being threaded to receive the nuts. The side 80 of the slide is supported in a guide 60 affixed to the front plate 10 of the cabinet. 51A designates the other connecting rod, and it is to be understood that a slide of similar construction is provided at the other side of the cabinet.

In Fig. 10 the lever 42 is shown in its vertical position in dotted lines, and in its inclined position 49A in full lines. The operation of this mechanism is similar to that previously described.

Various modifications in construction, mode of operation, method and use of an invention may and do occur to others, especially after benefiting from knowledge of such a disclosure as that herein presented of the principles involved, but the invention itself is not confined to the present showing.

I claim:

A cabinet having a plurality of spaced slanting parallel racks extending over the top of the cabinet, said racks being provided with spaced pockets open at their upper edges, a locking plate slidably supported on each of the racks and having portions overlying the racks, a side of each of said overlying portions of the locking plates being provided with spaced notches in registration with the pockets in the racks, a pair of slides mounted on the cabinet having roller-engaging cams thereon, and a pair of anti-friction rollers mounted on each locking plate in the path of said cams, a manually operable mechanism for simultaneously moving the slides upwardly on the racks to put the notches in said plates out of register with the pockets in the racks, and means for locking the slides in positions wherein said cams maintain the locking plates in their raised position, combined with chartholders narrower than the distance between the racks and having portions extending from their edges into the pockets in the racks.

JOSIAH S. CLACHKO.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
776,569	Wade	Dec. 6, 1904
1,040,805	Staples	Oct. 8, 1912
1,235,533	Moinett	July 31, 1917
2,197,355	Ulrich	Apr. 16, 1940