April 21, 1925. 1,534,557

C. D. WILLIAMS

SELF SERVING TABLE

Filed March 9, 1923 2 Sheets-Sheet 1

Fig. 1.

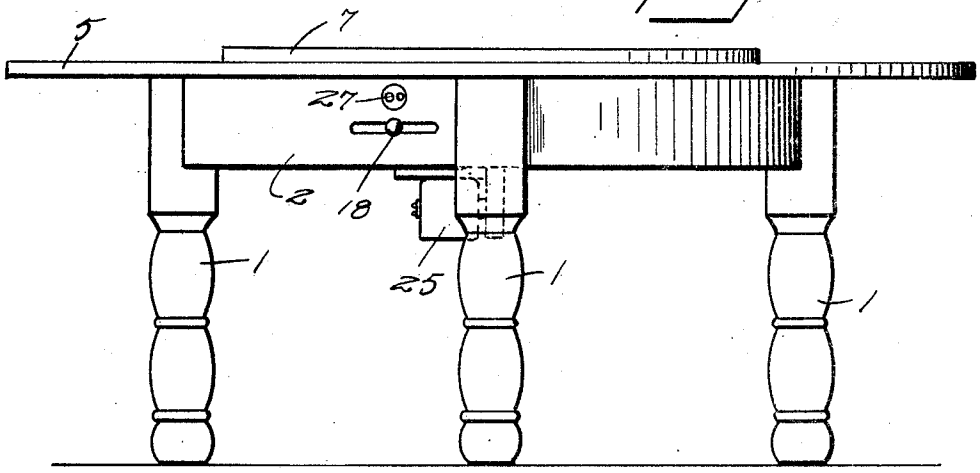
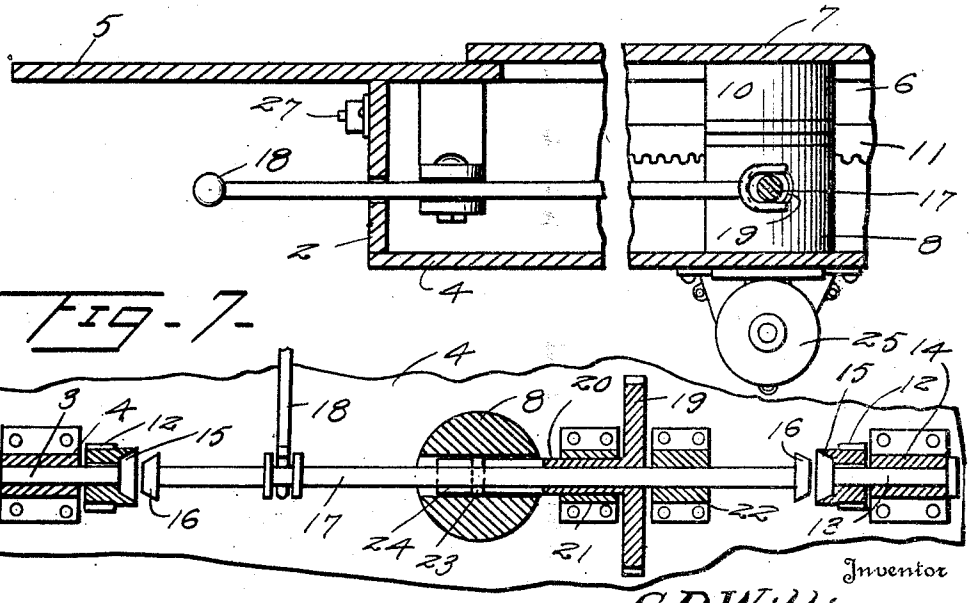


Fig. 3.



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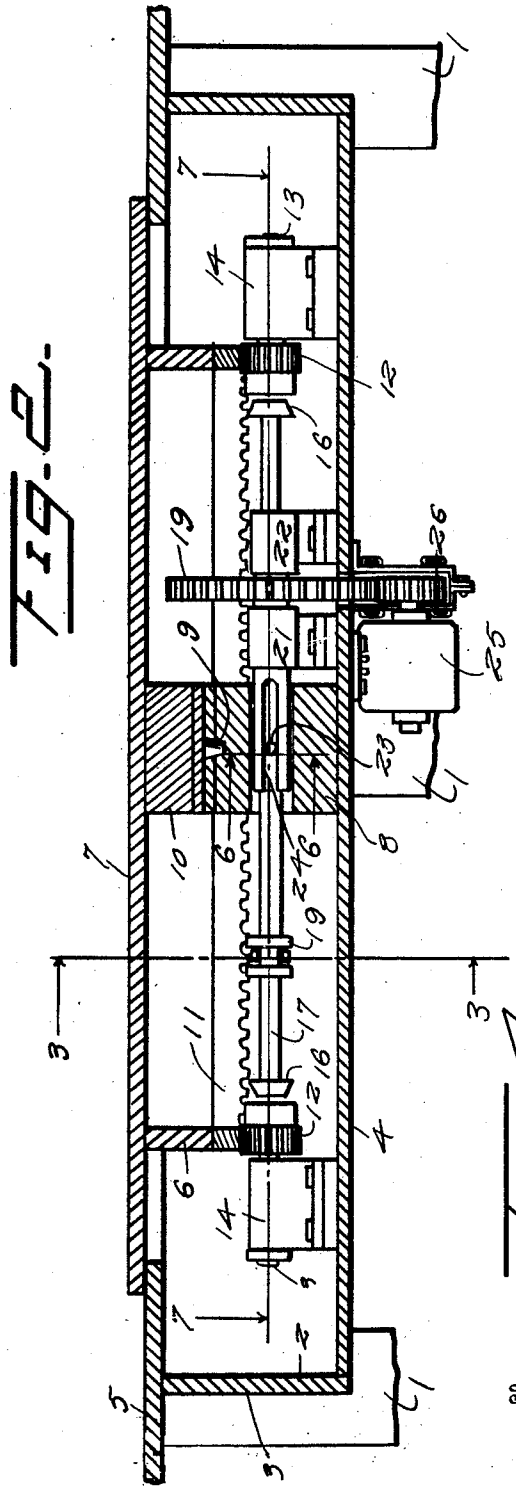


Fig. 2.

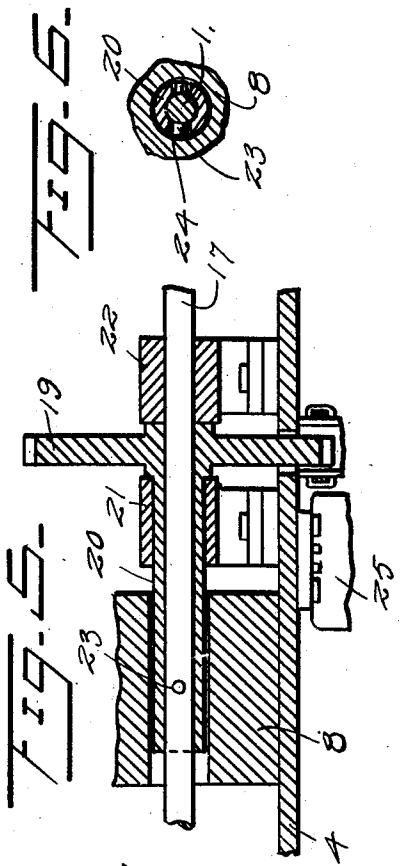


Fig. 5.

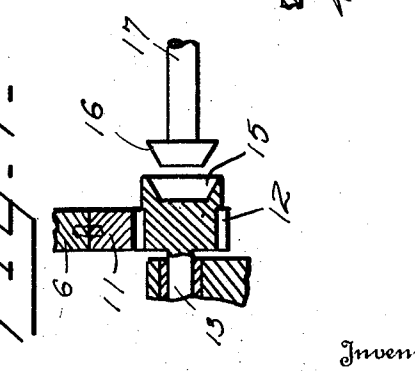


Fig. 4.

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Patented Apr. 21, 1925. 1,534,557

UNITED STATES PATENT OFFICE.

COMMODORE D. WILLIAMS, OF CARUTHERSVILLE, MISSOURI.

SELF-SERVING TABLE.

Application filed March 9, 1923. Serial No. 623,944.

To all whom it may concern:

Be it known that I, COMMODORE D. WILLIAMS, a citizen of the United States, residing at Caruthersville, in the county of Pemiscot and State of Missouri, have invented certain new and useful Improvements in Self-Serving Tables; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to tables and aims to provide an article of this nature which obviates the passing of dishes from one to the other when dining, thereby overcoming the annoyance incident to such practice and preventing the spilling of food.

The invention furthermore provides a table which admits of the host passing a plate to any guest or person seated at the table without the assistance of any other guest or person, the arrangement being such that the plate may be passed either to the right or the left as may be desired or found most convenient.

The invention also provides a table which enables any one seated thereat obtaining any desired article without the necessity of requesting some one else to pass the same.

Other objects and advantages will be apparent and suggest themselves as the nature of the invention is understood.

While the drawings illustrate an embodiment of the invention, it is to be understood that in adapting the same to meet different conditions and requirements, various changes in the form, proportion and minor details of construction may be resorted to without departing from the nature of the invention.

Referring to the accompanying drawings forming a part of the specification,

Figure 1 is a side view of a table embodying the invention,

Figure 2 is a vertical central sectional view of the upper portion of the table showing the parts on a larger scale,

Figure 3 is a sectional detail on the line 3—3 of Figure 2,

Figure 4 is a sectional detail showing more clearly the clutch between the drive shaft and drive pinion.

Figure 5 is a sectional detail showing more clearly the mounting of the drive gear and the relation of the drive shaft thereto,

Figure 6 is a sectional detail on the line 6—6 of Figure 2, and

Figure 7 is a horizontal section on the line 7—7 of Figure 2, the parts being shown on a smaller scale.

Corresponding and like parts are referred to in the following description and designated in the several views of the drawings by like reference characters.

A table constructed in accordance with this invention embodies a stand which includes legs 1 and a connecting band 2. The upper ends of the legs 1 are cut away upon the inner sides as indicated at 3 to receive the band 2 and a bed piece 4. The band 2 connects the legs 1 and is secured to the vertical faces of the cut away portions 3. The bed piece 4 rests upon the horizontal faces of the cutout portions 3. The table top 5 rests upon the stand and is secured to the band 2 and legs 1 in any manner. The parts may be of any design and finish, depending largely upon the cost of the table.

A rotary platform 7 surmounts the central portion of the table 5 and is adapted to be turned to the right or to the left as required. A ring 6 depends from the platform 7 and is concentric with the axis thereof. A block 8 is secured centrally to the bed piece 4 and its upper end receives a pivot 9 depending from a companion block 10 attached centrally to the under side of the platform 7. The central portion of the table 5 is cut away to receive the band 6 and the marginal portion of the platform 7 overlaps the inner portion of the table 5 bordering upon said opening. A ring gear 11 is attached to the lower edge of the ring 6 and is in mesh with drive pinions 12 fast to the inner ends of shafts 13 journaled in bearings 14 attached to the bed piece 4. The inner faces of the drive pinions 12 are formed with conical recesses 15 which constitute clutch elements. Complemental clutch elements 16 at opposite ends of the drive shaft 17 are adapted to cooperate with the respective clutch elements 15. The drive shaft 17 may occupy a neutral position or be moved longitudinally to throw it into clutch engagement with either one of the drive pinions 12, whereby the platform 7 may be rotated either to the right or left as desired. The drive shaft 17 passes through an opening formed in the block 8 and is adapted to be moved

longitudinally by means of a lever 18, the inner end of which is forked to embrace the shaft 17 between collars 19. The outer end of the lever 18 passes through a slot formed in the band 2 so as to be conveniently reached and operated. A drive gear 19 loose upon the shaft 17 is rotatable with a shaft 20 mounted in a bearing 21 attached to the bed piece 4. The shaft 20 is hollow and the shaft 17 passes loosely therethrough. The shaft 17 is mounted in a bearing 22 secured to the bed piece 4. While the shaft 17 is mounted to move longitudinally, nevertheless it is rotatable with the shaft 20 and drive gear 19. This is effected by means of a pin 23 projecting laterally from the shaft 17 operating in a longitudinal slot 24 formed in a side of the hollow shaft 20. The gear 19 is adapted to be driven in one direction from any suitable source of power and as indicated an electric motor 25 is attached to the bed piece 4 and its shaft is provided with a drive pinion 26 which is in mesh with the drive gear 19. The motor 25 may be of any type and is included in a circuit (not shown) adapted to be controlled by means of a switch 27 located in any convenient position and preferably near the projecting end of the operating lever 18 as indicated most clearly in Figure 1.

When the circuit including the motor 25 is closed, the drive shaft 17 is rotated continuously in the same direction and when moved into clutch engagement with either one of the drive pinions 12 imparts a corresponding movement to the platform 7, the latter rotating to the right or left according to which of the drive pinions 12 is in clutch engagement with the drive shaft 17. The movement of the platform 7 is slow by reason of the relative proportions of the elements comprising the train of gearing between the motor and the said platform. The clutch 15—16 is of the friction type, thereby providing for slipping if desired by proper manipulation of the lever 18 as will be readily understood.

What is claimed is:

1. A self-serving table adapted for support on a floor comprising a stand, a table top mounted upon the stand, a rotary platform in substantially the same plane as the top and forming a continuation thereof, disposed centrally of the table top, a ring gear carried by the rotary platform, a drive shaft, means for rotating the drive shaft in one direction, and means engageable by a person while seated about the table, for connecting the drive shaft at either end to the ring gear whereby to rotate the platform in the required direction.

2. A self-serving table adapted for support on a floor comprising a stand, a table top mounted upon the stand, a rotary platform in substantially the same plane as the top forming a continuation thereof and disposed centrally of the table top, a ring gear connected with the rotary platform, drive pinions in mesh with the ring gear at diametrically opposite points, a longitudinally movable drive shaft adapted to be thrown into clutch engagement with either of said drive pinions, means for rotating the drive shaft in one direction, and manually operable means engageable by a person while seated about the table for moving the drive shaft into clutch engagement with either one of said drive pinions.

3. In a self-serving table adapted for support on a floor, a rotary platform disposed in substantially the same plane as the top and forming a continuation thereof, a ring gear having connection with the under side of said platform, oppositely disposed drive pinions in mesh with the ring gear, a longitudinally movable drive shaft, clutches between the drive pinions and drive shaft, a drive gear rotatable with the drive shaft and having the latter movable axially thereof, means manually operable by a person while seated about the table for throwing the drive shaft into clutch engagement with either one of said drive pinions, and a motor for operating said drive gear.

In testimony whereof I affix my signature in presence of two witnesses.

COMMODORE D. WILLIAMS.

Witnesses:
EDDIE WILSON,
DR. THOS. J. CENTER.