Aug. 3, 1943. P. E. M. THOMSON 2,325,641

ACCOUNTING AND FILING SYSTEM

Filed May 15, 1942 3 Sheets-Sheet 1

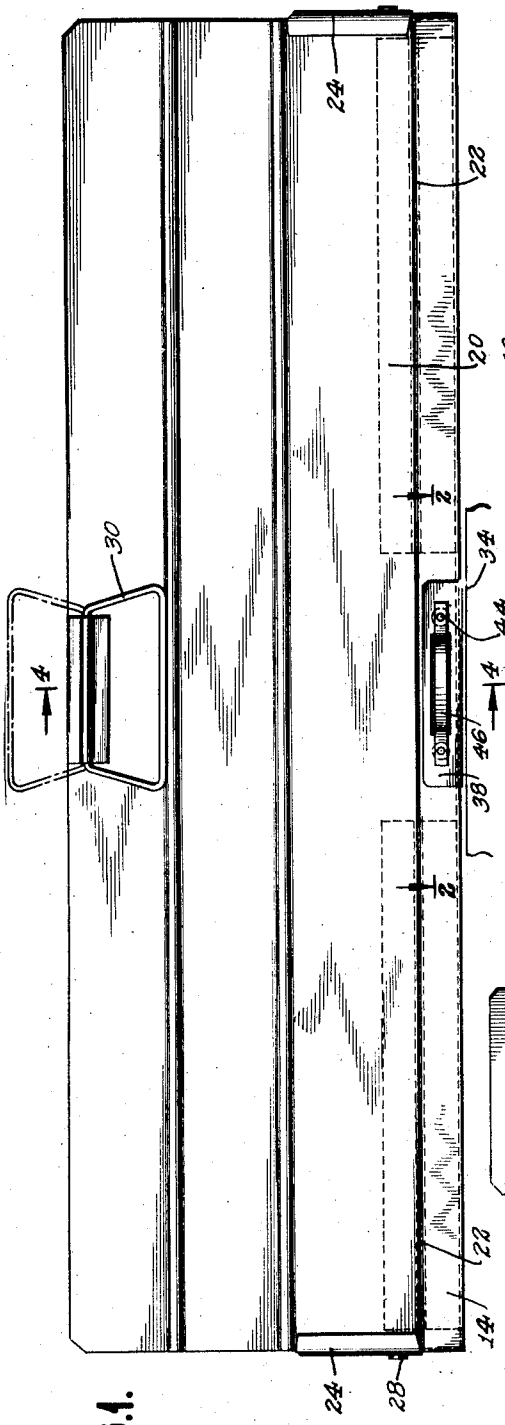



FIG. 1.

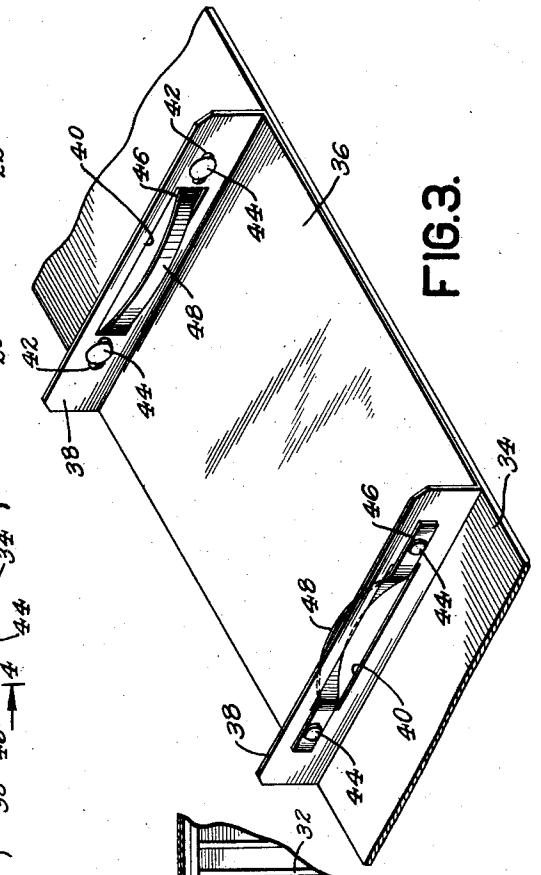



FIG. 3.

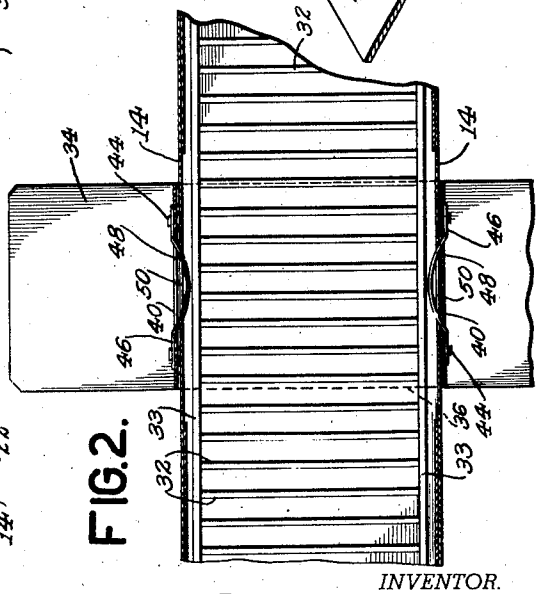



FIG. 2.

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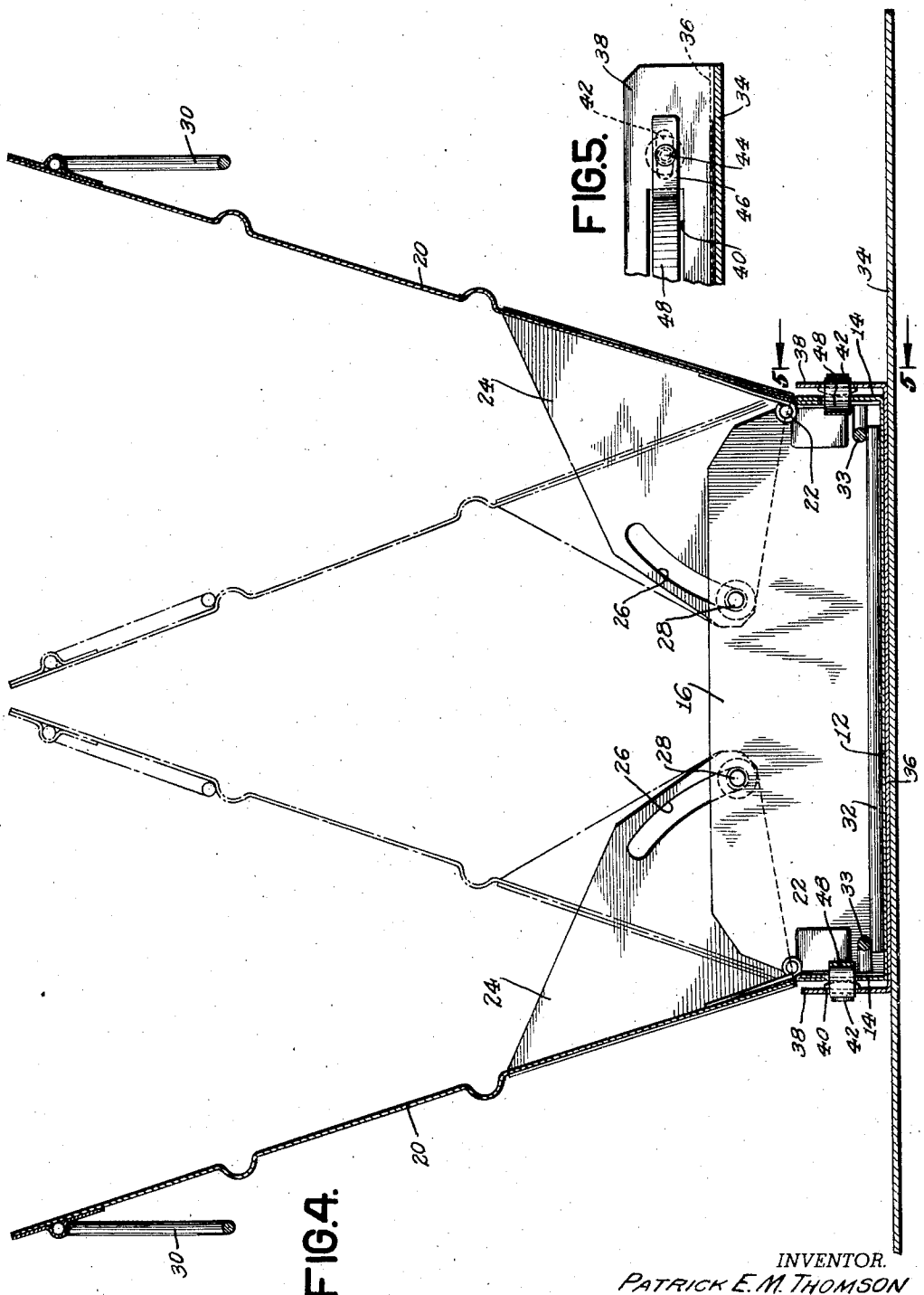



FIG. 4.




FIG. 5.

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FIG.6.

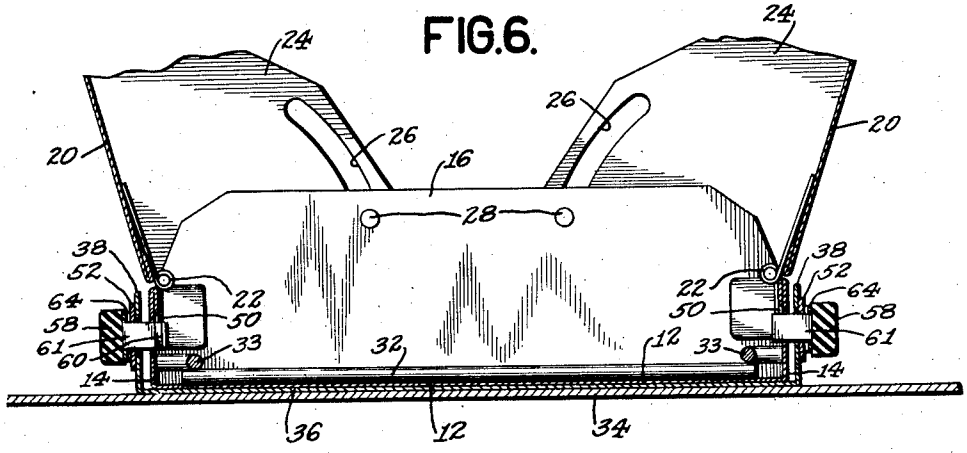



FIG.7.

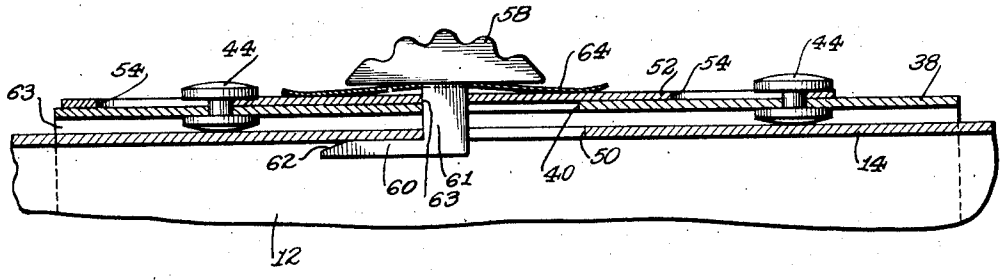
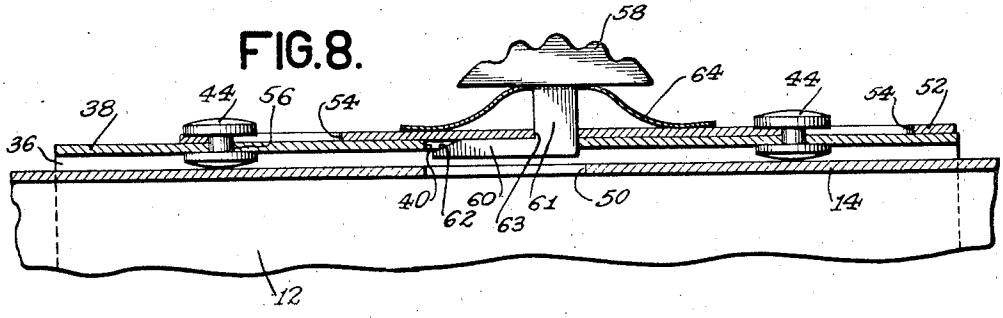



FIG.8.




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2,325,641

# UNITED STATES PATENT OFFICE

2,325,641

## ACCOUNTING AND FILING SYSTEM

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Application May 15, 1942, Serial No. 443,147

17 Claims. (Cl. 129—16)

This invention relates generally to card indexes or card registers of the kind in which the index cards or sheets have certain structural characteristics adapted to cooperate with portions of a container or holder for the cards to permit the positioning of the cards in relative offset relation whereby portions of all such cards will be visible. More particularly, the invention relates to containers for the cards whereby such cards may be readily arranged and handled. Accounting and filing systems of this character are disclosed and claimed in United States patents, Numbers 1,713,945 granted May 21, 1929; 1,975,566 granted Oct. 2, 1934; and 2,192,178 granted March 5, 1940.

It has been proposed to employ slotted or apertured cards cooperating with supporting or positioning ribs and the like whereby the cards may be offset either vertically or horizontally with respect to one another and in its simplest form, this arrangement involved slotting or perforating the cards or sheets along the lower edges thereof for horizontal offsetting as well as vertical offsetting.

Such cards have been contained within cabinets or drawers having inclined and adjustable back-rests to support banks of the cards, individual banks being separated by adjustable or readily movable partitions or dividers.

It has also been proposed to provide a portable carrier or tray for a plurality of index cards which has all of the advantages of the cabinet so far as visibility and accessibility of the cards are concerned, and which may be disposed, when not in use, in a cabinet in a compact arrangement while at the same time side wall portions of the portable tray are capable of angular displacement to afford inclined supporting surfaces for the cards in ready reading position when a portable tray has been removed from a cabinet.

It sometimes happens, during an examination of the cards in a portable tray when it has been removed from the cabinet, that a vigorous movement of the cards from one side to the other against an inclined wall may tip the tray over. It is an object of this invention to provide devices which will tend to stabilize the tray and prevent its tipping over.

Another object of the invention is a stabilizing base which is readily applied to a tray.

Another object of the invention is a stabilizing base for a tray which enables the base to be securely locked to the tray but at the same time is readily removable after use and for return to a cabinet.

Another object of the invention is latching devices whereby a stabilizing base may be readily attached to a tray and readily removed therefrom.

Yet another object of the invention is a device which will prevent a tray from being tipped over and which at the same time will occupy substantially no useable space on a desk or table and thus not interfere with the usual operations carried on at the desk.

In carrying the invention into effect, a plate-like member adapted to rest on a flat surface is conveniently provided with readily disengageable attaching devices by which it may be releasably mounted on the tray, beneath the bottom thereof, to prevent the tray from tipping over.

The invention also seeks constructions which are practical from the standpoint of ease and practicability of manufacture and convenience and durability in use.

These and other objects of the invention and the means for their attainment will be more apparent from the following detailed description, taken in connection with the accompanying drawings illustrating various embodiments by which the invention may be realized and in which:

Figure 1 is a view in side elevation showing a portable tray of this invention to which the stabilizing base has been affixed;

Figure 2 is a fragmentary view of the tray taken in the plane indicated by the line 2—2 Figure 1, looking in the direction of the arrows and showing the removable stabilizing base attached;

Figure 3 is a view showing, in perspective, one form taken by the stabilizing base of this invention;

Figure 4 is a view in transverse section taken in the plane indicated by the line 4—4 of Figure 1, looking in the direction of the arrows, showing a portable tray to which a stabilizing base has been affixed;

Figure 5 is a fragmentary view taken in the plane indicated by the line 5—5 of Figure 4, looking in the direction of the arrows and showing one form taken by the releasable devices securing the stabilizing base to the portable tray; and

Figure 6 is a fragmentary transverse sectional view showing another form taken by the releasable securing devices of the stabilizing device of this invention.

Figure 7 is a fragmentary view showing the securing device of Figure 6 in operative position.

Figure 8 is a view similar to Figure 7 but with the securing device in inoperative position.

The portable tray of this invention comprises a rectangular base member having a bottom 12 and integral side walls 14 and the end members 16.

Pivotally mounted upon the side walls 14 are movable side members 20. These side members 20 are pivotally mounted as by inwardly disposed elongated butt hinges 22, two on each side, spaced from one another at an intermediate portion of the tray to provide space for latching devices. One wing of the hinges 22 is secured to the respective side walls 14 and the other wing is secured to the movable sides 20 retaining the adjacent edges slightly spaced to permit movement of the sides outwardly past the vertical. The side members are provided with inwardly directed flanges or wings 24 at their front and rear edges which are formed with arcuate slots 26, respectively, and the end members 16 are each provided with pins 28 passing through the respective slots 26 so that the sides may be moved from the full line position in Figure 4 to the dotted line position shown, which is the position when the portable trays are carried in the hand. Handles 30 are provided on the uppermost portion of the movable side walls 20 so that both wall portions may be carried by one hand and this serves as a convenient way of carrying the portable tray from one place to another.

Transversely, preferably, of the longer dimension of the portable tray, the base member is provided with positioning members in the form of rods or bars 32 engageable by the slots or cut-out portions in the bottom of the cards, as will be understood.

To prevent a tray from tipping over, when removed from a cabinet and standing, say, on a desk so that the index cards can be conveniently examined, the stabilizing base illustrated in Figure 3 is provided. This base member is shown as comprised of a flat plate-like member 34 relatively thin but rigid and of a length greater than the width of the portable tray to extend a sufficient distance on opposite sides thereof to stabilize the tray, as illustrated in Figure 2.

An elongated sheet metal strip 36 of the same width as the supporting member is secured to the top thereof and is formed with upturned ends 38 forming positioning sides or flanges facing one another and spaced a distance sufficient to receive the base of the portable tray, that is, the distance between the side flanges 38 is slightly greater than the transverse outside dimension of the base of the portable tray. In Figures 1 to 5, these flanges 38 are shown as formed with slots 40 of a length somewhat less than the width of the strip of metal and, on opposite ends of the slots, are formed with short slots 42 within which move pins 44 carrying the ends of a leaf spring 46 bent as at 48 to extend through the major slot 40 and engage in a corresponding slot 50 in the side walls 14 of the base of the portable tray. Therefore, while the normal position of the spring is as illustrated in Figure 3 with its bent portion 48 extending through the major slot 40, the ends are fastened to pins 44 within the slots 42 thereby enabling the pins 44 to separate when the spring is under compression in positioning a portable tray base therein. Conveniently the slots 50 in the tray base member, and the registering slots 40 in the stabilizing member 34—48, are disposed at a point in the side walls 14 above the positioning bars 32 and their retaining longitudinal strips 33 so that the positioning bars will not interfere with the application or removal of the base thereto. Also, it will be noted the slots are formed in the area where hinge members are omitted, as shown in Figure 1, so as not to interfere with the entrance of the springs in the slots.

A modification of the invention is illustrated in Figure 6. Here again the tray sides 14 and the flanges 38 are formed with registering slots 50 and 40, respectively. The latching devices are manually actuated, however, and comprise slides 52 formed with spaced slots 54 registering with holes or slots 56 in the flanges 38 and held on the flanges by pins 44, as before. The slides carry thumb pieces 58, respectively, and latches 60, 61 formed with bevelled ends 62 and each extending through the registering slots 50 and 40. The shank 61 of a latch is freely movable in a slot 63 in the slide 52 and a leaf spring 64 between the thumb piece and the slide tends to move the thumb piece outwardly so that the bevelled end 60 normally lies outwardly of a side 14 but the latch can readily be manipulated by pressing inwardly on the thumb piece 58 to cause the latch portion 60 to pass inwardly through the slot 50 and then be moved laterally to a position inwardly of the wall 14, the bevelled end 62 facilitating this movement, as will be understood.

The purpose and operation of the several features of the invention have been described in conjunction with the description of the several parts and no further description of the operation of the device is deemed necessary. Suffice it to say that portable trays for card indexes have been provided which are readily stored in restricted space in a cabinet and yet are provided with stabilizing devices which prevent their being tipped over when removed from a cabinet and placed on a table or the like for examination of the cards.

It will thus be seen that a stabilizing member has been provided for a portable tray which extends beyond the sides thereof a sufficient distance to prevent the tray from tipping over. By means of latching devices the tray is securely held to this stabilizing member and yet is capable of being readily released to be returned to a cabinet.

Various modifications will occur to those skilled in the art in the composition, configuration and disposition of the component elements going to make up the invention as a whole, as well as in the selection of specific features for particular purposes and no limitation is intended by the phraseology of the foregoing description or illustrations in the accompanying drawings except as indicated by the appended claims.

What is claimed is:

1. In card indexing devices, the combination with a portable tray whereof the base is elongated and provided with side walls, of a stabilizing member comprising a transversely disposed plate-like member of a length greater than the transverse dimension of the tray base, a plate-like member secured to the upper surface thereof and formed with upturned ends disposed inwardly of the ends of the first mentioned plate-like member to provide sides spaced to receive the base of the tray therebetween, said upturned ends being formed with elongated transversely extending slots and a slot spaced from each end thereof, pins movable in the last mentioned slots, a leaf spring the ends of which are secured to the pins, respectively, said leaf spring being inwardly bent intermediate its ends to extend

toward one another through the slots, the sides of the tray base being formed with registering slots to receive the bent portions of the respective springs to removably secure the stabilizing device on the base of the tray.

2. In card indexing devices, the combination with a portable tray whereof the base is elongated and provided with side walls, of a stabilizing member comprising a transversely disposed plate-like member of a length greater than the transverse dimension of the tray base, upwardly extending flanges carried on the upper surface of the plate-like member to provide sides between which the tray base is received, said flanges being respectively formed with elongated slots and a slot spaced from each end thereof, pins movable in the last mentioned slots, leaf springs the respective ends of which are secured to the pins and inwardly bent intermediate their ends through the slots, the sides of the tray base being formed with registering slots to receive the bent portions of the respective springs to removably secure the stabilizing device on the base of the tray.

3. In card indexing devices, the combination with a portable tray whereof the base is elongated and provided with side walls, of a stabilizing member comprising a transversely disposed plate-like member of a length greater than the transverse dimension of the tray base, flanges secured to the plate-like member to provide sides between which the tray base is received, said flanges being formed with elongated slots, leaf springs, at least one end of which is movably mounted on each flange and formed with an inwardly bent portion entering the slot, at least one side of the tray base being formed with a registering slot to receive the bent portion of a spring to removably secure the stabilizing device on the base of the tray.

4. In card indexing devices, the combination with a portable tray whereof the base member is provided with side walls, of a stabilizing member comprising a member of a length greater than the transverse dimension of the tray base, and provided with flanges between which the tray base is received, said flanges being formed with elongated slots, the sides of the tray base being formed with registering slots, and leaf springs carried with one of said members and adapted to engage both said slots to removably secure the stabilizing device on the base of the tray.

5. In card indexing devices, the combination with a portable tray whereof the base is elongated and provided with side walls, of a stabilizing member comprising a transversely disposed plate-like member of a length greater than the transverse dimension of the tray base, a plate-like member rigidly secured to the upper surface thereof and formed with upturned end walls disposed inwardly of the ends of the first member to provide vertical sides between which the side walls of the tray base are received and retained, said end walls being formed with latching means and the side walls of the tray base being formed with coacting latching means to removably secure the stabililizing device to the base of the tray.

6. In card indexing devices, the combination with a portable tray whereof the base is elongated and provided with side walls, of a stabilizing member comprising a transversely disposed plate-like member of a length greater than the transverse dimension of the tray base, a plate-like member secured to the upper surface, upwardly extending flanges on the member to provide sides between which the tray base is received, said flanges being formed with slots, latching means carried by the flanges and movable in the slots to removably secure the stabilizing device on the base of the tray.

7. In card indexing devices, the combination with a portable tray whereof the base is elongated and provided with side walls, of a stabilizing member comprising a transversely disposed plate-like member of a length greater than the transverse dimension of the tray base and having upwardly extending flanges spaced from its ends to provide sides between which the tray base is received, said flanges being formed with elongated slots, bent leaf springs carried by said flanges whereof the bent portions are disposed in the slots, the sides of the tray base being formed with registering slots to receive the bent portions of the respective springs to removably secure the stabilizing device on the base of the tray.

8. In card indexing devices, the combination with a portable tray whereof the base is elongated and provided with side walls, of a stabilizing member comprising a transversely disposed plate-like member of a length greater than the transverse dimension of the tray base and having upwardly extending flanges spaced from its ends to provide sides between which the tray base is received, said flanges being formed with elongated slots, the sides of the tray base being formed with registering slots, latching means slidable in the slots of the flanges and adapted, respectively to enter the slots of the base to removably secure the stabilizing device on the base of the tray.

9. In card indexing devices, the combination with a portable tray whereof the base member is elongated and provided with side walls, of a stabilizing member comprising a transversely disposed member of a length greater than the transverse dimension of the tray base member having flange members to provide sides between which the tray base member is received, one of said members being formed with slots and the other member being provided with movable latching means to engage a side of the slots to removably secure the stabilizing device on the base of the tray.

10. In card indexing devices, the combination with a portable tray whereof the base member is elongated and provided with side walls, of a stabilizing member comprising a transversely disposed member of a length greater than the transverse dimension of the tray base member having flange members to provide sides between which the tray base member is received, one of said members being formed with slots and the other member being provided with movable latching means to be caused to enter a slot and to engage a side of the slot to removably secure the stabilizing device on the base of the tray.

11. In card indexing devices, the combination with a portable tray whereof the base is elongated and provided with side walls, of a stabilizing member comprising a transversely disposed plate-like member of a length greater than the transverse dimension of the tray base, a plate-like member secured to the upper surface thereof and formed with upturned ends to provide flanges between which the tray base is received, the sides of said base being formed with slots, movable latching means carried with the flanges and adapted to enter the slots and each latching means adapted

to engage a wall of a slot to removably secure the stabilizing device on the base of the tray.

12. In card indexing devices, the combination with a portable tray whereof the base is elongated, of a stabilizing member comprising a transversely disposed plate-like member of a length greater than the transverse dimension of the tray base, said base being formed with at least one slot and latching means carried by the stabilizing member and entering a slot to removably secure the stabilizing device on the base of the tray.

13. In card indexing devices, the combination with a portable tray whereof the base is elongated, of a stabilizing member comprising a transversely disposed plate-like member of a length greater than the transverse dimension of the tray base and having flanges to provide sides between which the tray base is received, said flanges being formed with slots, the sides of the tray base being formed with registering slots, and a latch movable on a flange and passing through a slot and engaging the slot in the tray base to removably secure the stabilizing device on the base of the tray.

14. In card indexing devices, the combination with a portable tray whereof the base is elongated and provided with side walls, of a stabilizing member having flange members between which the tray base is received, one of the side walls being formed with a slot and the flange member being provided with a registering slot, movable latching means carried by the flange member to be caused to enter the slot in the side wall and to engage a side of the slot to removably secure the stabilizing device on the base of the tray.

15. In card indexing devices, the combination with a portable tray whereof the base is elongated and provided with side walls, of a stabilizing member having flange members between which the tray base is received, one of the side walls being formed with a slot and the flange member being provided with a registering slot, movable latching means carried by the flange member to be caused to enter the slot in the side wall and to engage a side of the slot to removably secure the stabilizing device on the base of the tray, and spring means to oppose movement of the latching means.

16. In card indexing devices, the combination with a portable tray whereof the base is elongated, of a stabilizing member comprising a transversely disposed plate-like member of a length greater than the transverse dimension of the tray base, flanges on the plate-like member providing sides between which the tray base is received, said flanges being respectively formed with an elongated slot and a slot spaced from each end of the elongated slot, a slide on each flange formed with spaced elongated slots to register with the last named slots, pins in the registering slots, a thumb piece, a latch carried thereby, and a leaf spring between the thumb piece and the slide, each side of the tray base being formed with an elongated slot which registers with a corresponding first mentioned elongated slot, said latch being received in the registering elongated slots to removably secure the stabilizing device on the base of the tray.

17. In card indexing devices, the combination with a portable tray whereof the base is elongated, of a stabilizing member comprising a transversely disposed plate-like member of a length greater than the transverse dimension of the tray base, flanges on the plate-like member providing sides between which the tray base is received, at least one of said flanges being formed with an elongated slot and a slot spaced from each end of the elongated slot, a slide on said flange formed with spaced elongated slots to register with the last named slots, pins in the registering slots, a thumb piece, a latch carried thereby, and a leaf spring between the thumb piece and the slide, one side of the tray being formed with an elongated slot which registers with the first named elongated slot, said latch being received in the registering elongated slots to removably secure the stabilizing device on the base of the tray.

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