July 15, 1924.

1,501,439

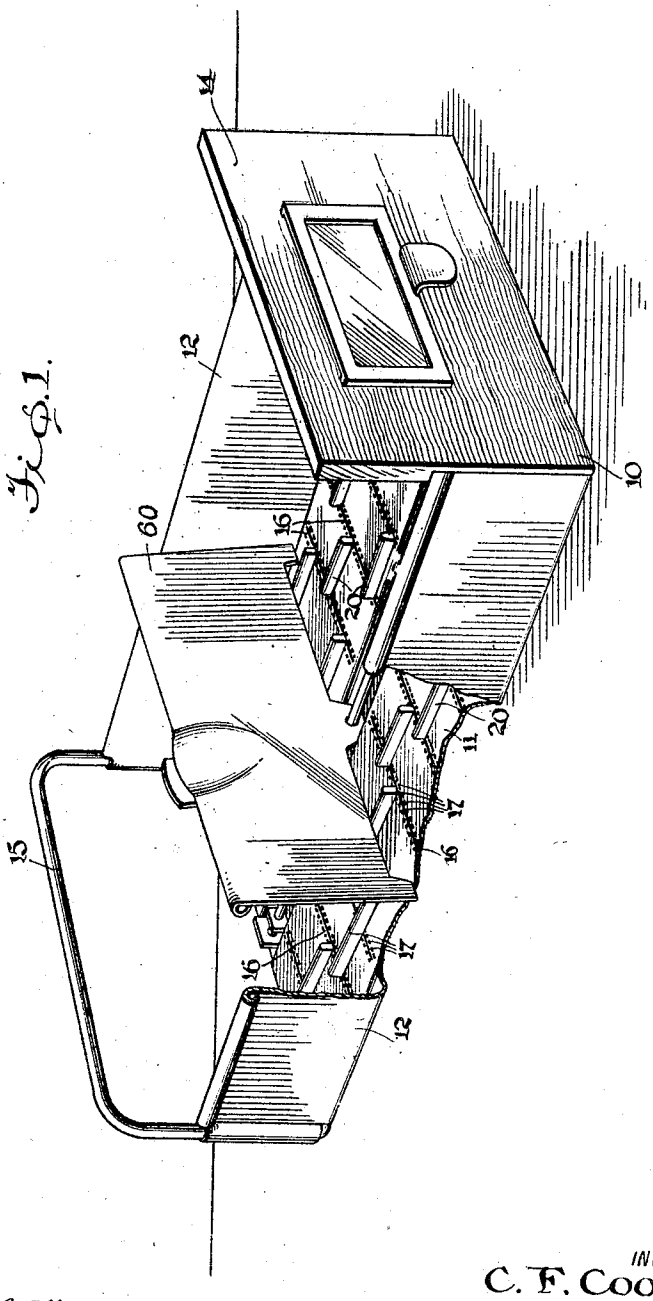
C. F. COOK.

FILING SYSTEM

Filed April 14, 1923

3 Sheets-Sheet 1

Fig. 1.



WITNESSES

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FILING SYSTEM

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Fig. 2.

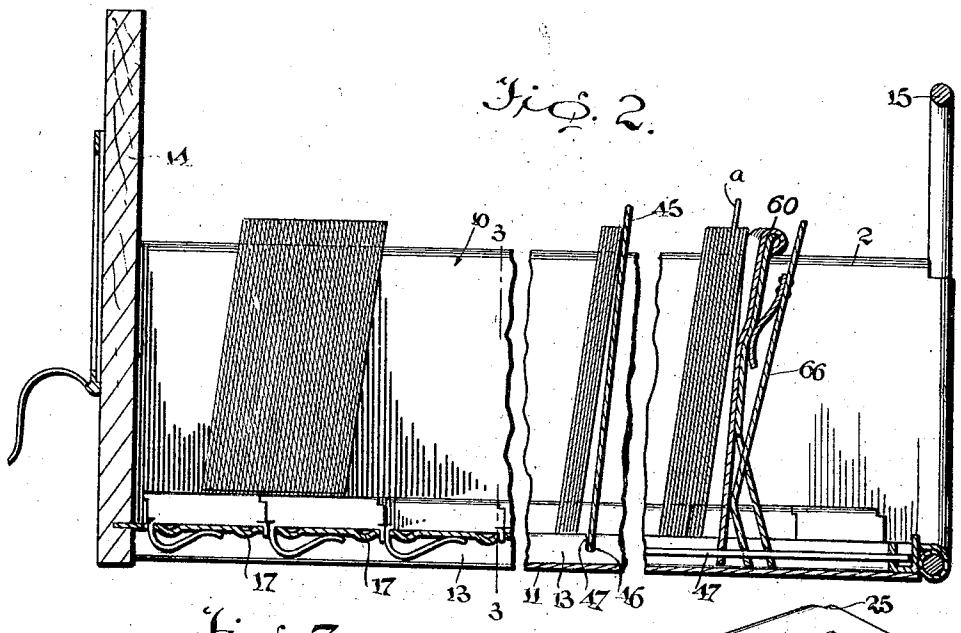
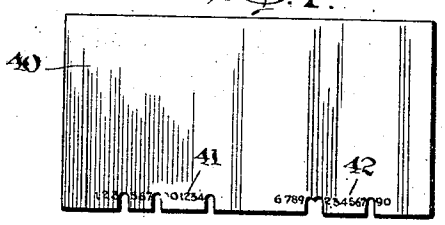


Fig. 7.



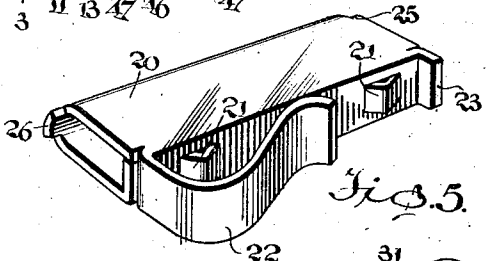


Fig. 5.

Fig. 8.

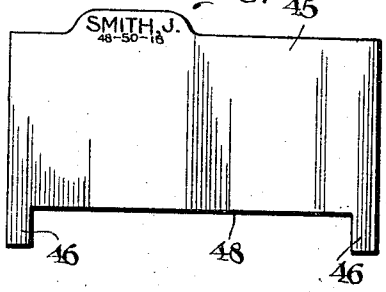
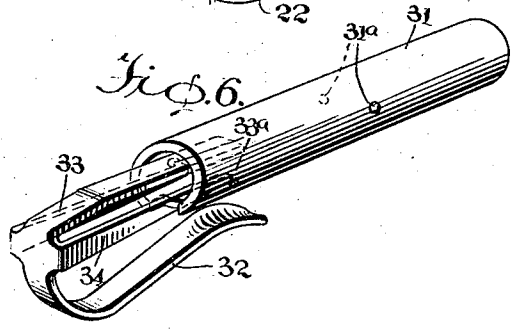


Fig. 6.



WITNESSES

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FILING SYSTEM

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Fig. 4.

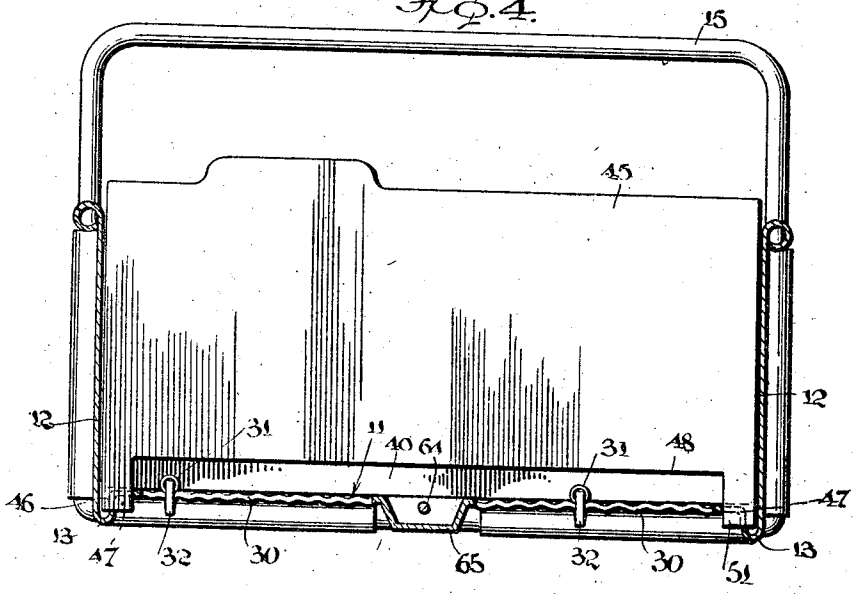
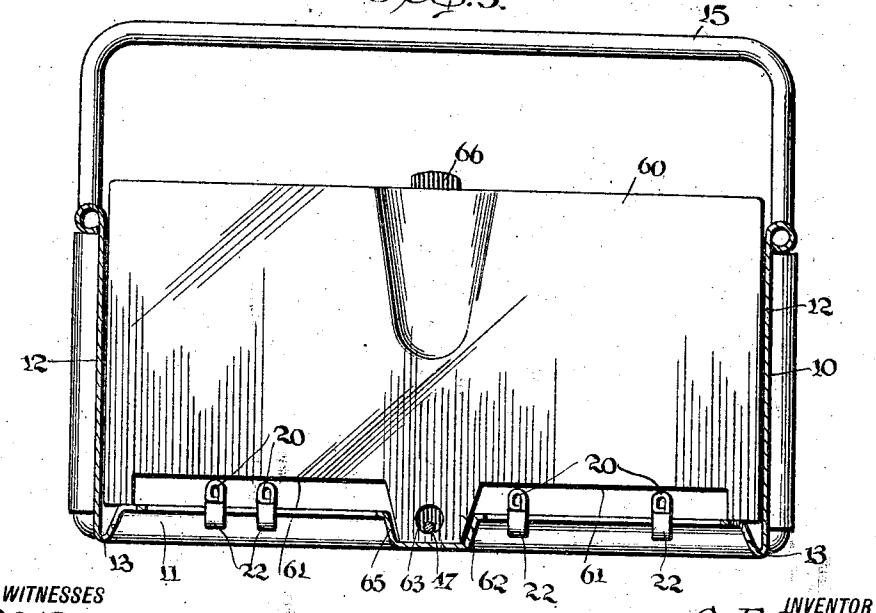


Fig. 3.



WITNESSES

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Patented July 15, 1924. 1,501,439

UNITED STATES PATENT OFFICE.

COLEMAN F. COOK, OF CINCINNATI, OHIO.

FILING SYSTEM.

Application filed April 14, 1923. Serial No. 632,122.

To all whom it may concern:

Be it known that I, COLEMAN F. COOK, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Filing Systems, of which the following is a specification.

This invention relates in general to filing systems, and more particularly to card index systems.

The object of the invention is to provide a card index system or the like in which provision is made for insuring correct classification or positioning of the cards or files, the file containers and the cards having cooperating means for preventing proper positioning of the cards in any except their correct classification.

A further object is to provide a device of this character which is of simple and durable construction and which at the same time has adequate capacity and range to adapt itself to almost universal use.

Accordingly, my invention consists, in its broader aspects, of a file container having upon one or more of its walls or parts and preferably upon its bottom wall a plurality of adjustable obstructions arranged in groups and each group constituting a division or classification for the cards or files, the cards or files of each classification or division having notches disposed to accommodate the obstructions of its own particular classification so that proper positioning of a file or card in the container or drawer is precluded except when such card is placed in its own proper classification or division, the misplaced cards being thus caused to project or protrude so as to at once attract the attention of persons using the system.

Other objects and advantages of the invention reside in certain novel features of the construction, combination and arrangement of parts which will be hereinafter more fully described and particularly pointed out in the appended claims, reference being had to the accompanying drawings forming part of this specification, and in which:

Figure 1 is a perspective view, showing a drawer or container constructed in accordance with the present invention, a portion of one of the side walls and a portion of the bottom wall of the container being broken away for the sake of illustration;

Figure 2 is a fragmentary view in longitudinal vertical section of the drawer or container shown in Figure 1;

Figure 3 is a similar view in transverse vertical section, taken approximately on line 3—3 of Figure 2, no cards being shown in the container;

Figure 4 is a view similar to Figure 3, showing a slightly modified form of the invention;

Figure 5 is a detail view in perspective, showing the obstructions utilized in the form of the invention illustrated in Figures 1 and 2;

Figure 6 is a similar view of the obstruction utilized with the form of the invention shown in Figure 4;

Figure 7 is a view in elevation, showing a card notched in accordance with the present invention; and

Figure 8 is a similar view of an index or guide card.

Referring to the drawings it will be seen that the invention in all of its embodiments comprises a box or drawer-like structure 10 having in addition to the features which constitute the present invention the characteristics of the conventional file box or drawer. Preferably the file container thus constituted includes a bottom wall 11 and side walls 12 integral with the bottom wall, the bottom wall being offset upwardly from the lower ends of the side walls to provide runners or shoes 13. At its forward end the box is provided with a front wall 14 and at its rear end the box is completed by a frame 15 or by a rear wall if desired.

The bottom wall 11 of the box is formed with a plurality of pairs of transversely extending slots 16, the pairs of slots 16 being spaced longitudinally along the bottom of the drawer, and the members of each pair of slots 16 being transversely spaced from each other and from the sides of the box and transversely alined as shown in the drawings. Along the side edges of each slot 16 series of indentations or depressions 17 are provided. These indentations or depressions 17 constitute seats, as will presently appear. In lieu of indentations the bottom wall may be perforated, although indentations are preferred. As stated a series of such indentations occurs on each side of each slot 13 and this is true except for the slots of the front pair of the drawer and

the slots of the rear pair. As to the front slots it is only necessary to have a series of indentations along the rear marginal edges thereof, as shown in Figure 2 whereas in respect to the rear slots 16 it is only necessary to have indentations along the front edges of such slots.

Obstructions are arranged on the bottom 11 of the container and coact with the slots 16 and with the depression 17 thereof. These obstructions may take the form shown in detail in Figure 5 in which event they are preferably constituted of a single piece of sheet metal folded or shaped to form a hollow bar or body portion 20 made up of parallel side walls, a curved top wall and a base consisting of overlapping plate like sections, one such section being integrally formed with each side wall. The lower or under section of the base has pressed therefrom lugs 21 engageable with the indentations 17. At the forward end of the under section of the base of each obstruction 20 a spring clip 22 is provided and extends rearwardly and under the base of the bar 20, the clip 22 being bowed inwardly or upwardly to resiliently press against or engage the base. At the rear end of the under section of the base of each bar 20, that is at the end thereof opposite to the arm 22, a shoulder 23 is integrally formed. When the obstructions 20 are assembled with the file box or container the spring arms 22 are entered through certain of the slots 16 so as to underlie the bottom of the box, the shoulders 23 being entered through other of the slots 16 while the lugs 21 are engaged with the depressions 17. It is of course understood that the slots 16 are sufficiently wide and the clips or arms 22 are sufficiently resilient to permit of assembly. As indicated the length of each obstruction is of an extent equal to the longitudinal distance between adjacent pairs of slots 16 so that each obstruction extends from a member of one such pair of slots to a member of the adjacent pair. In this manner the distance between the pairs of slots 16 may constitute a division or space in the box for the reception of any single group or classification of cards but at the same time more than one such space may be utilized to accommodate the cards of a single group of classification and in such event the obstructions of the several spaces are of course alined. In order to provide for continuous obstructions in such event the body portion of each obstruction is recessed at one end, as at 25, and is provided with a tongue 26 at its opposite end so that in the assembly the tongue of one body portion or bar is received in the recess of the adjacent one. While it is preferred to use obstructions having recesses 25 and tongues 26 obviously the obstructions may be made without tongues 26 or recesses 25 if desired.

In Figures 4 and 6 there is shown a slightly modified arrangement. This modified arrangement is in all respects identical with that shown in the other figures of the drawings except as to the design of the obstruction and that in lieu of forming the series of depressions or apertures 17 in the bottom of the box it is corrugated longitudinally between the slots 16 as indicated at 30 in Figure 4, these corrugations having substantially the same function as the depressions in the other embodiment of the invention. The obstruction shown in Figure 6 and used with the arrangement of Figure 4 includes a tube 31 of metallic construction which corresponds to the hollow bar 20 of the other embodiment of the invention and which is seated in any one of the series of corrugations which extend between the slots with which it is employed. Moreover, with the construction of Figure 7 a clip or spring arm designated as 32 is provided, but is separable rather than integral as in the other embodiment of the invention and is held in place by means of a plurality, preferably three spring fingers 33, integrally formed with the clip 32 and entered into one end of the tube 31, the fingers frictionally engaging the inner wall of the tube to hold the clip thereon. Preferably the side fingers 33 have bosses 33^a extending laterally from their inner extremities and adapted to engage the seats provided in the tube 31 by perforating the same, as at 31^a. Relative rotary movement is prevented by providing a notch 24 in the end of the tube 31 to receive the end of the arm 32. With either form of the invention the obstructions are set in the box in a predetermined manner with respect to location or arrangement, a manner which is variable through a wide range in view of the fact that a relatively large number of depressions 17 are provided in the form shown in Figure 1 and a relatively large number of corrugations are provided in the form shown in Figures 4 to 7, and since the obstructions 18 and 31 have as many transverse adjustments as there are depressions 17 or corrugations 30 respectively.

The cards employed with either embodiment of the invention are of identical construction and one such card is shown in Figure 9 and is designated at 40. The lower end of each card bears one or more and preferably two series of numbers, designated at 41 and 42, there being one series of numbers for each series of depressions or corrugations. By forming in the bottom edge of the card notches at the numbers coresponding to the set or arrangement of the obstructions with which the card is to be used, the card will be designed to accommodate the obstructions of its division or classification. But should the card be im-

properly placed the notches of the card cannot accommodate the obstructions since they are not so located as to receive the obstructions and the card will be caused to protrude or project above the others. For instance at the right side of Figure 2 there is shown one card designated at *a* extending above the rest, and this is shown to illustrate what occurs when a card is misplaced, and in such event there are not the proper notches in the lower end of the card to accommodate the obstructions 18 and consequently the card cannot be properly placed but will be so disposed as to at once attract the attention and thus ordinarily provide for or result in the correct placing of the card. The notches may be formed in the lower end of the card in any approved manner and may be punched therein by an adaptation of the conventional punch.

Guide or index cards, indicated at 45 are provided between each group or classification and may be constructed as shown in Figure 10 having at each end of their lower side depending legs 46 the legs being received in the slots 47 provided in the runners or shoes 13 opposite each slot 16, and positioning the lower edge of the card designated at 48 above or over the obstructions as shown in Figure 3.

Preferably a locking slide block designated at 60 is provided and is of conventional construction except that it is cut away, as at 61, in order to permit it to ride over the obstructions. This locking slide includes a depending lug 62 apertured, as at 63, for receiving a lock rod 64, the bottom of the box being provided with a central and longitudinally extending enlarged channel 65 when the slide 60 is employed (see Figs. 2 and 4) to accommodate the lock rod and lug 62. Finger-operated means for releasably securing the slide 60 in adjusted position on the lock rod is shown at 66 in Figures 2 and 3. In this arrangement there is nothing to prevent the use of locking rings on the bases of the cards and guides to prevent removal of the cards where such systems are used.

It is obvious that the depressions or apertures 17 in the form of the invention shown in Figures 1, 2 and 3 and the corrugations 30 in the form of the invention shown in Figure 4 constitute pockets cooperable with their respective constructions for carrying out or providing for the transverse adjustment of such obstruction.

With this arrangement as many divisions and classifications of cards and obstructions can be placed in the box as may be desired, the number of classifications being limited of course by the capacity of the box and being increased or diminished by increasing or diminishing the obstructions in the manner hereinabove described. Should a temporary subdivision or subclass of any particular division or classification be desired ordinary guide cards of less height than the regular cards by the height of the obstructions can be inserted between the regular guides and will rest on the obstructions. When such an expedient is resorted to there is of course the danger that cards may be misplaced within the main classification but of course they cannot be properly placed in the container out of the main classification. With this arrangement should any one filing a card away misplace the same out of the main classification and fail to notice it, it will still be caused to protrude or project and thus attract the attention of persons who subsequently use the system.

I claim:

1. In a card index system, a card container having a bottom wall provided with a plurality of pairs of transversely extending slots, the pairs of slots being spaced longitudinally and the members of each pair of slots being transversely spaced from each other and from the sides of the box and being transversely alined, a series of pockets along each side of each slot and obstructions having releasable locking means comprising a gripping arm extending through the slot and engaging the under side of the bottom, the obstructions being selectively engaged with any one of the pockets, in combination with a card having notches corresponding to the obstructions.

2. In a card index system, a card container having a bottom wall provided with a plurality of pairs of transversely extending slots, the pairs of slots being spaced longitudinally and the members of each pair of slots being transversely spaced from each other and from the sides of the box and being transversely alined, a series of pockets along each side of each slot and obstructions having releasable locking means comprising a gripping arm adapted to extend through one of the slots and to engage the under side of the bottom, the obstructions having projecting lugs adapted to be selectively engaged with any one of the pockets, the obstructions also having a shoulder adapted to be received in the next adjacent transverse slot, in combination with a card having notches corresponding to the obstructions.

3. In a card index system, a card container having a bottom wall provided with a plurality of pairs of transversely extending slots, the pairs of slots being spaced longitudinally and the members of each pair of slots being transversely spaced from each other and from the sides of the box and being transversely alined, a series of pockets along each side of each slot and obstructions having releasable locking means comprising a gripping arm adapted to extend through one of the slots and to engage the

under side of the bottom, the obstructions being selectively engageable with any one of the pockets, said bottom being slotted outside of and in line with the members of each pair of slots so as to provide for the support of a division card, in combination with a card having notches corresponding to the obstructions and a guide card having legs adapted to be received in the slots.

4. In a card index system, a card container having a bottom provided with transversely extending slots, obstructions having spring arms extending through the slots and engaging the container for holding the obstructions in adjusted position, cards adapted to be positioned in the container and having notches for accommodating the obstructions, the obstructions being arranged in groups and the notches of each card being adapted to accommodate the obstructions of its group only, guide cards having depending legs at their sides, the container having slots adapted to receive said legs, the guide cards between the legs being cut away whereby the bottom edge of the guide cards clear the tops of the obstructions.

5. In a card index system, a card container having a bottom provided with transversely extending slots, obstructions having spring arms extending through the slots and engaging the container for holding the obstructions in adjusted position, cards adapted to be positioned in the container and having notches for accommodating the obstructions, the obstructions being arranged in groups and the notches of each card being adapted to accommodate the obstructions of its group only, guide cards having depending legs at their sides, the container having slots adapted to receive said legs, the guide cards between the legs being cut away whereby the bottom edge of the guide cards clear the tops of the obstructions, in combination with a lock rod, and a channel connected to the container and accommodating the lock rod, and a slide block cooperable with the lock rod.

6. In a card index system, a card container having a bottom provided with transversely extending slots, obstructions having spring arms extending through the slots and engaging the container for holding the obstructions in adjusted position, cards adapted to be positioned in the container and having notches for accommodating the obstructions, the obstructions being arranged in groups and the notches of each card being adapted to accommodate the obstructions of its group only, guide cards having their bottom edges arranged above the tops of the obstructions, and a slide block recessed at its lower edge to ride over the obstructions.

COLEMAN F. COOK.