

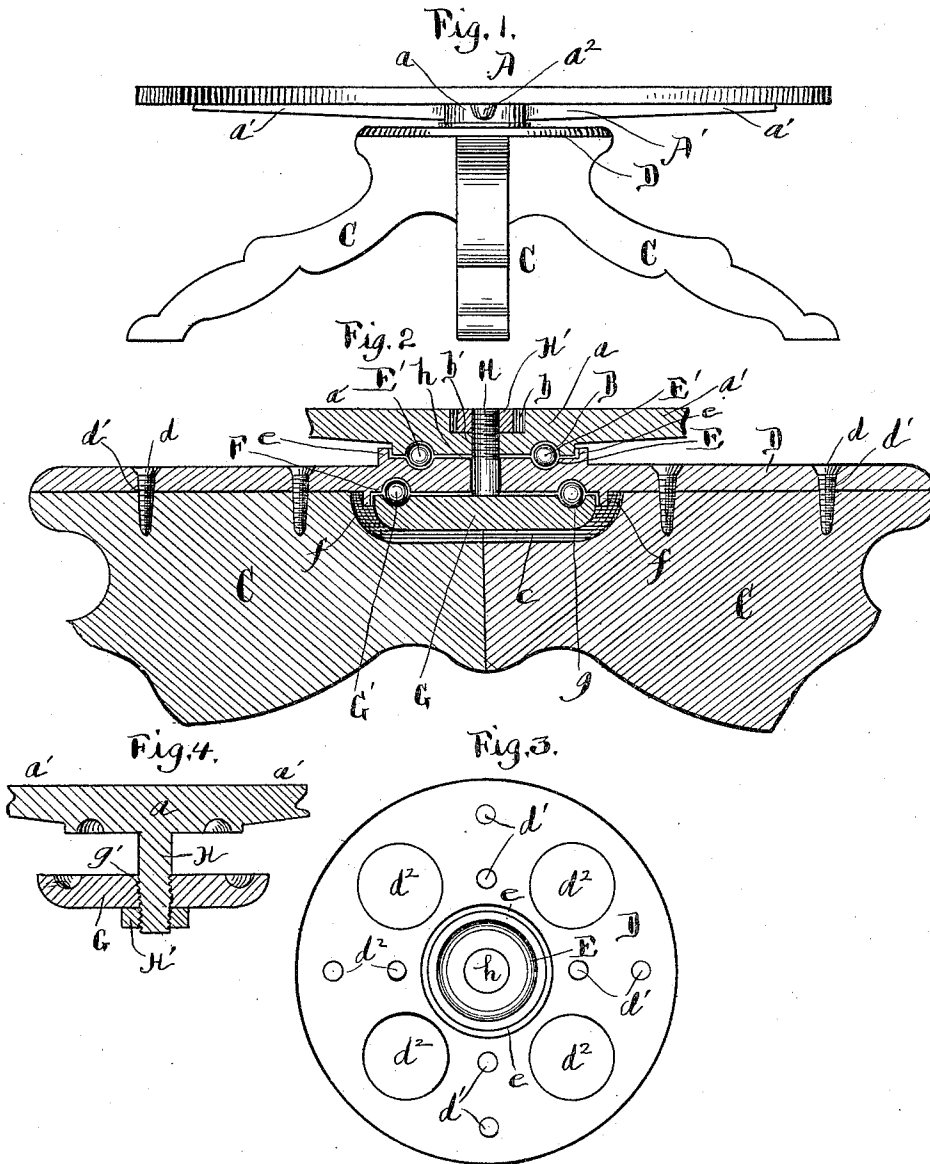
No. 705,237.

Patented July 22, 1902.

A. T. HATCH.
TABLE SERVER.

(Application filed Apr. 11, 1902.)

(No Model.)



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TABLE-SERVER.

SPECIFICATION forming part of Letters Patent No. 705,237, dated July 22, 1902.

Application filed April 11, 1902. Serial No. 102,410. (No model.)

To all whom it may concern:

Be it known that I, ALBERT T. HATCH, a citizen of the United States, residing at South Elgin, county of Kane, and State of Illinois, have invented certain new and useful Improvements in Table-Servers, of which the following is a specification.

This invention relates to that class of devices which are used for the purpose of holding food and other articles and facilitating their distribution by enabling those seated at the table to revolve the server until the desired preparation has been brought within reach.

The improvement more particularly relates to the manner of mounting the top of the server so as to facilitate its easy and noiseless revolution and at the same time provide a firm and secured bearing which will not bind despite the weight carried by the server; and the invention consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of the server of this invention; Fig. 2, an enlarged longitudinal sectional view taken through the center of the server and showing the arrangement of bearing-surface; Fig. 3, a top or plan view of the disk or plate, and Fig. 4 a modified construction.

The server of this invention is constructed with a top A, preferably of circular formation and of a size suitable to the requirements of its use, which is mounted on and suitably secured to a spider A', having in the construction shown four arms radially extending from the body a, the arms a', which extend transversely of the grain of the wood, being preferably of greater length than the arms a², which extend longitudinally of the grain of the wood, although the arms might be of the same length without changing the character of the invention. The body or base of the spider has therein a circumferential race or channel B in its lower face and a recess [b in its upper face and an internally, screw-threaded hole or perforation b', extending downwardly from the recess in the top face of the body or base of the spider.

Legs C of any suitable number serve as a base or support for the revoluble top of the server, and at the point of the union of the legs is a recess c, cut in the upper or sup-

porting face of the legs, and the legs are firmly secured in place and supported by the supporting disk or plate D, to which the legs are secured by means of screws d, extending through screw-holes d' in the disk, or by any other suitable means. The supporting disk or plate is provided with a series of perforations d² for the purpose of decreasing its weight without impairing its strength to any appreciable extent; but it is obvious that the metal composing the disk might be further cut away, leaving, in effect, a spider for the purpose of uniting and securing the legs in place. In the upper face of the disk is a groove or race E, coinciding with the groove or race B and forming therewith a runway for the reception of a series of balls E', which prevent the lower face of the body of the spider from contacting with the upper face of the disk and furnish a bearing-surface for the revolution of the top of the server. A circumferential rim or wall e on the face of the disk encircles the body of the spider, thereby minimizing the access of dirt or dust to the bearings and protecting them under all circumstances. In the lower face of the disk is a channel or race F, of a greater diameter than the channel or race in the upper face of the disk, and around the channel or race is a circumferential rim or wall of greater diameter than the corresponding wall in the upper face. Below the disk and within a recess in the top face of the legs at their point of juncture is a circular bearing disk or cup G, having in its upper face a channel or race g, coinciding with the channel or race F in the lower face of the supporting disk or plate and forming therewith a runway for a series of balls G', which prevent the lower face of the supporting disk or plate from contacting with the upper face of the bearing cup or disk. Fixedly attached to and extending upwardly from the bearing disk or cup is a stud H, projecting through a hole h in the center of the supporting disk or plate and screw-threaded into and through the body of the spider and into the recess in the face thereof, and a jam-nut H' within the recess serves to lock the stud into fixed relation with the body of the spider carrying the server-top.

In use the weight of the server-top and the receptacles carried thereon will bear directly against the balls E', which rotate freely be-

tween the upper face of the supporting disk or plate and the body of the spider, and the stud will revolve within the hole or perforation in the bearing-disk, and the series of balls G', carried between the supporting disk or plate and the bearing disk or cup, will serve to prevent the top of the server from being tilted or tipped by the weight carried thereby, and thereby prevent jamming or binding between the stud and the inner wall of the hole in the supporting disk or plate, and at the same time the revolubility of the server-top will not be decreased by reason of the fact that a greater weight is carried on one side than on the other. The arrangement is one in which all the operative parts are combined within a very small space; but by reason of the fact that the guide-balls G' rotate within a race of larger diameter than the supporting-balls E', or, in other words, are farther from the center of revolution, the server-top is firmly and yet delicately poised in operative position without the necessity for further means of support. If the weight be increased on one side of the server-top, a greater pressure will be brought to bear upon the supporting-balls in proximity to that side of the server-top bearing the greater weight, which will tend to throw the stud out of plumb; but this tendency will be counteracted by the opposite guide-balls, which will be forced up into contact with the race in the supporting disk or plate, thereby holding the server-top against further displacement by reason of the weight carried thereon. It will thus be seen that the server as a whole is neat and elegant in appearance and perfect in its operation by reason of the adjustment of its parts and is at the same time of strong and durable construction and easy operation.

In Fig. 4 is shown a slightly-modified form of construction in which the stud securing the bearing disk or cup into fixed relation with the body of the spider is made integral with the body of the spider and extends downwardly through the hole in the supporting disk or plate and screw-threads into and through a hole g' in the bearing disk or cup and is secured by means of a jam-nut H', screwed down onto the face of the bearing disk or cup, holding the stud firmly in place. In other respects the construction and operation of the parts is precisely the same as that already described.

What I regard as new, and desire to secure by Letters Patent, is—

1. In a table-server, the combination of a spider having a hub or body and arms radially extending, a top mounted on the spider, a circular groove or channel in the lower face of the hub or body, a supporting disk or plate having in its upper face a circular groove or channel coinciding with the groove or channel in the hub or body and forming therewith a runway, balls within the runway, a circular groove or channel in the lower face of the supporting disk or plate, a bearing disk or

cup below the supporting disk or plate, a groove or channel in the upper face of the bearing disk or cup coinciding with the groove or channel in the lower face of the supporting disk or plate and a fixed connection between the hub of the spider and the bearing disk or cup, substantially as described.

2. In a table-server the combination of a spider having a hub or body and arms radially extending, a top mounted on the spider, a circular groove or channel in the lower face of the hub or body, a supporting disk or plate having in its upper face a circular groove or channel coinciding with the groove or channel in the hub or body and forming therewith a runway, balls within the runway, a circumferential rim or wall encircling the hub or body, a circular groove or channel in the lower face of the supporting disk or plate of greater diameter than the groove or channel in the upper face of the supporting disk or plate, a bearing disk or cup below the supporting disk or plate, a groove or channel in the upper face of the bearing disk or cup coinciding with the groove or channel in the lower face of the supporting disk or plate and a fixed connection between the hub of the spider and the bearing disk or cup, substantially as described.

3. In a table-server the combination of a spider having a hub or body and arms radially extending, a top mounted on the spider, a circular groove or channel in the lower face of the hub or body, a supporting disk or plate having in its upper face a circular groove or channel coinciding with the groove or channel in the hub or body and forming therewith a runway, balls within the runway, a circumferential rim or wall on the supporting disk or plate encircling the hub or body, a circular groove or channel in the lower face of the supporting disk or plate of greater diameter than the groove or channel in the upper face of the supporting disk or plate, a bearing disk or cup below the supporting disk or plate having an internally-screw-threaded hole extending therethrough, a groove or channel in the upper face of the bearing disk or cup coinciding with the groove or channel in the lower face of the supporting disk or plate, a circumferential rim or wall on the supporting disk or plate encircling the bearing disk or cup, a stud-screw threaded on its end fixedly attached to and extending down from the body or hub of the spider through a hole in the supporting disk or plate and through the hole in the bearing disk or cup to have its screw-threads engage with the screw-threads of the hole, a jam-nut screw-threaded onto the stud to contact with the outer face of the bearing disk or cup, and legs fixedly attached to the supporting disk or plate, substantially as described.

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Witnesses:

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