This invention relates to card-index trays, box drawer, and kindred receptacles of the type including swivy plates or pivotal dividers serviceable to subdivide the cards into sections as desired, and it has for a primary object to provide an improved pivotal-divider and associated supporting means thereafter.

Another object is to provide a pivotal-divider preferably for use in card-index box drawers which is very simple to produce, easily applied or removed from the supporting means, efficient in use, and devoid of any tendency to planar deflection.

A further object is to provide a pivotal-divider of the species indicated in the preceding paragraphs which is free of any planar projections and includes associated supporting means, both of which are easily insertable in conventional types of card-index trays, box drawers and so forth, with the minimum of effort; and when so located are adapted to jointly hold and stabilize standard types of index cards with pre-assurance of their being easily accessible for inspection, removal and replacement.

While the foregoing definitions are indicative in a general way of the aims of this invention, other objects, with ancillary advantages, will become apparent from the following detailed explanation of a preferred embodiment thereof, such as is shown by the accompanying sheet of illustrative drawings, wherein like reference characters designate corresponding parts in all the views; while the concluding claims more particularly define the features of novelty over the prior art.

In the drawing:

Fig. 1 is a broken perspective view of a card-index box drawer showing the improved pivotal-divider and support, of this invention, adapted thereto.

Fig. 2 is a longitudinal section taken approximately as indicated by the angled arrows II—II in Figs. 1 and 3.

Fig. 3 is a vertical cross-section on the plane designated by the angled arrows III—III in Fig. 1.

Fig. 4 is a view somewhat corresponding to the preceding illustration but showing the pivotal-divider planarly tilted incidentally to insertion or removal.

Fig. 5 is a fragmentary section on the plane indicated by the angled arrows V—V in Fig. 3; and,

Fig. 6 is a fragmentary detail section of a modification hereinafter fully explained.

In describing the form of this invention exemplified in the above captioned illustrative views, specific terms will be employed for the sake of clarity, but it is to be understood the scope of said invention is not thereby limited; each such term being deemed to embrace all equivalents which perform the same function for an analogous purpose.

Referring more in detail to the drawing, the reference character 6 comprehensively designates a fragmentary cross-section of a known type of indexing card box drawer, the same being made of suitable sheet metal and appropriately shaped to define spaced sides 7, with an intervening bottom 8 including side runner portions 9 and a lengthwise median recess 10, while the spaced sides 7 have retroverted upper edges 11 for stiffening purposes.

Snugly fitting the recess 10 is the improved pivotal-divider supporting element 12 of this invention, the same being shaped to include a central channel shaped section with the opposing walls 13 reversely angled to define flanges 14 coplanarly related with respect to the box drawer bottom 8. The flanges 14 have their longitudinal edge portions preferably bent down as indicated at 15 for snug engagement with the confronting walls 16 of the drawer recess 10, as clearly understandable from Figs. 3 and 4, more particularly. At spaced intervals lengthwise of the supporting element 12, there are provided laterally opposing Z-form slots 17, the paralleling portions of which are respectively located in the flanges 14 and bottom of said element; whereas the connecting leg penetrates the side walls 13, as clearly shown in Figs. 1, 3 and 4 to best advantage.

The pivotal-divider, in accordance with this invention, consists of a flat rectangularly contoured rigid plate 18 having the diagonally opposing corners rounded at 19. The pivotal-divider or plate 18, along the edge intended for coaction with the supporting element 12, embodies a coplanar projection 20 of a linear dimension for free engagement and lateral movement in the slots 17 of said element. This projection 20, as best seen in Figs. 3 and 4, is provided at the lower corner of one side with a rounded offset or tab 21 adapted to underlie the associated flange 14, beyond the outer limit of the slot 17. At the opposite end the projection 20 is of rectangular form and includes the one side edge 22 of a vertically directed stepped slot 23 in the pivotal-divider plate 18. Snugly fitted in the stepped or narrower section 24 of the slot
23, as by line welds 25, Fig. 5, is the one end portion of an appropriate section springy wire element 26, flexed for normal outward influence, and embodying a latching or V-section 27, at the lower end, coplanar with the pivotal-divider plate 18.

Fig. 6 illustrates the obvious alternative formation of the Z-form slots 17 in the bottom 8 and recess 10 of the box drawer 6.

Having described the structural aspects of this invention, the manner of inserting and removing the pivotal-divider or plate 18 is briefly as follows: Assuming it is desired to shift the position of the plate 18 from the showing of Figs. 1 and 3, the operator simply elevates said plate whereupon the cam action of the V-latch 27 with the edge 28 and the drawer bottom, a plate to the right-hand in the latter figure; then, by rocking the plate 18 upwards in a clockwise direction and using the upper angular edge of the tab 21 as a fulcrum against the overhanging edge 23, it will be readily apparent the springy element latch section 27, by coaction with the confronting vertical edge 28 of the slot 17, will be inwardly forced relative to the adjoining edge 22 of the projection 10; and as a result of such movement the angular tip of the latch section 27 will be released or spring outwardly and upwards to the position of Fig. 4, whereupon the pivotal-divider or plate 18 can be easily withdrawn, in an obvious manner. To insert or re-insert the pivotal-divider or plate 18, the sequence of movements just described is reversed; or, in other words the rounded tab 21 is passed into the desired slot 17 and rocked from the position of Fig. 4 to that of Fig. 3 with incidental snap engagement of the springy element V-latch into active position.

From the foregoing the merits and advantages of this invention will be self-evident, while it is to be noted the pivotal-divider 18 is limited as regards angular movement, see Fig. 2, by engagement of the projection sides laterally within the upper horizontal portions of the slots 17.

Having thus described my invention, I claim:
1. In combination, a card-index receptacle or box drawer having a channel recess longitudinally of the bottom thereof with opposing substantially Z-form slots through the side walls and upper and lower flanking bottom portions, a flat pivotal-divider embodying a seating medial projection engageable in opposed slots, said projection including a tab at one side for disposition below the upper flanking bottom portion of the receptacle or drawer bottom, a springy element having a latch section wholly within the plane of the pivotal-divider at the opposite side of the seating projection, and said springy element latch being coactive below the opposed upper flanking bottom portion to hold the pivotal-divider in active position.

2. In combination a card-index receptacle or box drawer having a channel recess longitudinally of the bottom, a supporting element with side walls, a bottom wall and outer flanking flanges adapted to said recess, opposing substantially Z-form slots through the bottom and side walls and outer flanges, a flat pivotal-divider embodying a seating medial projection engageable in opposed slots, said projection including a tab at one side for disposition below one flanking flange of the supporting element, a springy element having a latch section wholly within the plane of the pivotal-divider at the opposite side of the seating projection, and said springy element embodying a lower latching portion coactive below the opposed flanking flange of the supporting element to hold the pivotal-divider in active position.

3. The combination of claim 2, wherein the receptacle or drawer bottom recess is of rectangular cross-section, the supporting element embodies a central portion of channel section with the opposing walls outwardly angled to define flanges coplanarly related to said receptacle or drawer bottom, the spaced slots are formed in said opposing walls and the flanking portions of said supporting element flanges and its bottom, and the supporting element flanges have their longitudinal edge portions downwardly angled for snug engagement with the side walls of the receptacle or drawer bottom recess.

4. The combination of claim 2, wherein the pivotal-divider is in the form of a rigid flat plate, and the springy element is planarly embedded therein and has the latching portion of V-formation with the subending angle outwardly active.

5. As a new article of manufacture, a pivotal-divider for card-indexes consisting of a rectangular plate having the several corners rounded, a coplanar generally rectangular medial projection from the lower part of said divider with a round edged tab at one side and a vertical stepped slot flanking the other side thereof, a springy wire element having one end portion permanently secured in the narrower section of the stepped slot with the free part embodying an outwardly angled V-latch, and said element lying wholly within the planar confines of the pivotal-divider.