

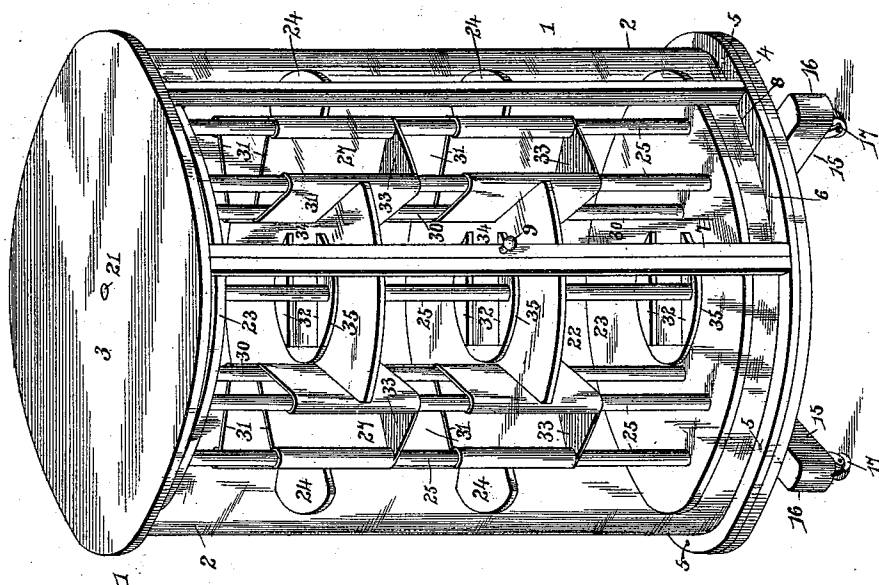
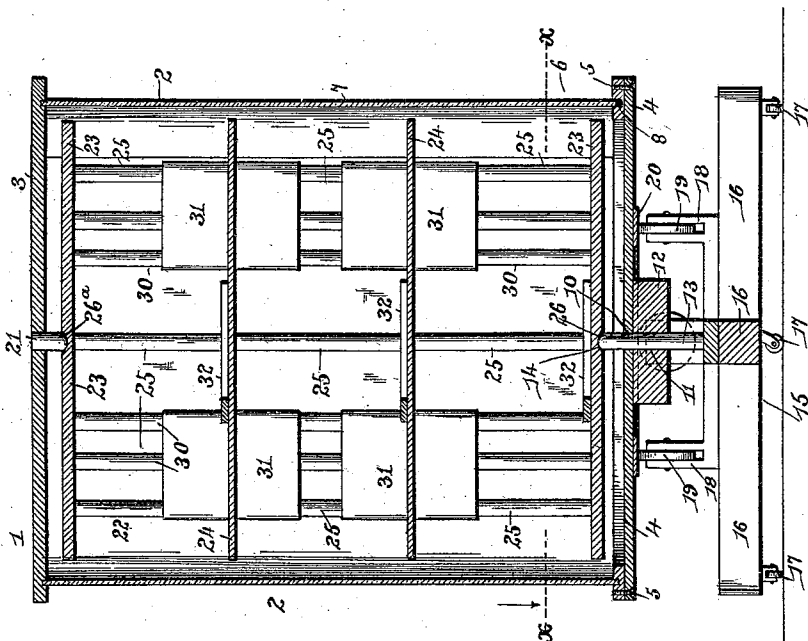
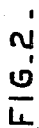
(No Model.)

2 Sheets—Sheet 1.

W. L. YOST.
REVOLVING CASE.

No. 555,550.

Patented Mar. 3, 1896.



Inventor

William L. Yost

Witnesses

Jas. K. McLaughlin
D.P. McLaughlin.

By *his* Attorneys.

Chas. Snow & Co.

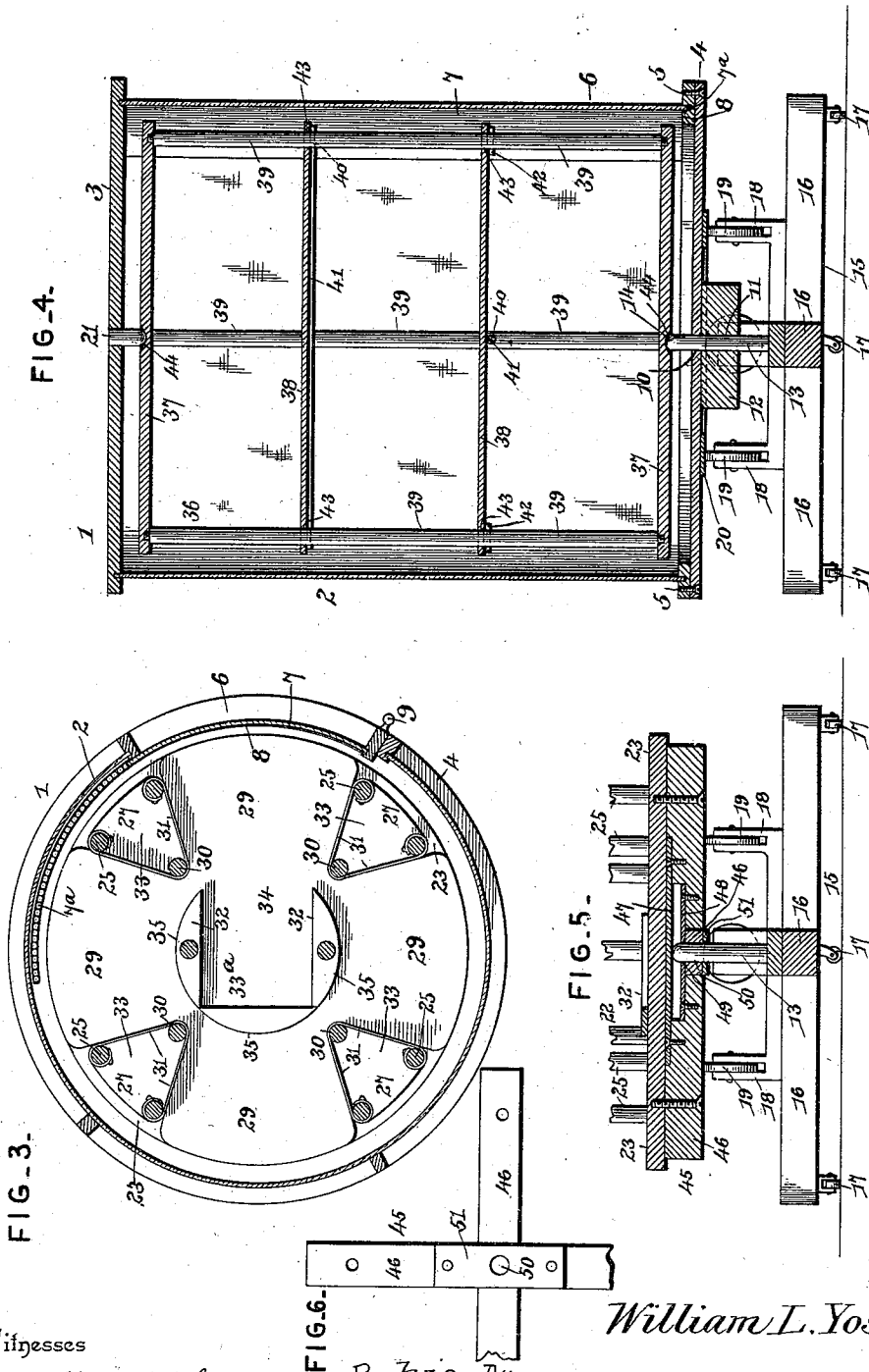
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UNITED STATES PATENT OFFICE.

WILLIAM LOCKHART YOST, OF CHICAGO, ILLINOIS.

REVOLVING CASE.

SPECIFICATION forming part of Letters Patent No. 555,550, dated March 3, 1896.

Application filed April 12, 1894. Serial No. 507,289. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LOCKHART YOST, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Revolving Case, of which the following is a specification.

This invention relates to revolving cases; and it has for its object to provide a piece of furniture of this character which shall possess exceptionally desirable qualities for use as a bookcase, show-case, cabinet, &c.

To this end the main and primary object of the present invention is to provide a revolving case especially intended for the reception of books and to provide novel and efficient means whereby books may be arranged in a circle.

Heretofore it has not been practicable to arrange books within a circular bookcase on account of the central space, which ordinarily has been left unoccupied, and on account of the wedging of the books; but in the present invention these objections are obviated and every available portion or space in the case fully utilized, while at the same time permitting the books to be arranged in a circle, which not only avoids the sharp corners of square bookcases, produces the most pleasing effect to the eye, but at the same time provides the most convenient and economical arrangement of books that can be secured.

With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a revolving case constructed in accordance with this invention. Fig. 2 is a central vertical sectional view thereof. Fig. 3 is a central horizontal sectional view on the line *xx* of Fig. 2. Fig. 4 is a central vertical sectional view showing a modified construction of inner circular revolving shelf-case as adapted for show-case purposes. Fig. 5 is an enlarged detail sectional view of the lower portion of the revolving case as mounted in position without the outer circular revolving casing. Fig. 6 is a

detail plan view of a portion of the spider bearing-frame.

Referring to the accompanying drawings, 1 designates a circular revolving casing that consists of a circular frame 2, the walls of which are formed of bent glass or of wood and glass at the option of the manufacturer, so as to complete a frame having a circular contour, but the glass sides or walls are preferable in order that the interior construction of the case within the casing may be readily seen at a glance, and the circular frame 2 of the casing is connected at the top and bottom by the circular head-boards 3 and 4, respectively, the upper circular head-board, 3, being fixedly secured to the upper ends of the uprights comprising the body of the circular frame 2, and the lower of said head-boards, 4, is removably secured to the lower end of the circular frame of the revolving casing by means of the removable attaching-screws 5.

The circular frame 2 of the revolving casing 1 is provided at one side with a door-opening 6, which is adapted to be covered and uncovered by the sliding curved door 7, that conforms to the curvature of the sides or walls of the casing and slides at its upper and lower edges in the upper and lower curved guide-grooves 8, formed at the upper and lower ends of the circular casing-frame 2 at points where the door-opening is located to accommodate the sliding movement of the door 7, which is provided at its outer edge with a finger knob or pull 9, which may be conveniently grasped for opening and closing the door in gaining access to the interior thereof or to keep out dust, &c. At the lower edge of the door may be arranged a suitable ball-bearing 7^a therefor to reduce friction and ease its movement.

The removable bottom head-board, 4, of the circular revolving casing 1 is provided with a central bearing-perforation 10, that aligns with a similar perforation or opening 11 in the bearing-block 12, secured to the bottom of the head-board 4, and said bearing openings or perforations are adapted to loosely receive the upwardly-projecting pivot-pin 13, that is adapted to project through the perforation of the board 4 into the interior of the circular revolving casing when the same is

mounted on the pin, and said upwardly-projecting pivot-pin has a rounded bearing-point 14 at its upper end and is secured fast at its lower end to the center of the spider leg-frame 15, consisting of right-angularly crossed leg-pieces 16, secured together at their point of intersection and carrying at their outer ends the supporting-casters 17. These serve to support the case on the floor and allow the same to be readily moved from place to place. The spider leg-frame 15 has fitted to the upper side thereof, at each side of the central pivot-pin, 13, the upwardly-disposed bifurcated roller-brackets 18, in which are journaled the vertically-disposed bearing-rollers 19, on top of which bears the bottom head-board, 4, of the circular casing, so as to relieve the pivot of undue friction and to provide for the easy turning of the casing with the hand, and a metallic wear-ring 20 is preferably secured to the bottom of the lower head-board, 4, with which ring the bearing-rollers 19 contact to prevent them from grooving the bottom board of the casing.

The circular revolving casing, which is mounted for rotation in the manner described, receives in its lower end the central upwardly-projecting pivot-pin, 13, as already noted, and depending within the upper end of the said casing from the top board, 3, is the upper fixed pivot pin or stud, 21, that is disposed in precise vertical alignment with the pin 13, on which the casing is removably and revolvably mounted, and said upper and lower pivot-pins, 21 and 13, pivotally secure therebetween for an independent rotation the inner circular revolving shelf-case, 22, that is adapted to revolve within the outer casing independently thereof.

The circular shelf-case consists of the upper and lower circular disks or heads 23, the parallel circular shelves 24, and a series of vertical connecting posts or bars 25 connecting the upper and lower disks or heads of the case and supporting the several shelves in position. The lower circular disk or head of the revolving shelf-case is provided with a central bearing-socket, 26, that fits over the upper rounded bearing-point, 14, of the lower pivot-pin, 13, and the upper disk or head 23 is provided with a similar bearing-socket, 26^a, that loosely fits over the lower end of the upper fixed pivot pin or stud, 21, to provide for the pivotal or revoluble support of the shelf-case between the upper and lower pivot-pins.

The circular revolving shelf-case 22 may be provided with any number of the circular shelves 24, according to the size of the case or cabinet to be made, and at regularly-spaced points the edges of said shelves 24 are provided with the triangular or V shaped notches or cuts 27, that embrace the outer circular rows of the vertical connecting posts or bars 25, and to correspond with the triangular or V shape of the notches or cuts 27 in the shelves the outer rows of the connecting posts or bars are arranged in triangular groups, so

as to form exterior V-shaped pockets or receptacles extending the entire height of the revolving case 22, and in each triangular group of the posts or bars 25 there is usually one of these posts or bars placed or disposed at the inner point or apex of the cuts or notches 27 and a pair at the outer wide apart of the notch or cut, and between each of these triangular groups of posts or bars are formed book-spaces 29, in which the books may be arranged in a circle without wedging, owing to the fact that the distance between the inner posts of each group, which may be additionally designated as 30, is less than the distance between the adjacent outer posts or bars of the adjacent groups, but the distances between the groups of posts or bars may be varied to suit a particular case or cabinet, and when preferred may be so adjusted as to throw the backs of the books closely together.

At the points where the shelves 24 connect with the triangular groups of vertical posts or bars inclosing rims 31 are located at opposite sides of each V-shaped notch or cut 27, and are secured in any suitable manner to the posts or bars, so as to extend a short distance above and below the shelves in order to form guides for the books as they are inserted into the book-spaces 29, and to prevent the same from working in between the posts of the triangular groups, while at the same time said inclosing rims may be connected at their lower ends below each shelf by the shelf-pieces 33, which thereby provide the exterior V-shaped pockets or receptacles with shelves on which may be conveniently placed papers, statuary, bric-à-brac, &c. In this manner the V-shaped spaces formed by the triangular arrangement of the posts or bars may be utilized, while at the same time this triangular arrangement is necessary in order to admit of the books being arranged in circular rows, so that the same may be accessible conveniently, and will also present an ornamental appearance.

Necessarily in arranging books in circular rows a central circular space would be left unoccupied unless a provision was made to utilize such space, and in the present invention this space is provided with the rectangularly-arranged retaining or guide strips 32. The guide-strips 32 are secured to the top of each shelf, the lower of which shelves is formed by the lower disk or head 23, and the inner sides of said strips are straight to inclose a central square book-space, 33^a, into which books may be introduced through one of the exterior circular book-spaces, 29. The rectangularly-arranged guide-strips 32 are three in number to leave an entrance opening or space 34 between one end of two of said strips, and the outer sides of said strips are rounded or curved, as at 35, concentrically with the circular periphery of the shelves of the case, and these rounded or curved outer sides of the strips 32 form stops for the inner ends of the books placed in the spaces

29, whereby such books may be easily arranged in an even uniform row. Certain of the vertical posts or bars 25 are arranged to extend vertically the entire height of the case at opposite sides of the central square book-space, 33^a, and form inclosing side walls for the books which are introduced into this space to prevent the same from falling over or otherwise becoming displaced from the position which they occupy.

From the above it will be seen that I have provided a most economically-constructed case for the reception of books, whereby every available portion of the space formed is utilized, while at the same time providing for the circular arrangement of books, and by reason of the independent rotation of the circular shelf-case 22 ready access may be had to all parts thereof through the door of the revolving casing 1.

Although the case just described is that preferably employed by me, still it will be obvious that in place of the same other modified forms of circular cases may be placed inside of the independently-revolving casing, and in one of the figures of the drawings I have illustrated a circular revolving show-case 36 that may be placed within the revolving casing for the purpose of exhibiting goods or as a cabinet or for other purposes. The circular revolving case 36 comprises the upper and lower disks or heads 37, a series of circular shelves 38, and a series of connecting posts or bars 39. In this modified form of case the posts or bars 39 are provided with a vertical series of perforations 40 to removably receive the supporting-bars 41, connecting directly-opposite posts or bars and the supporting-pegs 42, which, together with the bars 41, serve to adjustably support the shelves 38 in position to provide any desired space between the shelves, which are provided with perforations 43, loosely embracing said posts or bars.

The upper and lower circular disks or heads 37 of the revolving case 36 are provided with the bearing-sockets 44 that are adapted to loosely receive the reversely-disposed bearing-points of the upper and lower bearing-pivots, 21 and 13, and in order to replace the circular revolving case 22 with the plain show-case 37 it is simply necessary to remove the removable bottom head-board, 4, of the circular revolving casing, remove the case 22, replace it with the case 37, secure the bottom head-board, 4, again in position, and mount the same together with the said case on the pivot 13.

Other modifications than those described will readily suggest themselves to those skilled in the art, and it will of course be understood that the preferable form of case 22 may be mounted on the pivot 13 without an outer casing 1, as illustrated in Fig. 5 of the drawings. In this figure the case 22 has secured to the bottom thereof the spider bearing-frame 45, comprising the right-angularly crossed bars 46, one of which bars is provided with

the centrally-arranged and spaced metallic bearing-plates 47 and 48, the plate 47 being imperforate and the outer plate, 48, being provided with a bearing-opening 49 to receive the upper end of the pivot-pin 13, that turns on the upper imperforate plate, 47, and the other of said cross-bars, 46, is provided with a central bearing-opening 50, aligned with the opening 49 and protected at its lower end by the perforated facing-plate 51. By means of the spider bearing-frame 45 the revolving case 22 may be readily supported for rotation on the spider leg-frame 15 and thereby complete a circular form of single bookcase without an inclosing casing, while at the same time retaining its specific construction adapting it for the reception of books in circular rows and having central walled book-spaces at the center of such rows.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a circular bookcase, the combination of a series of parallel circular shelves, and a series of vertical posts connecting said shelves and certain of which posts are arranged in spaced groups to form between such groups outer open circular book-spaces leading in from the edges of the shelves, and other of said vertical posts being arranged centrally to form the inclosing side walls of a space for books at the center of each shelf, said central book-spaces being open at one side only and communicating at such open side with one of the outer open book-spaces, substantially as set forth.

2. In a case of the class described, a leg-frame having a central upwardly-disposed stationary pivot-pin, a circular revolving casing turning on said pin and having a central bearing-perforation in its bottom to loosely fit over the pivot-pin, and an upper fixed pivot pin or stud depending from the top, and an independently-revolving shelf-case mounted within the casing between and pivotally engaging the upper and lower pivot-pins to provide for a rotation independent of the casing, substantially as set forth.

3. In a case of the class described, the combination of a leg-frame having an upwardly-disposed pivot-pin, a circular revolving casing turning on said pivot-pin and having a circular frame, upper and lower head-boards connected to the upper and lower ends of the circular frame and the lower of which is removable, a side door-opening, and curved guide-grooves at the upper and lower edges of said opening, a sliding door having a roller-bearing at the bottom and arranged to work in said opening in said guide-grooves, and an independently-revolving shelf-case mounted within said casing and supported for an in-

dependent rotation on said upwardly-disposed pivot-pin, substantially as set forth.

4. In a case of the class described, the combination of a spider leg-frame mounted on casters and having a central upwardly-disposed pivot pin or stud, and a circularly-arranged series of vertically-disposed bearing-rollers, a revolving cylindrical or circular casing having a perforated bottom head-board turning on said pivot pin or stud which projects through the perforation therein, said bottom board also resting on said bearing-rollers and an upper fixed pivot pin or stud depending from the upper head-board of the casing, and an independently-revolving shelf-case mounted within said casing between the opposed pivot-pins and having bearing-sockets in the upper and lower ends thereof adapted to respectively loosely receive the upper and lower pivot pins or studs, substantially as set forth.

5. A case consisting of a series of parallel circular shelves provided in their edges at spaced points with V-shaped notches, a series of vertical connecting-posts connecting the shelves at and arranged directly in said notches, said posts within said notches being grouped together triangularly to correspond with the shape of the notches, and inclosing rims fitted on each group of posts at opposite

sides of the V-shaped notches and extending above and below the shelves to form guides for the books, said rims being connected at their lower ends by shelf-pieces to form, with the triangularly-grouped posts, exterior pockets or receptacles open at their front sides, substantially as set forth.

6. The herein-described revolving case consisting of a series of parallel circular shelves provided in their edges at regularly-spaced points with triangular or V shaped notches or cuts, a series of vertical connecting posts or bars connecting the shelves at said notches and arranged at such points in triangular groups, the inner posts or bars of each group being disposed at the inner point of said notches, inclosing rims connected at their lower ends by shelf-pieces and extending above and below the shelves at opposite sides of the V-shaped notches or cuts, and central side-inclosed book-spaces confined between the central posts or bars, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM LOCKHART YOST.

Witnesses:

JOHN C. PARKES,
J. L. VAN NESS.