

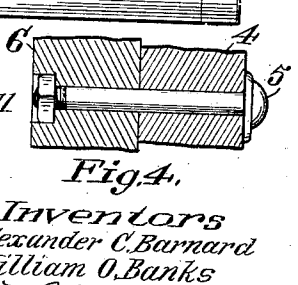
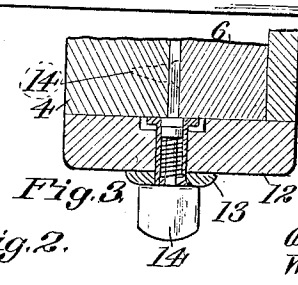
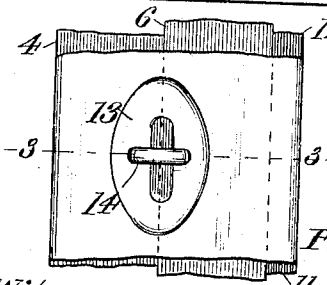
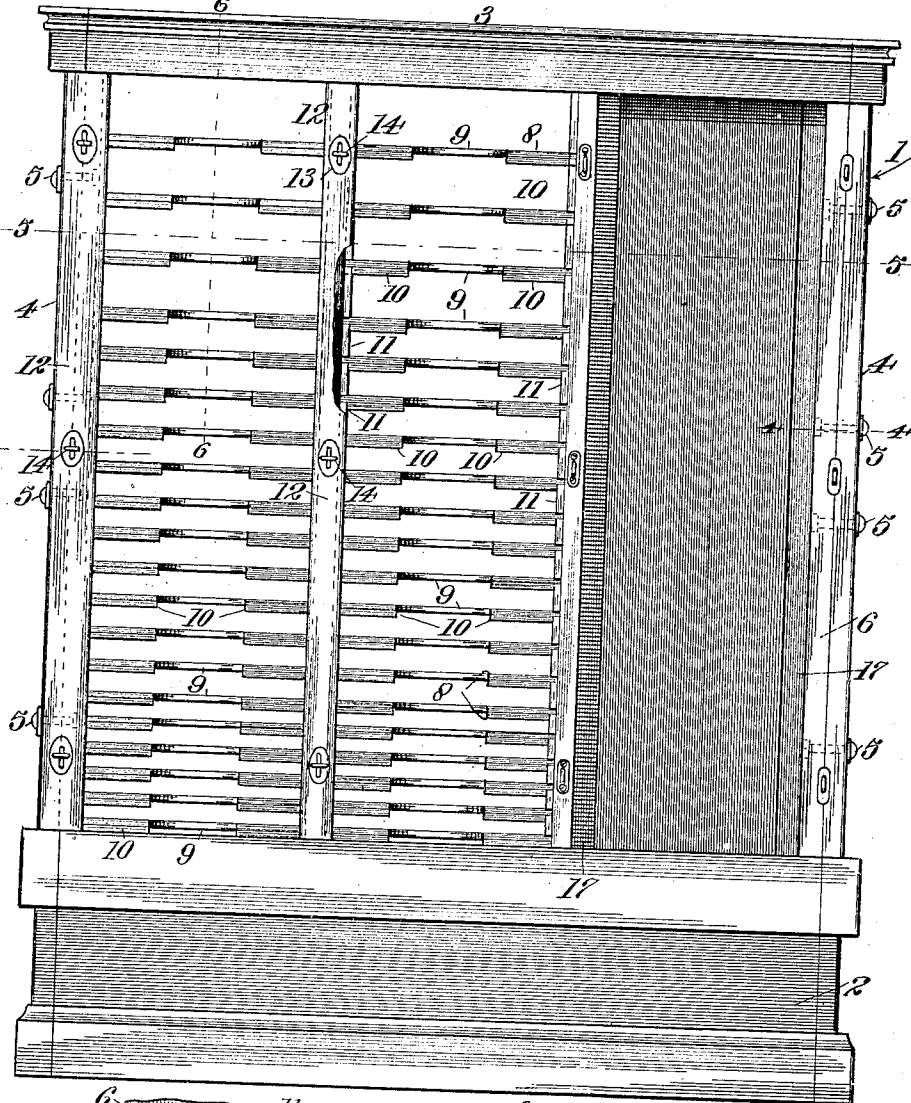
A. C. BARNARD AND W. O. BANKS.
FILING DEVICE.

APPLICATION FILED APR. 6, 1920.

1,375,650.

Patented Apr. 19, 1921.
2 SHEETS—SHEET 1.

Fig. 1.



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2 SHEETS—SHEET 2.

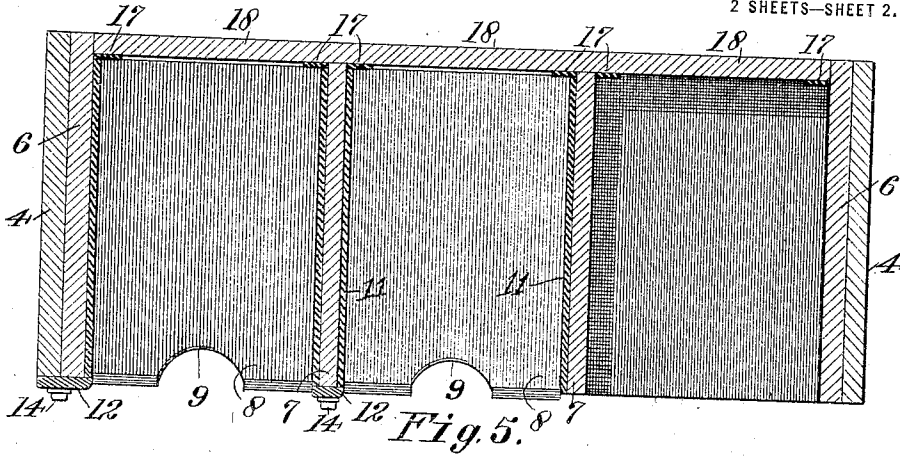


Fig. 5.

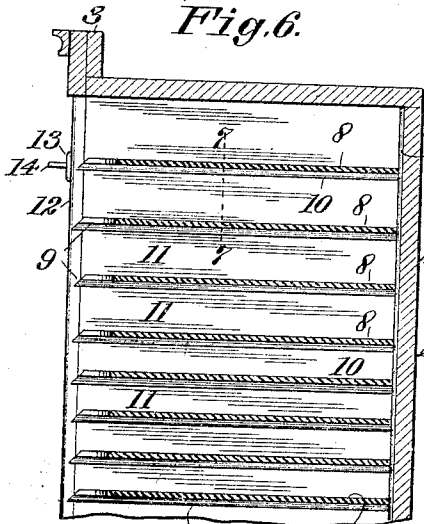


Fig. 6.

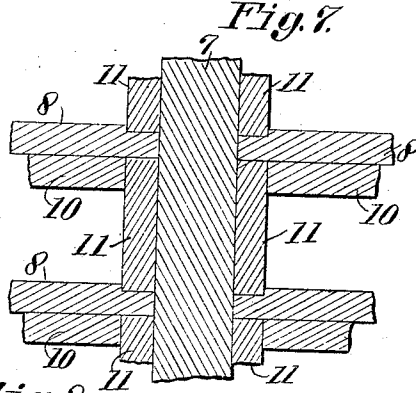


Fig. 7.

Fig. 8.

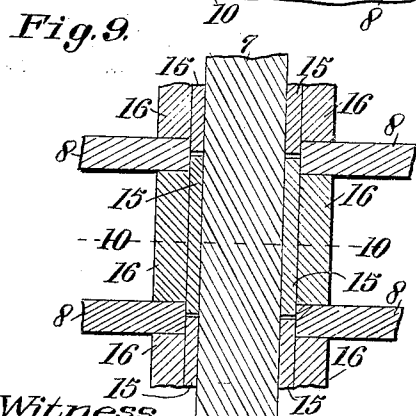


Fig. 9.

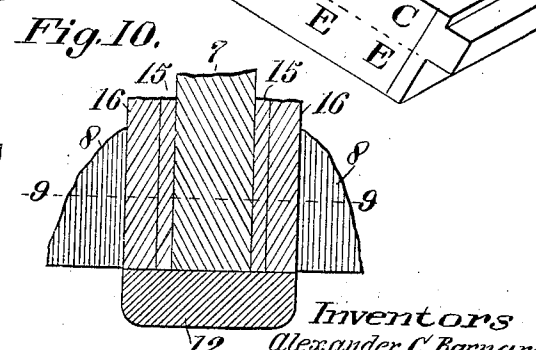
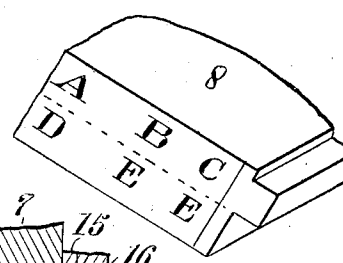


Fig. 10.



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UNITED STATES PATENT OFFICE.

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FILING DEVICE.

1,375,650.

Specification of Letters Patent.

Patented Apr. 19, 1921.

Application filed April 6, 1920. Serial No. 371,630.

To all whom it may concern:

Be it known that we, ALEXANDER C. BARNARD and WILLIAM O. BANKS, citizens of the United States, residing at Oakland, in the county of Alameda and State of California, have invented a new and useful Filing Device, of which the following is a specification.

The present invention relates primarily to filing devices and the like which are generally used in office equipments and has reference more particularly to an improved device for conveniently filing documents or data such as railroad and steamship freight or passenger tariff publications.

In office work in handling constantly changeable data and documents, the necessity for providing a convenient filing, transfer, or the like device is of utmost importance. For instance, in the case of tariffs, the new data which is coming in and which must be either added to or exchanged for the data already on file, requires considerable handling and a selectively or collectively handling of the filed matter.

There has been various arrangements provided with attempts to reduce the time and labor required to handle filing systems, but these equipments have fallen short of a practical solution of the problems involved. Simplicity is an important feature in any filing or transfer system. Then, again, not only must the system involve a simple arrangement, but the cost of manufacturing and the sale for which the equipment is offered to the trade must be taken into consideration.

According to the salient features of our invention, we have not only taken into consideration a simplified manner of manipulation and coöperative relationship of parts, but the invention also offers an equipment which can be manufactured at a comparatively modest cost and likewise sold to the trade far cheaper than other known devices.

For the purpose of illustration, we have shown on the accompanying drawings two examples of reducing the invention to practice.

In these illustrative embodiments:

Figure 1 is a front elevation of the so-called cabinet illustrating the application of the invention;

Fig. 2 is a detailed view of the preferred

means for holding or confining the shelves in the device;

Fig. 3 is a sectional view on the line 3—3 Fig. 2;

Fig. 4 is a sectional view on the line 4—4 Fig. 1;

Fig. 5 is a sectional view on the line 5—5 Fig. 1;

Fig. 6 is a sectional view on the line 6—6 Fig. 1;

Fig. 7 is a sectional view on the line 7—7 Fig. 6;

Fig. 8 is a detailed perspective view of one form of shelf;

Fig. 9 is a sectional view on the line 9—9 Fig. 10; and

Fig. 10 is a sectional view on the line 10—10 Fig. 9.

For convenience, the terms "cabinet" and "shelves" will be employed throughout the following detailed description and the subjoined claims. However, these terms are used merely for the purpose of convenience and the same should be interpreted to include any other convenient structure.

In carrying out the invention, it is proposed to employ a knock down or sectional cabinet, such as 1 having a suitable supporting base, such as 2, and a crown or capping, such as 3. In order that the cabinet may be added to, the side panels 4 are removable by releasing the bolts 5 which secure the same to the side pieces 6 of the cabinet. The cabinet may be arranged with any desirable number or series of compartments by employing vertical or horizontal partitions. As shown, the same is divided by means of vertical partitions 7.

Arranged in each one of the series of compartments are a plurality of slidably movable shelves 8, each of which preferably embodying in its structure, particularly so far as concerns the construction shown in Figs. 7 and 8, a relatively thin piece of material having a recessed, or cut-away portion, such as at 9, and with its edge on both sides of the recessed portion beveled off. Strips 10 are arranged along the bottom sides of the shelves, and terminating at their front end also in a beveled edge, with the bevel thereof corresponding to the bevel of the front edge of the shelf to accommodate the recessed portion 9 as an index space. Re-

ferring to the strips 10, it is to be noted that they are secured to the under side of the shelf in a manner to leave an overhang between them and the side edges of the shelf so as to provide a groove which together with the rabbetted out portion of the top side edge of the shelf will enable suitable spacing strips 11 to be introduced between the shelves for spacing and supporting the same in parallel relation within the compartments.

Again referring to the strips 10, it will be appreciated that aside from the above function which they are adapted to perform, they will also act as a reinforcing means for the shelves and prevent the same from warping, should the shelves be constructed of wood, and in the case of employing metal, as a material, these strips will add rigidity to the structure and prevent the same from bending or becoming otherwise impaired.

These shelves are adapted to be, as stated, slidably removable in each of the compartments, and they are in no way fixed or connected to the cabinet. However, to confine the shelves in a convenient manner in the compartments, detachable capping strips or the like 12 are made to cooperate with the sides and intermediate partitions of the cabinet, with their side marginal edges overlying and terminating flush with the spacing strips 11. As a convenient means of detachably fastening the capping strips it is proposed to employ gromets or the like 13 at spaced intervals in the height of the strip and with the openings therein made to receive the spring tongues 14 which are fixed to the partitions 7 and the ends of the cabinet so that they may be introduced through the openings in the gromets and turned transversely thereto as best shown in Fig. 3. In securing the spring tongues to the partitions, screws or the like may be provided as is customary in a device of this kind. However, inasmuch as these spring tongues will be fastened to the ends of the cabinet between the removable panels 4 and the up-rights 6, it will be necessary to employ a dowel which will be introduced between the said panel and up-right with the screws of the base portion of the tongues embedded therein.

These dowels may be maintained in fixed position by screws or the like 14'. See Fig. 3.

As another manner of constructing the shelves 8 attention is invited to Fig. 9. In this form, instead of rabbetting the edge on the top of the shelf and using the strip 10, it is proposed to employ instead of the spacing strips 11, a composite strip such as 15 with a second strip, such as 16 of a height less than that of the strip 15 and fixed thereto so as to leave an overhang at the top and bottom of the strip 16 and in this

way provide grooves which will be made to receive the shelf 8.

In this connection, when 2 of these composite strips are arranged one above the other, the space between the confronting edges of the strips 16 will be sufficient to accommodate the thickness of the shelf.

As heretofore stated, the shelves, when the capping strips 12 have been detached, are capable of a free sliding movement in their respective compartments. To reduce friction and in order that this sliding movement may be properly realized, tracks such as 17 are arranged vertically along the back 18 of the cabinet. These tracks may be nothing more than a strip and in this capacity they will act to space the back edge of the shelf from direct contact with the inner surface of the back 18 of the cabinet.

In order to realize the many changes of the arrangement, the spacing strips 11 are provided in different sizes or different heights so that any desirable spacing of the shelves may be realized. For instance, in some instances, it may be desirable to accommodate a greater thickness of documents between two of the intermediate ones of the shelves than that of the top or bottom shelves. Therefore, strips 11 of a greater height than others will be used in this particular instance.

The ease and simplicity by which any selective change of data may be resorted to, resides in the fact that the data in the shelves may be selectively changed without interfering with the classification of the whole system. There is no limit to the various ways which the idea can be utilized to conveniently take care of the proper classification and recording of documents as none of the shelves are restricted to a particular place in their respective compartments, nor is it necessary to use any particular spacing strip at a certain point. The space between the last two shelves in a section may be just as small as the spacing strip 11 is high, or by using a higher spacing strip, the space may be increased as desired. This same feature also applies to any one of the shelves.

It is to be noted, the shelves, when released by the confining means or rather the capping strips 12 are capable of a selective or collective withdrawal from or transfer in the cabinet without disturbing the data carried by the shelves.

The novel manner of arranging the index surface on the shelves will conveniently display the classification of the data. So long as the capping strips 12 are in place, the shelves will be collectively confined in their compartments and their position cannot become accidentally changed.

The whole equipment may be constructed either of wood or metal or of any other suit-

able material. In some instances, the salient feature may find expression in arranging the shelves so that they are made to slide sidewise instead of vertically. This would require necessitating a change in the position of the cabinet. For instance, if it were laid on its side, this result could be readily obtained.

To illustrate the ease and facility for making any desired rearrangement of filing space because of necessity for greater height between shelves, introduction of new shelves between other shelves already in use so as to preserve self-indexing numerical, alphabetical or other arrangement, the following concrete examples are offered, choosing for the sake of illustration, situations which present themselves in connection with the filing of railroad freight tariffs.

As a preface to these examples, we will assume that the tariffs are to be filed primarily in issuing railroad order, *i. e.* all of the tariffs issued by the "A" railroad will be filed in separate shelves in series one following the other; the tariffs of the "B" railroad will then follow and so on, the "C" railroad, "D" railroad, etc., in alphabetical progression. Further, a separate shelf will be utilized for each tariff and the index space provided on the shelf will bear the same reference number as appears on the tariff filed in the space immediately above such shelf, and the series of shelves for each railroad will be arranged in the cabinet in numerical progression. In this manner it is obvious that no further indexing is required and that any tariff can be readily referred to by locating the railroad concerned under alphabetical sequence and then the particular tariff in its proper place in numerical progression for such railroad.

Incidentally, as a matter of general information, it may be proper to state here that it is very often the case that but a few of the tariffs of certain railroads are maintained, the general tendency being to maintain on file only such tariffs as one may be particularly interested in, and it is this situation, together with the fact that tariffs are frequently supplemented and reissued with resultant difference in thickness that makes it imperative that an adjustable filing device be employed for facility in handling.

Example 1.

(a.) All filing spaces in the first two columns being in use and containing tariffs.

(b.) Tariffs Nos. 1, 3, 4, 5, etc. of railroads "A" on file.

(c.) Find it necessary to maintain tariff No. 2 on file also.

(d.) To accomplish change necessary in order to file tariff 2 between tariffs 1 and 3, already on file, all that will be necessary to effect the change will be to remove the

capping strips on the front of the cabinet and transfer the last shelf in second column over to third column; then move the last shelf in first column to the top of second column, and insert the new shelf between shelves indexed one and two at the top of first column.

(e.) In that the shelves are not in any way fastened to the cabinet while the capping strips are removed from the face thereof, it will be readily perceived that the shelves will slide upward or downward at will when any one or more shelves are removed, and without disturbing the spaces already allotted, or the tariffs which are filed in the spaces between.

(f.) In the operation described in paragraph (d) particular attention is attracted to the ease with which the change may be effected, as it was only necessary to actually remove but two shelves from the cabinet in effecting the rearrangement desired.

Example 2.

(a.) Assuming that the first two columns and a quarter of third column are in use and contain tariffs for railroad "A—C—D—E—F—" filed in order as indicated in preface above.

(b.) And assuming it becomes necessary to maintain certain tariffs of the "B" railroad that have not previously been carried in the file.

(c.) So as to conform with the self-indexing filing arrangement it becomes necessary to file the tariffs for railroad "B" between the series already in the file for railroads "A" and "C."

(d.) Assuming for this example that the tariffs of railroad "B" which are to be maintained comprise six publications of various sizes which will use up one-half of the space in first column and assuming that the tariffs already on file for railroad "A" use up the space remaining in that column.

(e.) The only operation necessary in effecting necessary change and readjustment of shelving will be (1st) to remove the capping strips from the face of the case, drop the shelves already in use in third column to the bottom of that column without removing from the case; (2nd) transfer one-half of the shelving complete with supporting and spacing strips (and without removing any of the publications filed therein), by two movements to upper portion of third column transferring five or six at a time; (3rd) similarly transfer one-half of the shelving complete from the lower half of first column to the upper half of second column; (4th) then insert the new shelving in its proper place with spacings suitable for the various sizes of publications to be filed, replace the capping strips on face of the cabinet and the operation is complete.

Example 3.

If it is found that the first space in first column should be larger so as to accommodate supplements which have been received to the publication on file in that space and at the same time it develops that the last space of that column is no longer required, the adjustment may be made by the simple operation of removing the bottom shelf which is no longer required and allowing the balance of the shelving to drop into place, thereby automatically providing the larger space required for the top shelf.

15 We claim:

1. A cabinet of the class described, including a plurality of slidably movable shelves, interchangeable spacing and supporting means extending throughout the length of said shelves and capable of selectively varying the area of the space between the shelves, and detachable means on the front of the cabinet for confining the shelves within the cabinet with an unobstructive access to the spaces between the shelves, said interchangeable spacing and supporting means comprising strips made to be received between two adjacent shelves, said shelves and their

spacing strips adapted to cooperate one with the other for spacing the shelves. 30

2. A cabinet having a series of compartments, slidably movable shelves in said compartments, interchangeable spacing and supporting strips between the shelves and extending throughout the length thereof for spacing and supporting the same one by another said strips capable of being selectively changed to realize a selective spacing of the shelves, and detachable means on the front of the cabinet adapted to cooperate with the shelves and the said strips for confining the same in the cabinet with an unobstructive access to the space between the shelves. 35 40

3. A device of the character described including a plurality of shelves, and means independent of, but adapted to cooperate with the shelves at each side for maintaining them in spaced order, and affording a collective introduction to or removal from the cabinet as a composite unit, any two or more of the shelves with their spacing means, together with the filed contents of the spaces there between held intact. 45 50

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