Aug. 31, 1965 L. M. TOMS 3,203,748

RECORD FILING CABINET

Filed June 18, 1964 2 Sheets-Sheet 1

Fig. 1

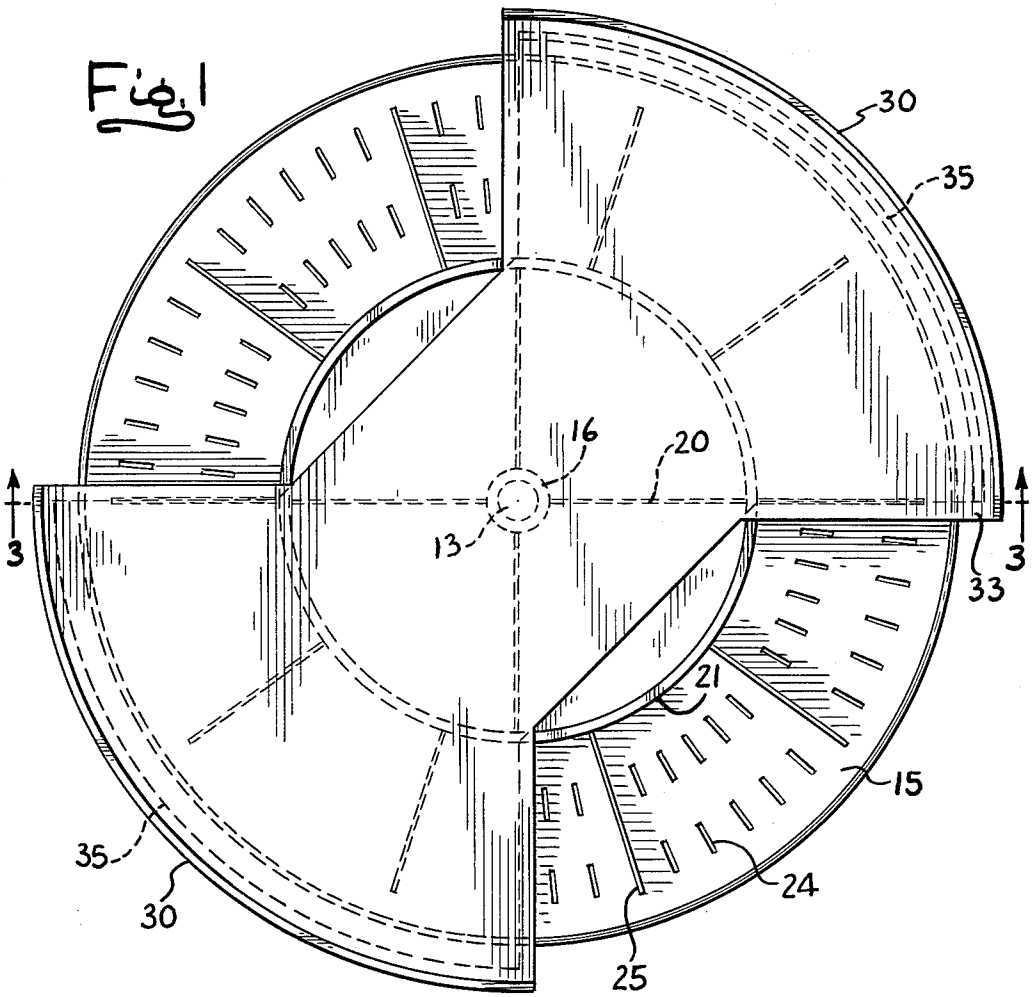

Fig. 2

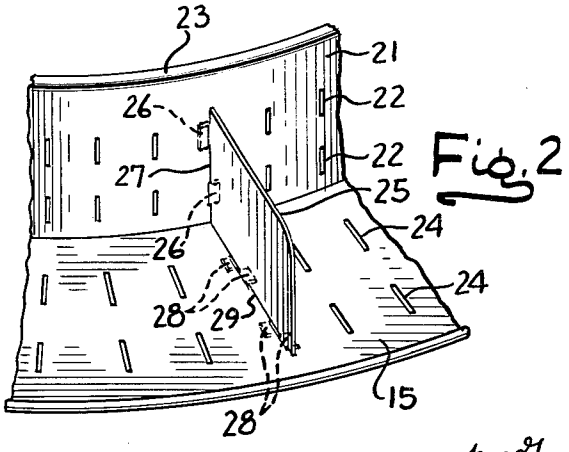

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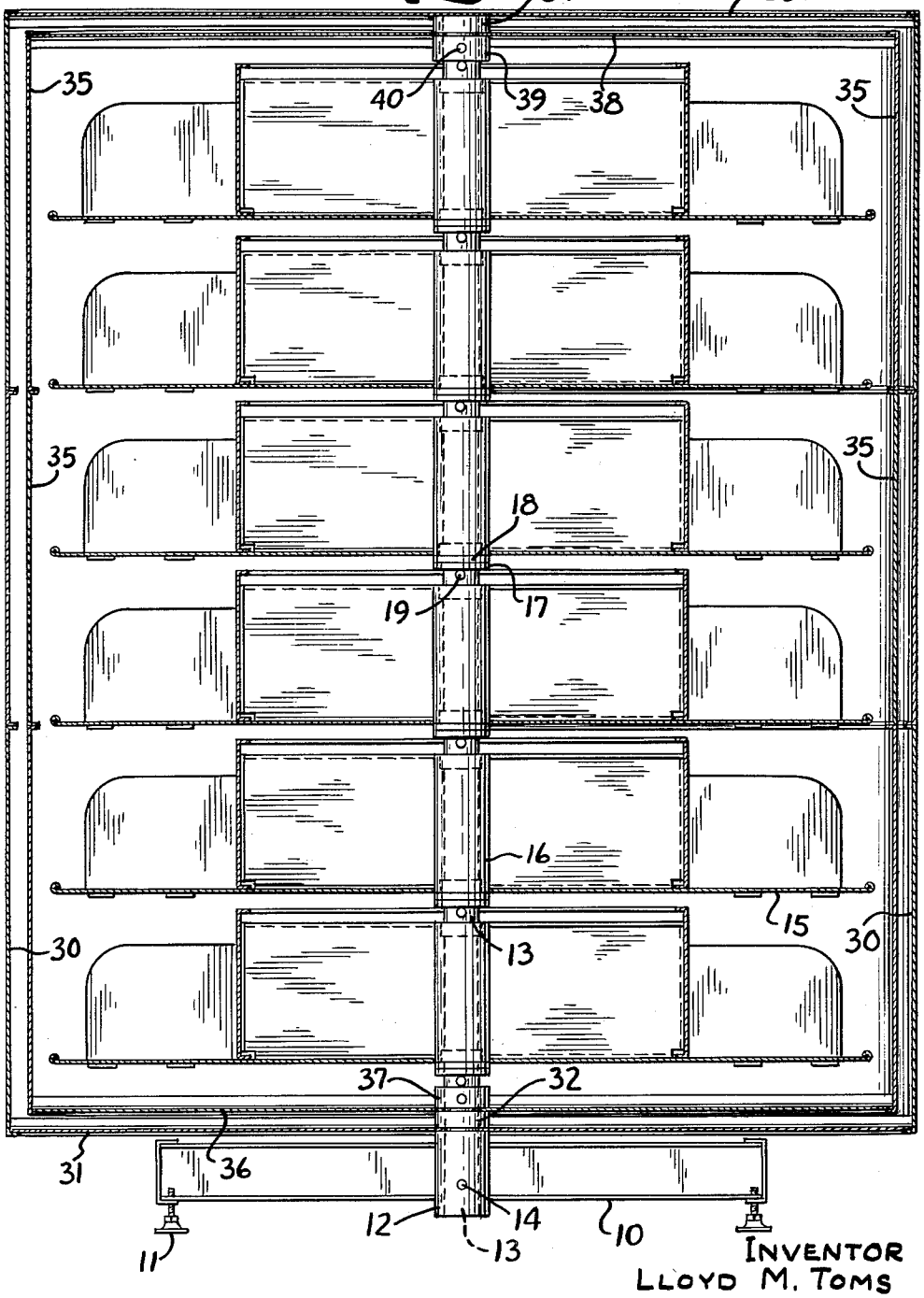
Fig. 3



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3,203,748

RECORD FILING CABINET

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3 Claims. (Cl. 312—252)

This invention relates to improvements in record filing cabinets of the class comprising a plurality of vertically spaced tiers rotatably mounted on a central shaft.

One object of the present invention is to provide a record filing cabinet of the class described with novel cylindrical enclosure means.

It is another object of the present invention to provide the tiers of the aforesaid cabinet with novel vertically disposed radially extending dividers.

Generally, the record filing cabinet of the present invention comprises a base, a shaft mounted on said base, and a plurality of vertically spaced tiers rotatably mounted on the shaft. The tiers are further enclosed with a complementary pair of cylindrical enclosure segments supported on the aforesaid shaft, each formed with opposed laterally or peripheral angular openings complementary to each other and adapted to be rotated relative to each other in register so that access to the embraced circular tiers may be had from radially opposed sides of the cabinet, these complementing cover portions being adapted to be thereafter rotated relative to each other and locked together to form a complete enclosure.

The record cabinet of the present invention further comprises dividers on each of the tiers extending vertically and radially and in interlocking engagement therewith by tongue and slot means.

Other objects and advantages of the present invention, its details of construction and arrangement of parts, will be apparent from a consideration of the following specification and accompanying drawings, wherein:

FIG. 1 is a top plan view of the record filing cabinet of the present invention.

FIG. 2 is a perspective fragmentary detailed view of one of the tiers of the assembly of FIG. 1.

FIG. 3 is a vertical elevational view, partly in section, of the record filing cabinet of the present invention, and taken on the line 3—3 of FIG. 1.

Referring to the drawings, the reference numeral 10 indicates a supporting base provided with suitable foot means 11. Fixedly secured in the base is a hub member 12 which receives the vertically disposed shaft 13 and maintains it against rotation by means of the pin 14. Disposed on the shaft in vertically spaced arrangement are a plurality of circular tiers 15 each comprising a hub 16 rotatably embracing the shaft 13 and supported on associated bushings 17 by means of thrust bearings 18. The bushings 17 are secured to the shaft 13 by means of the pins 19.

On each hub 16 are four radially extending sheet metal stabilizer members 20. These stabilizers 20 are circled by a sheet metal band or collar 21 which is secured to the stabilizers and to the tier 15. The bands 21 are provided with two parallel rows of, for example sixty, equally spaced vertical slots 22. The bands each have an inwardly turned flange 23 along the top, and a similar one along the bottom, not shown, welded to the tier 15.

Each of the tiers 15 are further provided with two concentric rows of, for example sixty, radially extending equally spaced slots 24 which are aligned radially with the slots 22.

A desired number of sheet metal partitions 25, such as for example ten in number, are fixed one in every sixth set of slots 22 and 24 in the band 21 and the tier 15.

Each partition 25 is provided with a plurality of tabs

extending from two adjacent sides such as for example pairs of tabs 26, 26 extending from the side edge 27 and pairs of tabs 28, 28 extending from the lower edge 29 from the divider 25.

The tabs 26, 26 extend into the slots 22 in the collar 21 and are shown to be bent angularly thereto for fixed engagement. Likewise, the tabs 28 are shown to be extended through the slots 24 in the tier 15 and bent thereunder to provide firm fixed engagement.

Although not shown, it will be understood that similar removable partitions such as 25 may be placed in any or all of the remaining sets of slots 22 and 24, the removable partitions being identical to the fixed partition 25 with the exception that the tongues or tabs 26 and 28 are left flat in the plane of the partition. This permits these added partitions to be readily and easily removed or inserted in any desired set of slots. The removable partitions may be made from sheet plastic, fiber or the like, as well as sheet metal.

As an enclosure for the tiers, the present invention provides an outer cover member composed of two opposed identical vertical cylindrical sections 30, 30 which are fixed to and supported by the cut-away disc 31 at the bottom, with the disc 31 fixed to the hub 32 which in turn is rotatably mounted on the central shaft 13. The two opposed vertical cylindrical sections 30 are further fixed to and supported by the cut-away disc 33, identical to the disc 31, at the top with the disc 33 fixed to the hub 34 which in turn is rotatably mounted on the central shaft 13.

An inner cover which is adapted to remain stationery in relation to the central shaft 13 consists of two opposed identical vertical cylindrical sections 35, 35 fixed to and supported by the cut-away disc 36 at the bottom which in turn is fixed to the hub 37, which in turn is mounted on the central shaft 13. The two opposed vertical cylindrical sections 35, 35 are further fixed to and supported by the cut-away disc 38, identical with the disc 36, fixed to the hub 39, which is in turn fixed to the central shaft 13 by means of the pin 40.

The discs 31 and 33, as well as the discs 36 and 38, are each provided with two 90° diagonally opposed segmental cut-outs, with the discs 36 and 38 being of slightly smaller diameter than the discs 31 and 33. Thus, when the cover is rotated to the open position the cylindrical panels 30, 30 move around the outside of the cylindrical panels 35, 35 permitting access to the record-bearing tiers in two diagonally opposed positions about the unit.

A suitable lock, not shown, that acts between the inner and outer cylindrical panels 35 and 30 can be provided to secure the enclosure or cover sections about the tiers as a complete cylinder.

The foregoing arrangement has the advantage of permitting access to the record tiers 15 from two opposed sides, both of which can be opened simultaneously with one movement. The foregoing also provides a balanced arrangement and therefore is easy to rotate in order to open or close. By being supported from a common center shaft, the cover is relatively simple of construction and requires no costly tracks or the like for a sliding and rolling door.

Although I have shown and described the inner cylinder as fixed and the outer cylinder as rotatable, it will be understood that conversely the outer cylinder can be fixed and the inner cylinder rotatable, or both cylinders can be rotatable.

While I have shown and described the preferred embodiment of my invention, it will be understood by those skilled in the art that changes may be made in the details thereof without departing from its scope as comprehended by the following claims.

I claim:

1. A record filing cabinet comprising a plurality of vertically spaced tiers, a vertically disposed shaft rotatably supporting said tiers, a base fixedly supporting said shaft, an inner cylindrical angularly open enclosure for said tiers including angularly notched top and bottom supporting discs rotatably mounted on said shaft, and a complementary outer cylindrical angularly open enclosure for said tiers and said inner enclosure including angularly notched top and bottom supporting discs rotatably mounted on said shaft and adapted to form a complete cylindrical enclosure for said tiers in combination with said inner enclosure.

2. A record filing cabinet comprising a base, a vertically disposed shaft fixedly mounted on said base, a plurality of vertically spaced circular tiers rotatably mounted on said shaft, an inner cylindrical enclosure formed with opposed angular lateral openings including angularly notched top and bottom supporting discs rotatably mounted on said shaft and a complementing outer enclosure including angularly notched top and bottom supporting discs rotatably mounted on said shaft and formed with opposed angular lateral openings, said cylinders being relatively rotatable and adapted to form a complete cylindrical enclosure for said tiers in combination with said inner enclosure.

3. A record filing cabinet comprising a base, a vertically disposed shaft fixedly mounted on said base, a plurality of vertically spaced circular tiers rotatably mounted on said shaft, an inner cylindrical enclosure formed with opposed angular lateral openings including angularly notched top and bottom supporting discs rotatably mounted on said shaft and a complementing outer enclosure including angularly notched top and bottom supporting discs rotatably mounted on said shaft and formed with opposed angular lateral openings, said cylinders being relatively rotatable and adapted to form a complete cylindrical enclosure for said tiers in combination with said inner enclosure, a concentric collar, and vertically disposed radially extending dividers carried by said tiers and means retaining them in separable engagement with said tiers and said collars.

References Cited by the Examiner

UNITED STATES PATENTS

723,714	3/30	McKenna	312—305 X
2,113,386	4/38	Schneider	108—103 X
2,308,629	1/43	Rosenberg	211—183 X
2,711,741	6/55	Wassell	312—183 X
2,902,175	9/59	Shoffner	108—103

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