March 14, 1961 J. H. HUMPHREY 2,974,803

FILING SYSTEMS AND CONSTRUCTIONS THEREFOR

Original Filed Jan. 28, 1954 2 Sheets-Sheet 1

Fig. 1.

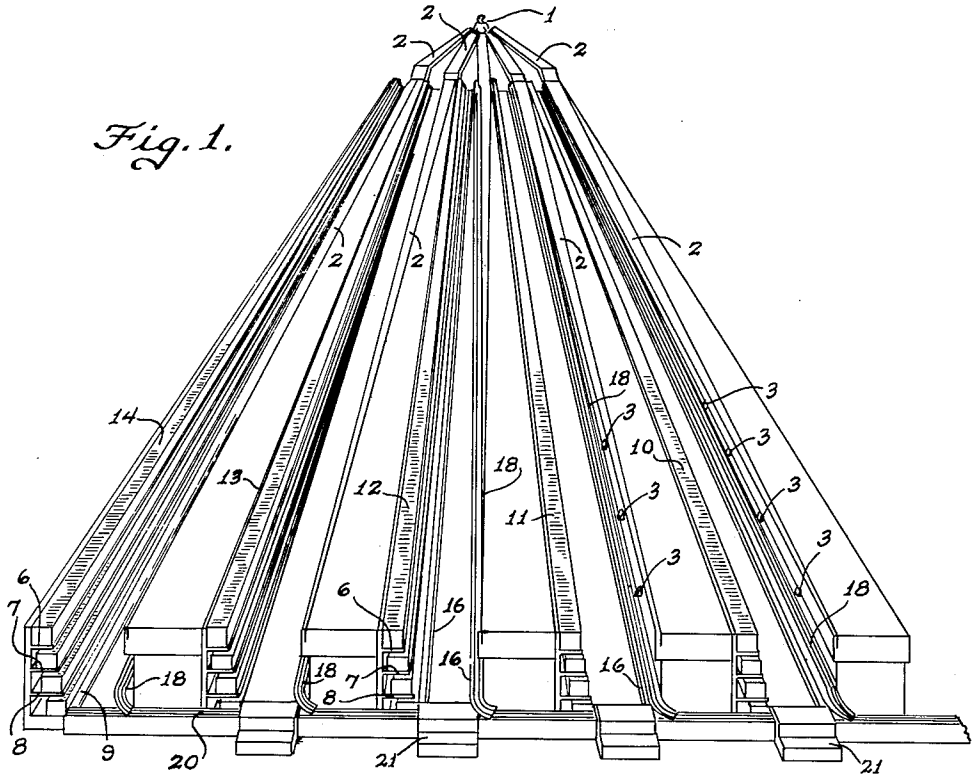
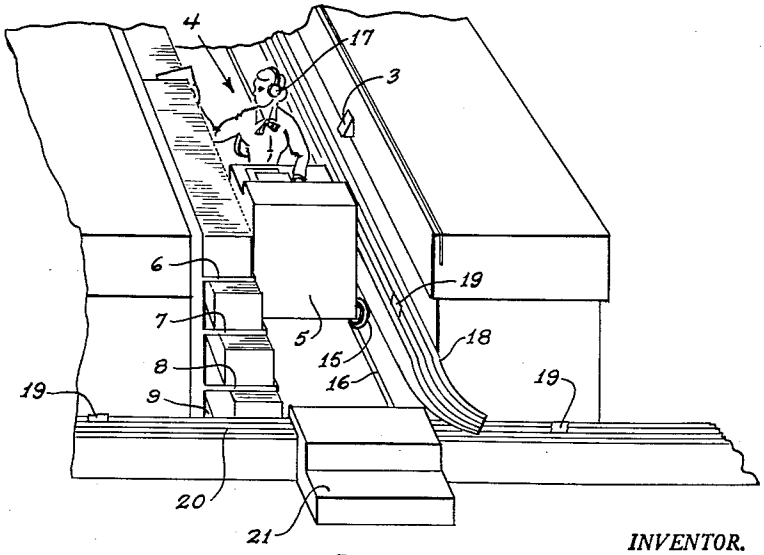


Fig. 2.



INVENTOR.
JOHN H. HUMPHREY
BY
Albert M. Parker
ATTORNEY.

March 14, 1961 J. H. HUMPHREY 2,974,803

FILING SYSTEMS AND CONSTRUCTIONS THEREFOR

Original Filed Jan. 28, 1954 2 Sheets-Sheet 2

Fig. 3.

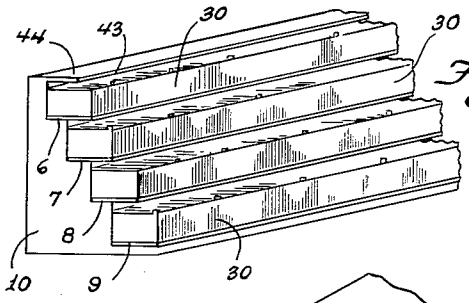


Fig. 6.

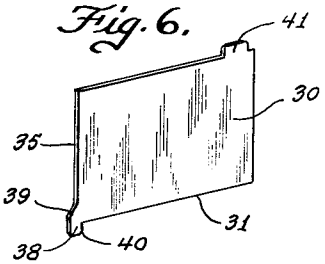


Fig. 4.

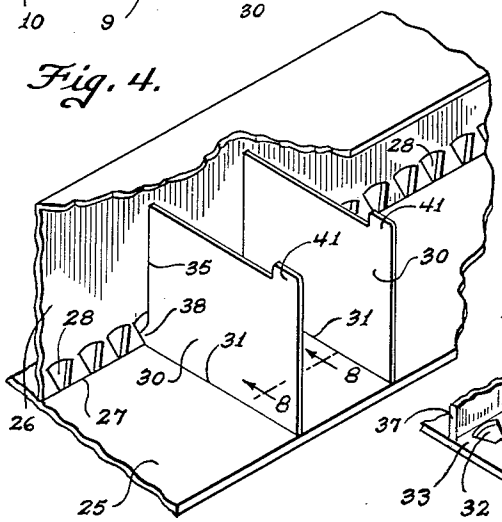


Fig. 5.

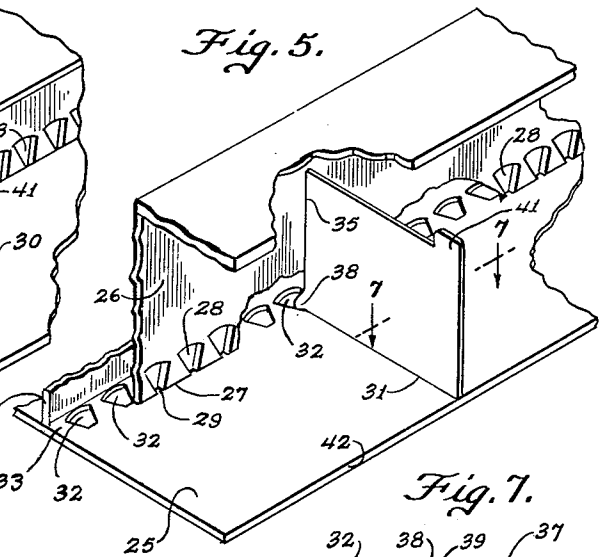


Fig. 9.

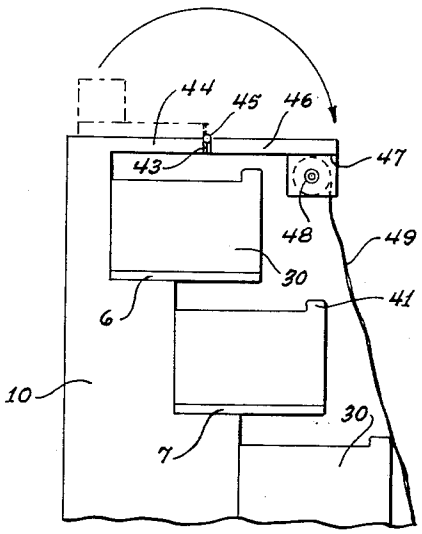


Fig. 7.

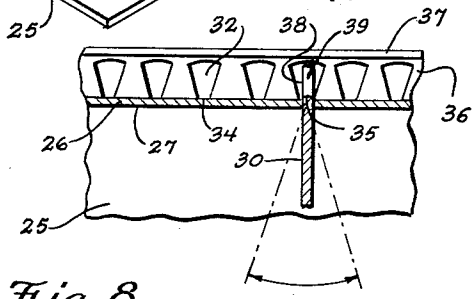
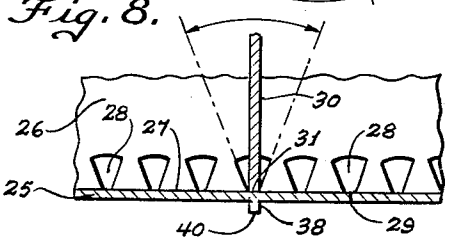


Fig. 8.



INVENTOR.

JOHN H. HUMPHREY

BY

Albert M. Parker

ATTORNEY.

United States Patent Office 2,974,803 Patented Mar. 14, 1961

2,974,803

FILING SYSTEMS AND CONSTRUCTIONS THEREFOR

John H. Humphrey, Cucamonga, Calif.
(7521 Piper Lane, Los Angeles 45, Calif.)

Continuation of application Ser. No. 406,843, Jan. 28, 1954. This application Feb. 25, 1958, Ser. No. 722,602

14 Claims. (Cl. 211—10)

This invention relates to filing systems and constructions therefor and is more particularly concerned with the filing of papers and documents on shelves.

In large business organizations, a tremendous amount of space is consumed and expensive equipment is employed in the filing of papers and other documents. Commonly, the filing is done in deep drawers of metal filing cabinets and such drawers must not only be pulled out and pushed back in a considerable distance, but the operator must also reach into the drawer to remove or file the papers, or more often the file folders, required. Cabinets four drawers high are usually employed so the operator must bend down and over or stretch up, in order to gain access to the drawers. This consumes a considerable amount of time and energy and makes for high labor costs. Even though modern time saving equipment be employed to convey the material to be filed to and from the various stations, the work and time involved in pulling out drawers and inserting or removing papers needed, then closing the drawers, bottleneck the system unless an inordinate number of people are employed.

In the drawer type of filing, also, it is not possible to file papers unless they are in file folders as they will slip down and will not be visible to the operator or filing clerk and will be as good as lost. Thus, in the filing installations of big business concerns untold thousands of dollars must be spent just for file folders alone.

It is the province of the instant invention to eliminate the foregoing and other drawbacks of prior art filing, and to do so in a straightforward economical manner, which is of the utmost simplicity and efficiency. In the first place, the invention enables the total space required for filing and working to be reduced by a substantial proportion.

The filing of the invention is done on tiers of staggered, normally open shelves in continuous rows. The vertical positioning of the shelves with respect to an operator seated at a desk rollable along in front of them is such that the contents of each shelf can be readily seen and reached without the operator having to move from the seated position. There is nothing to do like pulling out and returning heavy filing drawers. No matter which of the shelves the papers are on, or are to be placed on, they can be easily reached and extracted by the operator, or inserted in the file, if that is what is desired. The system of the invention also provides for the filing, either of loose papers or of papers in folders, as may be desired by those in charge of the filing. The filing system is set up to prevent even single papers from collapsing downwardly but, even if they do so, they still remain readily visible and present no problem.

Besides the economy of space and labor and the simplifying and expediting of filing effected by the invention, the economy and durability of the structure of the invention go far beyond anything heretofore contemplated in the prior art. Most important, however, the system and structure of the invention operate with the

utmost efficiency and meet the needs of modern business for efficient, straightforward filing.

It is, accordingly, the principal object of this invention to improve upon the filing of papers and documents of all sorts.

Another object is to materially simplify such filing.

Another object is to reduce the cost of such filing.

Still another object is to reduce the floor space required for such filing.

A further object is to materially reduce the labor involved in the filing of papers and documents.

A still further object is to reduce the physical energy required to effect such filing.

More detailed objects are to render the documents filed and the places for filing them readily visible and immediately accessible, to retain papers and documents in upright position, whether filed separately or in folders, and to enable access to be obtained to a filing section of several layers in height without the operator having to move from a pre-selected seated position.

Further and more detailed objects of the invention will in part be obvious and in part be pointed out as the description of the invention taken in conjunction with the accompanying drawing proceeds.

In that drawing:

Fig. 1 is a perspective view generally illustrative of a type of a complete filing system to which the construction of the invention is applicable.

Fig. 2 is an enlarged fragmentary perspective view of a portion of such system showing an operator at work.

Fig. 3 is a fragmentary perspective view of a shelf arrangement for open shelf filing in accordance with the invention, showing material filed on the shelves.

Fig. 4 is an enlarged fragmentary elevation with parts broken away and shown in section of a portion of one of the shelves in accordance with the invention, with separator plates in accordance with the invention in place therein.

Fig. 5 is a similar view of shelf construction in accordance with the invention taken from a somewhat different angle, with a separator member in place and with portions broken away showing the mounting for the separator in back of the vertical wall of the shelf.

Fig. 6 is a perspective view of one of the separator plates of the invention.

Fig. 7 is a fragmentary horizontal section taken on line 7—7 of Fig. 5 and looking in the direction of the arrows.

Fig. 8 is a fragmentary vertical section taken on line 8—8 of Fig. 4 and looking in the direction of the arrows; and

Fig. 9 is a fragmentary end elevation of a shelf assembly as in Fig. 3 illustrating the addition of a covering curtain therefor.

This application is a continuation of my application Serial No. 406,843, filed January 28, 1954, for Filing Systems and Constructions Therefor, now abandoned.

Generally speaking, this invention is concerned with the filing of papers and documents on a staggered shelf arrangement which provides for access to all the shelves from a seated position, and provides for readily visible indexing. The sections of open shelves of the invention have no fixed partitions or separators at their ends, so that sections may be added on at the end of other sections to form a series of sections and to provide unrestricted continuous assembly and continuous filing. The invention construction also provides for the holding of even loose papers in upright position and for the insertion and removal of such papers. The mounting of separators for adjustable positioning is provided for at a multiple of closely spaced stations all along the shelves.

The manner in which the structure of the invention

is applicable to a filing system is illustrated in Figs. 1 and 2. The system there shown is illustrative of one of many into which the structure of the invention can be incorporated, it being understood that the invention is in no way limited by such particular showing, but rather such showing is for the purpose of enhancing the appreciation of the advantages inherent in the invention and the manner in which it introduces improvements in many respects over the teachings of the prior art.

In the filing system illustrated in Figs. 1 and 2, material to be filed would be dispatched to one, or more, distributors at the position 1, who would start the paper, or other documents, down the appropriate one of the distributing conveyors 2. These conveyors would incorporate selective equipment for the discharge of paper or papers at the appropriate one of the discharge pockets 3. The operator 4, seated at a swivel chair-desk combination 5, would take the arriving paper from the pocket 3 at one side and file it in the appropriate place on one of the open shelves, 6, 7, 8 or 9, at her other side. The indexing for the top shelves would be at about eye level and the indexing and material in all of the shelves would be visible and attainable from the seated position at the desk. Also, it would be attainable directly, without the necessity of opening any drawers, let alone getting up and down to see into and reach into the drawers.

In a sufficiently busy operation one operator or file clerk, would cover only a portion of one of the rows 10, 11, 12, 13 and 14 of the file shelves. The operator would, however, cover receipts from several of the pockets 3. To facilitate this, the desk 5 is mounted on rollers such as 15, which run along tracks 16 on the floor of the aisles between the conveyor side and the filing side. Such desks, already available on the market, roll easily and are propelled by the operator pushing on the floor with her feet.

A call for material to be pulled out of the files is received orally by the clerk, or operator, through a headset 17. She moves her desk 5 to the appropriate position, selects the material requested and, preferably slipping it into an envelope or other holder, merely places it on the row dispatching conveyor 18, as illustrated at 19. The row dispatching conveyors 18 all discharge on to the main dispatching conveyor 20 which runs along the end of the rows and beneath suitable steps 21. Thus, the package 19 proceeds onto the conveyor 20 as shown in Fig. 2 and eventually reaches its destination.

It is believed to be obvious that filing in this manner eliminates space, labor, expense and time required, as against systems where filing is done in jackets or folders in the drawers of filing cabinets, which drawers must be opened and closed as used. The only action required of an operator in a filing system in accordance with the invention is that of lifting the paper, or jacket, should jackets be used, off the shelf or placing it back on the shelf. That is the equivalent of the most simple of the series of actions required when filing is done in the drawers of filing cabinets. The invention is concerned with the manner and structure by which filing on open shelves, whether of single papers, file folders, or quantities of either, is rendered effective. Generally speaking, this is accomplished by special formations of the shelving, or the separators and of the mounting of the separators on such shelves. The construction of the presently preferred form of these features is shown in Figs. 3–8.

From the Fig. 3 showing, it will be apparent that four open shelves, 6, 7, 8 and 9, are all carried by a suitable support 10 which may be of any desired construction for mounting the shelves to extend out in cantilever arrangement. Each of the shelves has a bottom wall 25 and a vertically extending back wall 26. These are preferably made of sheet metal due to its workability, though they may be formed of other materials if desired. The upper surface of the wall 25 meets the front face of the back wall 26 at a joining line 27 and the back wall 26 has a series of suitably shaped openings 28 punched therethrough, commencing at the line 27 and extending upwardly therefrom. These openings are close together and the series of them extends all along the wall 26. The lower ends of the openings 29 are just wide enough to receive the thickness of the mounting tip of the separator 30, shown per se in Fig. 6. From the end 29 the openings 28 as here shown are upwardly enlarged into segments of circles, or other suitable formations, in order to provide controlled swinging movement of the separator members 30, to the extent indicated in Fig. 8, about a horizontal axis lying along their bottom edge 31. Though an opening which is a segment of a circle, or "pie shaped," symmetrically disposed about a vertical axis, is effective for this purpose, the invention is not to be considered as being limited thereby. Rather the invention embraces within its scope such other shapes as will permit controlled movement of the kind desired.

A similar set of openings 32 is horizontally disposed in an extension 33 of the base 25 of the shelf back beyond the back wall 26. The openings 32 are preferably, though not necessarily, of the same shape and extent as the openings 28 and their reduced inner ends 34 mate up with the bottom ends 29 of the vertical openings 28. A series of the openings 32 extends along the portion 33 in the same spaced relationship between individual openings as is the case with respect to the openings 32. In other words, wherever there is an opening 28 there is an opening 32 mated with it. Also, like the openings 28 the particular size and shape of the openings 32 is not to be considered as limited by the showing herein, but rather the openings are such as are needed to provide for controlled swinging movement of the separator plate 30 about a vertical axis extending along its back edge 35, as illustrated in Fig. 7.

As here shown, the extension 33 has an upstanding wall 37 extending therealong just beyond the openings 32. This wall serves to strengthen the structure and would form a channel along the back of the wall 26, but it is not necessary that such a wall be provided. All that is necessary is that the extension of the shelf 25 in the portion 33 beyond the wall 26 be perforated with a row of openings 32 for the proper reception of the control tip 38 of the separator plate 30.

Reverting for a moment to the separator plate 30, two of which are shown in Fig. 4, but which of course would be used in the number and position required for effective filing, it will be seen from the Fig. 6 showing that this is all one integral piece. This is preferable and it is also desirable that the separator plates be rigid, without any sharp edges. Thus, the plates would preferably be made of steel, though they could be made out of aluminum and also from stiff plastic materials. No matter what the material, or the thickness of it, it is essential that the tip 38 remains rigid, remains in alignment with the plane of the plate body 30 and will not break off wholly or in part. The provision of the tip 38 and reception of it by the shelf structure involve the essentials of effective filing in accordance with the invention.

The tip 38 is clearly seen from Fig. 6 to extend for approximately the same distance outwardly from the back edge 35 and downwardly from the bottom edge 31. The top 39 of the tip is rounded off on a rather flat curve, and the inner under corner 40 is similarly rounded off. These curved corners provide for the ready application of the separator plates 30 with their tips 38 seated within mated pairs of the vertical recesses 28 and horizontal ones 32. This application can be quickly accomplished, as seen from Figs. 4 and 5, by holding the separator plates vertically and moving them laterally toward the back wall 26, while holding them up so that the vertical height of the tips 38 are in position to be inserted in the slots 28. Once the tips 38 are inserted in the slot 28 with their corners 40 clearing the edge 27, the plates are allowed to settle down so that their bottom edges 31 rest on the shelf 25 whereupon the downwardly ex-

tending portion of the tips 38 will seat in the horizontal openings 32. For removal of the plates, it is merely necessary to reverse the procedure by raising the plates so that their tips 38 can be withdrawn from the slot 28 and then moving them forward. This cannot happen accidentally, so the plates will remain in position where located.

Not only may these plates be readily inserted and removed, but, more importantly, when they are in position with the tip 39 in the openings 28 and 32, they will have definitely controlled movements about the vertical axis running up their back edge 35 and the horizontal axis running along their bottom edge 31. This movement will be limited by the extent to which the slots 28 and 32 enable the tip 38 to swing therein.

This provision for the tilting, or wobbling, of the plates about both a vertical and a horizontal axis to a controlled extent renders filing on open shelves effective. In the first place, the plate rests against the papers to be held, leaning where placed about both its vertical and horizontal axes away from the position of the operator. The plate is rigid, so holds the papers rigid between it and the next plate. The leaning of the plate away from the operator enables the operator to quickly detect the markings on it, or the markings on its indicating tab, such as 41 shown in Fig. 6. Nevertheless, the plate may be tilted to lean in the opposite direction about its horizontal axis and swung about its vertical axis to open up the space between it and the next plate, so the papers may be readily inserted, or removed, into or out of filing position on the shelves.

With regard to the indicating tabs 41, these may extend vertically as shown, or may instead extend horizontally near the top of the plate. Otherwise, they may be eliminated entirely and suitable markings may be applied to the edge of the body of the plate. Also, of course, the tips 38 and tabs 41, rather than being integral with the body of the plate 30, may be separate members applied thereto and may be of various sizes or shapes. Insofar as the tips 38 are concerned, they would of course have to be rigid and be rigidly affixed to the body 30. Their size and shape would depend, of course, upon the size, shape and relationship of the series of openings 28—32 with which they are to be engaged.

For the filing of individual papers between the plates 30, it is to be noted that when a pair of separator plates are located in adjacent sets of mated perforations 28—32, the effect is substantially the same as when a folder is used, thus rendering the folder unnecessary. As the pile of papers increases, the plates 30 are moved further apart, by shifting their tips to other slots, but the tilt of one with respect to the other will always be sufficient to maintain the papers in position and upright.

It is normally entirely satisfactory to have the bottom wall 25 extend horizontally and devoid of any retaining lip along its edge. There is little or no tendency for the papers to fall outwardly, particularly when held in place by the separator plates. Should any particular condition call for retaining means to prevent outward movement of filed material this can be accomplished by such means as providing an upstanding lip on the front edge 42 of the shelf or tilting the shelf upwardly from the horizontal about the line 27 with similar backward tilt of the back wall 26.

Reverting to Fig. 3, it will be seen that the papers on the top shelf 6 project out from the edge 43 of the top cover 44. Each succeeding row of papers on the shelves 7, 8 and 9 is seen to project out by the same distance as the rows move downwardly. When a reasonable distance is left between the top edges of the papers and separators and the undersurface of the shelf or cover member above, the staggering of the shelves need be no more than 2" for effective filing of ordinary correspondence. This allows for the removal and insertion of papers in the file by directing them in an upward and outward direction, or conversely in a downward and inward direction, as illustrated in Fig. 2.

In some instances it may be desirable to cover up the files when not in use. This can be achieved in a simple manner and one arrangement for doing it is illustrated in Fig. 9. Here, the top cover 44 has a hinge 45 secured along its outer edge 43 and the other leaf of this hinge has a shelf 46 secured thereto. On the underside of this shelf, when it is in the Fig. 9 position, a housing 47 is provided adjacent its outer end for a roller 48 which carries a curtain 49. The roller may be of a spring type, like an ordinary shade roller, or it may be otherwise suitably mounted for enabling the raising and lowering of the curtain 49.

While the files are in use, the curtain 49 is rolled up on the roller 48 and the extending portion 46 is swung about the hinge 45 into the dot-dash position shown in Fig. 9, where it is entirely out of the way. To cover the files, the curtain 49 is drawn down across the face of all the files and suitably engaged with suitable means extending from the floor, or from the bottom shelf 9. Since the shelf sections forming these files align up end to end, a suitable curtain supplied with each shelf section will enable the whole of the files to be covered in very simple manner when such cover is desired.

Though the separator member 30 has been shown and described as a solid plate, it is of course to be understood that a plate having portions within the border thereof cut out could be effectively employed, or, instead of being plates, the separators can be effectively formed as wire frames. In either instance, however, the tips for mounting the frames would need to be strong and to be snugly secured to the body of the separator to assure the full effectiveness of the separator.

As already indicated, the apertures such as 28 and 32 need not all be of the same size or of the same shape. Where difference in swinging movement between that about the edge 31 as against that about the edge 35 is desired, the apertures 28 can, of course, be formed of different size or shape, or of different size and shape from the apertures 32. Finally, though uniform spacing of the apertures 28 and 32 along the shelves is preferable, it is, of course, to be understood that different even spacing, or uneven spacing, can be provided if desired.

While in the foregoing and in the accompanying drawing certain presently preferred details of construction have been described and shown, it is of course to be understood that the scope of the invention is not limited thereby. Rather is is to be understood that certain changes may be made in the above construction and different embodiments of the invention could be made without departing from the scope thereof. It is, accordingly, intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

Having described by invention, what I claim as new and desire to secure by Letters Patent is:

1. In shelf construction for filing systems and for the mounting of separators thereon which comprises, a horizontal shelf member and a vertical extending wall adjacent but spaced from the back thereof, said member and said wall being secured in fixed relationship and meeting along a line, said wall being formed with a separator tab receiving, vertically extending opening therethrough, said opening having a horizontally reduced portion symmetrically formed with respect to a vertical center line and said horizontally reduced portion communicating with a portion horizontally enlarged with respect to said reduced portion at either side of said vertical center line and said shelf member being formed with an opening therethrough extending from said meeting line away from said wall and being symmetrically enlarged about a horizontal center line, said vertical and horizontal center lines substantially lying in the same vertical plane.

2. In shelf construction for filing systems and for the

mounting of separators thereon which comprises, a horizontal shelf member and a vertically extending wall adjacent but spaced from the back thereof, said member and said wall being secured in fixed relationship and meeting along a line, said wall being formed with a separator tab receiving, vertically extending opening therethrough, said opening having a horizontally reduced portion symmetrically formed with respect to a vertical center line and said horizontally reduced portion communicating with a portion horizontally enlarged with respect to said reduced portion at either side of said vertical center line and said shelf member being formed with an opening therethrough extending from said meeting line away from said wall and being symmetrically enlarged in substantially the form of wedge about a horizontal center line, said vertical and horizontal center lines coming together at said meeting line and lying substantially in the same vertical plane.

3. In shelf construction for filing systems and for the mounting of separators thereon which comprises, a horizontal shelf member and a vertically extending wall adjacent but spaced from the back thereof, said member and said wall being secured together and meeting along a line, said wall being formed with a recess therein extending therethrough and upwardly from said line, said shelf member having a portion extending in back of said wall and said extending portion being formed with a recess therein, extending therethrough, in alignment with said recess in said wall, said recesses communicating at substantially said line in reduced ends and extending away from said line into portions symmetrically enlarged on either side of a common plane at a right angle with respect to said member and wall.

4. In shelf construction for filing systems and for the mounting of separators thereon which comprises, a horizontal shelf member, a vertical wall extending upwardly from said shelf member adjacent but spaced from the back thereof, said shelf member having an extension beyond said wall, said wall and said member meeting at a common line of joinder, said wall being formed with a first recess therein extending therethrough in substantially the form of a segment of a circle, said first recess having its pointed end flattened, commencing at said line and enlarging symmetrically in its upward extent about a vertical axis, said extending portion of said shelf member being formed with a second recess therein extending therethrough in the form of a segment of a circle, said second recess commencing in a flattened portion mated with said flattened end of said first recess and said second recess extending away from said line in symmetrically disposed relation with respect to an axis at right angles to said vertical wall.

5. Shelf construction as in claim 4 wherein a plurality of mated pairs of said vertically extending and horizontally extending recesses are formed in said vertical wall and in said extension, said plurality extending throughout the length of said vertical wall and of said extension.

6. In filing construction of the character described, a horizontally extending shelf and a vertically extending back wall extending upwardly from said shelf adjacent but spaced from the back thereof, said wall and said shelf meeting at a line, said back wall being formed with an opening therethrough, said opening having a horizontally restricted center portion symmetrically formed with respect to a vertical center line and said opening extending from said horizontally restricted portion into a horizontally enlarged portion symmetrically disposed with respect to said vertical center line, said shelf being formed with an opening therethrough, at one side of said wall, commencing substantially at said meeting line and extending away from the same, said shelf opening being symmetrically enlarged with respect to a horizontal center line extending from said meeting line at right angles with respect to said wall, an upstanding separator mounted on said shelf, mounting tip means formed on the inner portion of said separator, said tip means having a portion seated within said wall opening and a portion seated within said shelf opening, said horizontally restricted center portion of said wall opening being dimensioned for the ready reception of the portion of said tip means seated in said wall opening.

7. In filing construction of the character described, a horizontally extending shelf and a vertically extending wall extending upwardly from said shelf adjacent but spaced from the back thereof, said wall and said shelf meeting at a line, said wall being formed with an opening therethrough, said opening having a horizontally restricted center portion symmetrically formed with respect to a vertical center line and said opening extending from said horizontally restricted portion into a horizontally enlarged portion symmetrically disposed with respect to said vertical center line, said shelf being formed with an opening therethrough, at one side of said wall, commencing substantially at said meeting line and extending away from the same, said shelf opening being symmetrically enlarged in substantially the form of a wedge with respect to a horizontal center line extending from said meeting line at right angles with respect to said wall, with the smaller end of said wedge lying toward said wall, an upstanding separator mounted on said shelf, mounting tip means formed on the inner portion of said separator, said tip means having a portion seated within said wall opening and a portion seated within said shelf opening, said horizontally restricted center portion of said wall opening being dimensioned for the ready reception of the portion of said tip means seated in said wall opening.

8. In filing construction of the character described, a horizontally extending shelf and a vertically extending back wall extending upwardly from said shelf, said shelf having a portion extending rearwardly of said back wall, said back wall being formed with an opening therethrough extending upwardly from the line of joinder of said back wall and said shelf and said backwardly extending portion of said shelf being formed with an opening therethrough aligned with said opening in said back wall, an upstanding separator mounted on said shelf, said separator being formed as a substantially rectangular plate and a mounting tip formed on said separator, said mounting tip having portions extending into and received in each of said openings.

9. In filing construction of the character described, a horizontally extending shelf and a vertically extending back wall extending upwardly from said shelf, said shelf and said back wall meeting at a line, said shelf having a portion extending rearwardly of said back wall, said back wall being formed with a recess therein extending from said meeting line and said backwardly extending portion of said shelf being formed with a recess therein mated with said recess in said back wall, an upstanding separator mounted on said shelf, said separator being formed as a substantially rectangular plate and a mounting top on said separator, said mounting tip having portions received in each of said recesses, said recesses commencing adjacent said line of joinder in portions of substantially the same width as the thickness of said tip and extending away from said line in symmetrically enlarged portions whereby said separator will have controlled rocking movements about its bottom edge and its back edge.

10. Structure as in claim 9 wherein there is a plurality of said mated recesses extending throughout the length of said back wall and of said rearwardly extending portion, said mated recesses lying in close uniformly spaced relation.

11. In filing construction employing open shelves, a support, a plurality of horizontally extending vertically spaced shelves, each of said shelves above the bottom shelf of said plurality being offset backwardly with respect to the shelf below it, each of said shelves being provided with a vertically extending back wall joined to said shelves along a line and each of said shelves having portions extending backwardly beyond said back wall,

separator members in the form of substantially rectangular flat plates mounted on said shelves and extending in substantially upright relation with respect thereto, each of said separator plates being formed with a tip thereon extending backwardly and downwardly with respect to the rear corner thereof, said back wall adjacent its joinder with said shelf and said backwardly extension of said shelf being formed with aligned recesses therethrough and said tips being seated in said recesses, the seating of the tips for each shelf being in back of the back wall of the shelf beneath it, whereby all of the shelves are free of any obstructions.

12. In a filing system of the character described, a series of identical shelf assemblies aligned in continuous end to end relation, each of said assemblies including a plurality of shelves, each of said shelves providing an uninterrupted elongated horizontal surface and vertical walls adjacent but spaced from the rear of said shelves, each of said vertical walls and said shelf portions in back of said vertical walls being formed with a plurality of aligned pairs of symmetrical separator tab receiving openings therethrough, the respective shelves and vertical walls of each of said assemblies meeting to form continuous surfaces devoid of interruptions whereby a filing system may be established and extended without waste space, each of said assemblies including a support for said shelves, said shelves being stepped backwards in their upward extent, each of said shelves having the same extent from vertical wall to front edge and the height of said shelf assembly from said bottom shelf and to said top shelf including a zone normally reachable with either hand by an operator in sitting position on a seat at substantially the level of the lowermost of said shelves.

13. In a filing system of the character described, a series of identical shelf assemblies aligned in continuous end to end relation, each of said assemblies including a plurality of shelves, each of said shelves providing an uninterrupted elongated horizontal surface and vertical walls adjacent but spaced from the rear of said shelves, each of said vertical walls and said shelf portions in back of said vertical walls being formed with a plurality of aligned pairs of symmetrical separator tab receiving openings therethrough, the respective shelves and vertical walls of each of said assemblies meeting to form continuous surfaces devoid of interruptions whereby a filing system may be established and extended without waste space, each of said assemblies including a support for said shelves, said shelves being stepped backwards in their upward extent, separators with mounting tabs seated in substantially upstanding positions on said shelves with said tabs seated in said tab receiving openings.

14. In a filing system as in claim 13, a base for said shelf assemblies, a track secured to said base in parallel and closely spaced relationship with respect to the front of said shelf assemblies, and a rollable chair and desk assembly mounted on said track to roll therealong, said chair and desk assembly being positioned with respect to said shelf assemblies to render said shelves accessible to the operator seated on said chair.

References Cited in the file of this patent

UNITED STATES PATENTS

483,348	Fletcher	Sept. 27, 1892
1,270,212	Richeson	June 18, 1918
1,660,088	Ongman	Feb. 21, 1928
2,368,349	Cornish	Jan. 30, 1945
2,516,122	Hughes	July 25, 1950
2,726,912	Wassell	Dec. 13, 1955
2,839,203	Becker	June 17, 1958

FOREIGN PATENTS

244,356	Switzerland	Apr. 1, 1947