This invention relates to a device for sorting business documents such as checks, purchase orders, invoices, letters and the like.

The principal object of the present invention is to provide a device which may be of simple and inexpensive construction and readily and easily handled by office workers, for facilitating the sorting of business documents according to number, letter of the alphabet or other classifying indica.

Another object of the present invention is to provide a device of the character set forth in the preceding object which comprises a plurality of types of classifying indica adapted to be used selectively by an office worker as desired and as dictated by the type of documents to be sorted.

Other and further objects and advantages of the present invention will become apparent as this description progresses, reference being had to the accompanying drawings, in which:

FIG. 1 is a top plan view of a sorting device comprising a preferred embodiment of my invention with a portion of the cover broken away to facilitate illustration thereof;

FIG. 2 is an enlarged, side elevational view of the sorting device shown in FIG. 1 with the central portion thereof being broken away;

FIG. 3 is an irregular, vertical sectional view taken on the line III—III in FIG. 1, looking in the direction of the arrows and being somewhat diagrammatical;

FIG. 4 is an expanded side view of portions of one group of dividing sheets, the classification tabs of which are arranged in alignment in one transverse tier and the plurality of tiers being shown in FIGS. 1 and 2;

FIG. 5 is a perspective view of the top dividing sheet of the sorting device as shown in FIG. 1; and

FIG. 6 is a perspective view of the bottom dividing sheet of the sorting device as shown in FIG. 1.

The sorting device shown in the drawings comprises a flat, elongated base plate 10 of rectangular shape which may be formed of metal, wood or plastic. Where the base plate 10 is composed of clear transparent plastic, it affords the advantage of permitting an office worker to see therethrough to determine if the lower portion of the device has been cleared of sorted documents. A pair of spaced and aligned posts 11 having integrally formed annular flanges 12 on the bases thereof project upwardly through vertical apertures 13 extending through the plate 10 at points located adjacent the side edges thereof and between the center and one of the ends thereof. Each post 11 is provided with a screw-threaded head 14 which serves to retain the elements to be described hereinafter mounted on the posts between the heads and the plate 10.

A plurality of dividing sheets 16 which in the embodiment shown in the drawings total one hundred and which are provided with classification tabs 17 numbered on the top surfaces from one to one hundred, are mounted in superimposed relation on the posts 11 which serve as sheet supporting and positioning members. The sheets 16 are somewhat narrower than the width of the base plate 10 and their length is considerably shorter. The one hundred sheets, which may vary in number and arrangement from embodiment to embodiment of the present invention, are arranged in groups of ten sheets each, portions of the sheets being shown in their entire number in FIG. 3 and the groups being shown diagrammatically as thick individual units indicated by reference numerals 18 to 27, inclusive, in FIG. 2.

Each sheet 16 is of substantially the same length and is provided with pairs of aligned holes 28 adjacent to but inwardly spaced from the side edges thereof. The holes 28 of one pair are longitudinally spaced from the holes 28 of the other pair to an extent which is the same for the sheets 16 of the same group but as between the groups 18 to 27, inclusive, of the sheets 16 of the spaccings of the side pairs of holes 28 varies for purposes to be presently explained. As shown in FIGS. 1 and 2, the pairs of holes 28 of the top group 18 of sheets 16 are spaced farther apart than the pairs of holes 28 of the next group 19 of sheets next below, and the pairs of holes 28 of the next lower sheet groups 20, 21, 22 and 23 become progressively closer together, the right-hand hole of each pair being punched further away from the right or rearward end of the sorting device. Thus, as arranged in FIGS. 1 and 2, the top sheet groups 18 to 23, inclusive, are secured on the plate 10 by having the binding posts 11 extending upwardly through the left or forward holes 28 of each side pair.

As further seen in FIGS. 1 and 2, the free or unoccupied holes 28 of each pair of holes of the lower sheet groups 24, 25, 26 and 27 are located on the left or forward side of the posts 11 and this longitudinal spacing of the respective pairs of holes becomes progressively greater from the sheet group 24 down through the sheet group 27. This variation in the longitudinal spacing of the side pairs of holes 28 of the groups 18 to 27, inclusive, of sheets permits the groups to be turned over and reversed in position so that the top group 18 may be disposed on the posts 11 in a manner similar to the bottom group 27, the posts 11 being inserted in the other holes 28 of the respective pairs.

The tabs 17 of each group of ten sheets are arranged in transverse rows or tiers in staggered or non-overlapping relation, the tab 17 of the top sheet 16 of group 18 as viewed in FIG. 1 bearing the number 1 and the numbers on the tabs increasing progressively going down through the stack of sheets, the tab 17 of the lowermost sheet of group 27 bearing the number 100. Tab 17 bearing the number 1 is located at the forward lower corner edge of top sheet 16 while the tab 17 bearing the number 100 is located at the forward top corner edge of the lowermost sheet 16, as viewed in FIG. 1. The lowermost sheet group 27 extends forwardly or to the left to a greater extent than the sheets 16 in the top group 18, and the tabs 17 affixed to the end edges thereof will be exposed and each succeeding sheet group 26 to 18, inclusive, is disposed farther to the right so as to expose the transverse tiers of tabs of the sheet groups positioned below.

For the purposes of appearance and neatness, the sorting device may be provided with a flexible cover 29 of substantially the same size and shape as the base plate 10 and being mounted on the posts 11.

Where the device of the present invention is being used to sort checks, purchase orders, invoices or the like in numerical groups according to the numbers contained on the documents, the documents being sorted may be inserted under the respective sheets 16 bearing the tab number relating to that carried on the respective documents. As the number of documents increases between the respective dividing sheets 16, the sheets 16 will be forced farther apart with the result that the sheets 16 will move upwardly on the posts 11 to accommodate the stack of documents. The posts are of substantially greater height than the combined thickness of the dividing sheets 16 and the cover 29. When the documents have been inserted according to number, they are removed in the sorted groups and thereafter may be posted or put through other
bookkeeping operations. Because the sheets 16 are transparent, the bookkeeper using the sorting device may rapidly determine whether all the sorted documents have been cleared and removed.

To permit the sorting device to be used to sort documents alphabetically rather than numerically, the tabs 17 are provided on their other or under surfaces with letters of the alphabet or combinations of letters of the alphabet running, for example, from Aa to Z. The tab 17 of the top sheet 16 as viewed in Fig. 1 bears the numeral 1 on one side and the letter Z on the other whereas the tab 17 of the bottom sheet bears the numeral 100 on the top side and the letters Aa on the bottom, all as shown in Figs. 5 and 6 of the drawings.

To reverse the sorting sheets 16 for use of the alphabetical tab classification, the heads 14 may be unscrewed from the tops of the posts 11 and the cover 29 and the groups 18 to 27, inclusive, of sheets 16 lifted upwardly off the posts, the sheets being maintained in their respective groups. Then, group 18 of sheets 16 may be turned over and remounted on the posts 11 but with the posts 11 extending through the right-hand holes 28 which are closer to the right end of the sheets than are the left-hand tabs 28. Thus, the group 18 of sheets will be caused to extend further to the left in a manner similar to group 27 when the latter was on the bottom as shown in Figs. 1 and 2. Similarly, groups 19, 20, 21, 22 and 23 of sheets 16 are also turned over as separate groups and remounted on the posts 11 by inserting the posts also in the right-hand holes of these groups so that they also will project more to the left than before.

However, upon turning over the groups 24, 25, 26 and 27 of dividing sheets 16, these groups will be remounted on the posts 11 by inserting the post 11 in the left-hand holes in these groups 24, 25, 26 and 27 thus causing these groups to extend more to the right than before. When the sheet groups 18 to 27, inclusive, have been so reversed and remounted as above described, the group 27 will be on the top and the group 18 on the bottom and the tabs 17 showing the letters of the alphabet in various classifications will be exposed in tiers. The tab 17 bearing the numeral 100 on one side and the letters Aa on the other will now occupy the former position once occupied by the tab 17 bearing the numeral 1 and the letter Z, as viewed in Fig. 1, and the tabs on the sheets therebelow will progress through the letters of the alphabet to Z. Similarly, the tab 1 with the letter Z on the reverse side will occupy the position formerly occupied by the tab 17 bearing the number 100.

The cover 29 may then be replaced over the reversed sheets 16 and the retaining heads 14 screwed down into the posts into retaining position. The use of the sorting device with the alphabetical indicia of the tabs exposed is then the same as previously described with respect to sorting according to numbers.

Although I have shown in the drawings and described above a preferred embodiment of my invention, it is to be understood that changes in the details of construction and mode of operation may be resorted to without departing from the spirit and scope of the appended claim.

I claim:

A device for sorting documents and the like comprising a base plate, sheet supporting and positioning members comprising upright posts carried by said base plate at the marginal edges thereof respectively and extending upwardly in spaced relation from the upper surface thereof, a plurality of dividing sheets arranged in superimposed relation on said sheet supporting and positioning members and adapted to be raised one from the other to permit the insertion therebetweeen of documents being sorted, and tab means secured on one of the end edges of each of said sheets in staggered relation from the tab means of the other sheets and having classifying indicia on each side thereof, each of said sheets being provided with longitudinally spaced pairs of means adjacent the marginal edges thereof respectively for engaging selectively said sheet supporting and positioning members, one pair of said sheet engaging means permitting the respective sheets to be positioned on said supporting members for a length of extension therefrom and the other pair of said sheet engaging means permitting the respective sheets to be positioned on said supporting members for a different length of extension therefrom whereby the sheets may be disengaged from the supporting members, inverted and re-engaged with said supporting members to expose selectively the other sides of said tab indicia, and the longitudinal spacing of said pairs of engaging means along the marginal edges of the sheets differing as between said respective dividing sheets in a manner such that respective sheets may be mounted on said supporting members in superimposed relation with the tabs on the marginal end edges of the sheets being exposed.

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