G. L. N. MEYER.

CAFETERIA.

APPLICATION FILED MAR. 13, 1920.

1,412,254.

Patented Apr. 11, 1922.

2 SHEETS—SHEET 1.

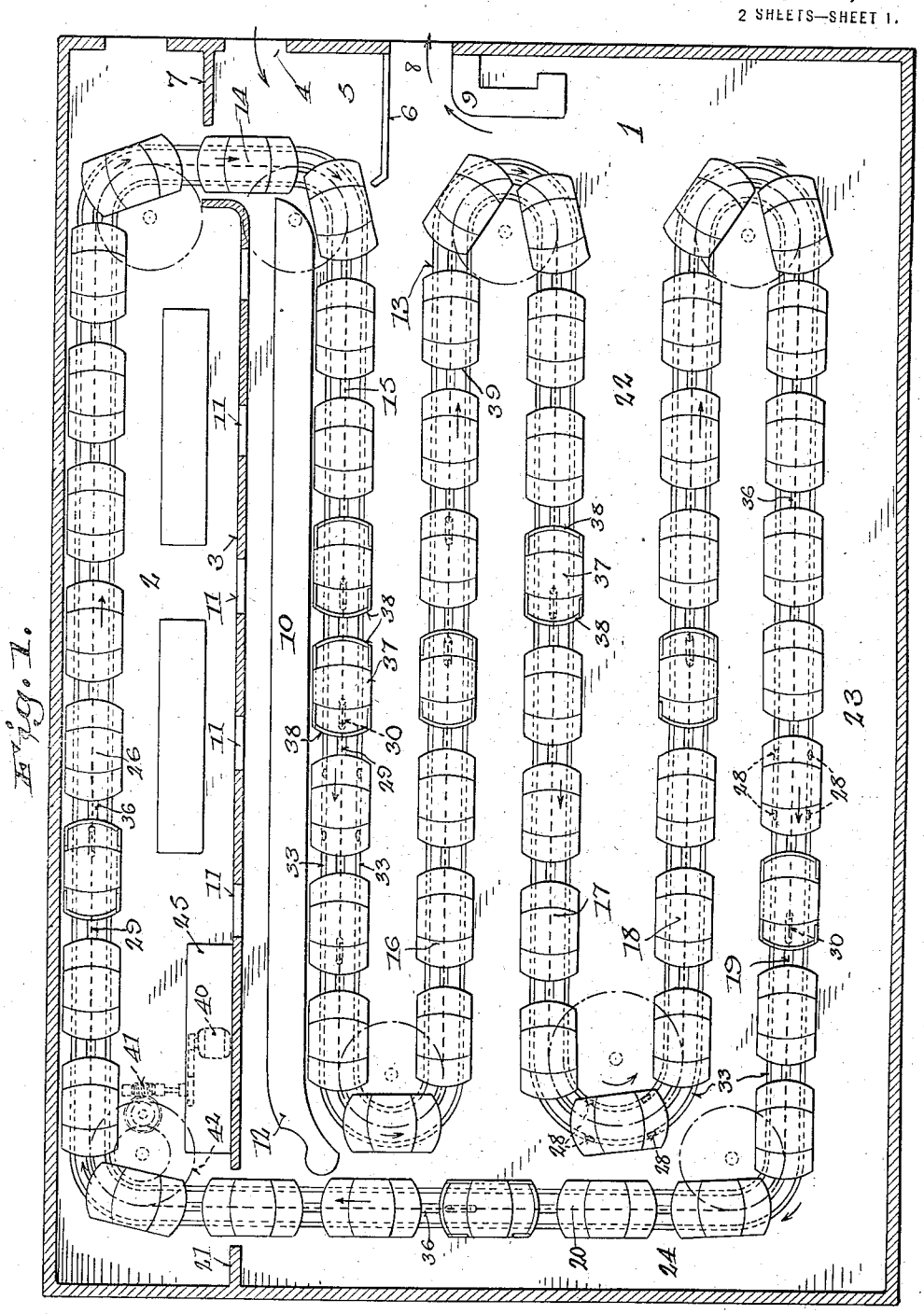


Fig. 1.

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2 SHEETS—SHEET 2.

Fig. 2.

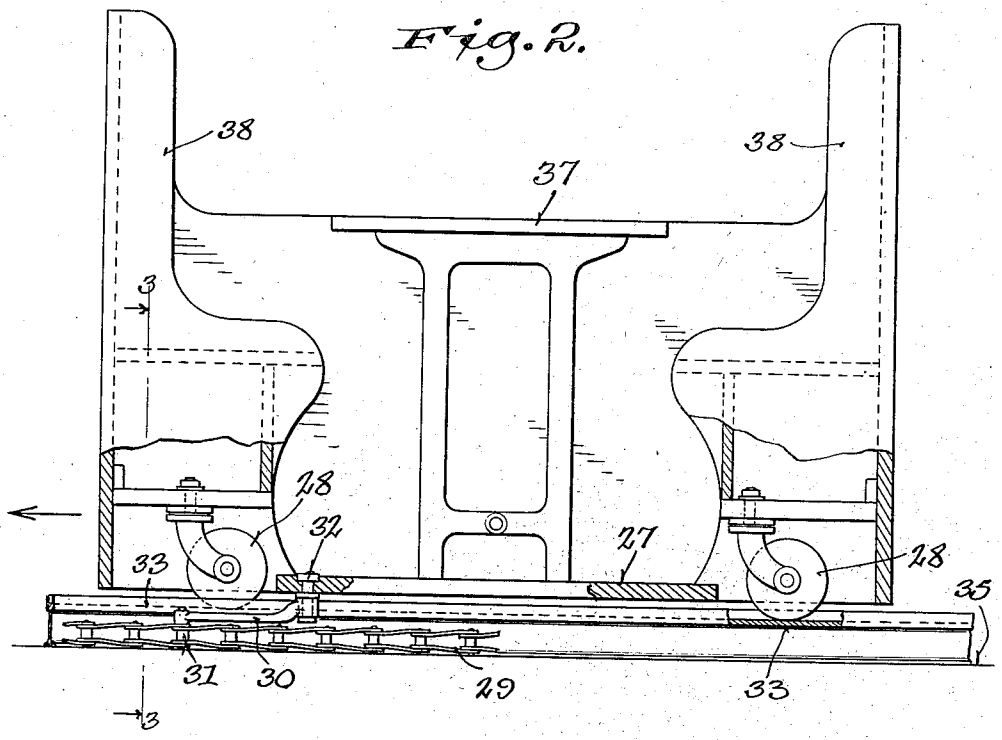


Fig. 3.

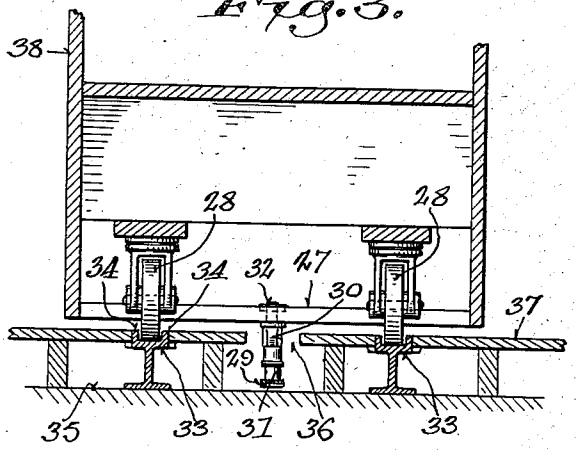
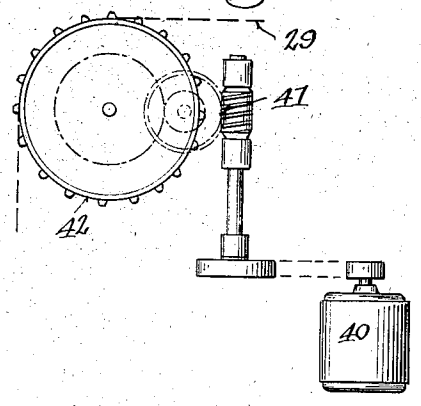


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE L. N. MEYER, OF MILWAUKEE, WISCONSIN.

CAFETERIA.

1,412,254. Specification of Letters Patent. Patented Apr. 11, 1922.

Application filed March 13, 1920. Serial No. 365,587.

To all whom it may concern:

Be it known that I, GEORGE L. N. MEYER, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Cafeterias, of which the following is a specification.

This invention relates to restaurants of the type in which the diners wait upon themselves, such restaurants being generally known as cafeterias. While cafeterias of the general type have greatly lessened the expense of operation and consequently lessened the cost to the consumer, they nevertheless have several defects, chief among which are the confusion which results from the mingling of the incoming and outgoing patrons and from the difficulty and annoyance which come from hunting for an unoccupied table, perhaps located at the remote end of the restaurant, as it is characteristic of the patrons to seat themselves somewhere near the first set of tables.

It is to overcome these defects that the present invention is designed.

Objects of this invention are to provide a cafeteria with the parts thereof so arranged and operated as to completely separate the incoming and the dining patrons from the outgoing patrons; to eliminate the necessity for, and the use of trays; to eliminate the carrying of soiled dishes through the aisles to the kitchen; and to thereby avoid the expense and confusion that usually result from the above enumerated operations.

Other objects are to provide a cafeteria in which a table and chairs are provided as a unit and are caused to travel past the serving counter; to provide a cafeteria in which a series of units each comprising a table and chairs travel continuously and uninterruptedly through a repeating cycle so that continuous operation may be maintained; to provide a cafeteria in which the individual units of the type noted above travel slowly back and forth throughout the length of the dining room and thereby secure an extended period of time in which the diners may be allowed at their tables; to provide a cafeteria in which exit walks are provided at suitably spaced positions so that there is a general gathering of the outgoing patrons into a passageway passing the cashier's desk; and to provide a cafeteria in which the chain of units above noted is caused to finally pass through the kitchen in such a manner that the dishes removed therefrom after having been washed may be again readily placed upon the serving counter with a minimum of effort.

In the drawings:

Fig. 1 is a diagrammatic view showing the entire cafeteria and the relative positions of the various units.

Fig. 2 is an enlarged view partly in section of one of the units.

Fig. 3 is a partial section on the line 3—3 of Fig. 2.

Fig. 4 is a diagrammatic view of one form of driving mechanism.

Fig. 1 shows a dining room 1 and a kitchen 2 separated by a partition 3, the dining room occupying a materially larger division of the restaurant. The entrance 4 for the patrons opens into a compartment 5 which is separated from the rest of the dining room by a partition 6 and from the kitchen by a partition 7. The door 8 for the exit of the patrons is in unrestricted communication with the remaining portion of the dining room, the cashier's desk 9 being located adjacent such door. The serving stand 10 is located adjacent the partition 3 so that the operators who stand between the serving stand 10 and the partition 3 may receive dishes and food through openings 11 in the partition 3 from the kitchen 2 and may arrange such articles upon the serving stand 10. At the remote end of the serving stand, a desk 12 is provided for the operator who puts the check upon the table indicating the amount purchased by the patron. A series of units 13, consisting each of a platform upon which are mounted a table and chairs, are arranged in a regular chain or series and are caused to pass outwardly from the kitchen along the line 14 through the compartment 5 where the waiting patrons are collected, thereby allowing such patrons to seat themselves in the chairs of these units. The units now pass along the line 15 in front of the serving stand 10 and the patrons either with or without the aid of the operators may select what they desire and place the same upon their tables. As they leave the serving stand 10 they pass by the desk 12 and

an operator there places a check upon the table indicating the amount purchased by the patrons. From this point the units pass alternately forwardly and rearwardly along lines 16, 17, 18 and 19 finally passing at right angles thereto along the line 20 towards the kitchen. The patrons may therefore begin eating their lunches when they pass the desk 12 and adequate time is allowed the diners by providing a sufficiently long path of travel before the units again enter the kitchen. This elongated path is secured by causing the tables to take the sinuous path illustrated. When the tables arrive at the forward end of the path 16, the patrons may leave at such point or at any point thereafter until the wall 21 is reached, through which the tables pass in entering the kitchen. An exit walk 22 is provided between the paths 17 and 18 so that such walk is available from either side thereof. As many of these walks as desired may be provided. An exit walk 23 is provided along the outer side of the path 19 and such walk 23 is joined by a walk 24 at right angles thereto which latter walk lies adjacent the line 20. It will thus be seen that no confusion is caused by the patrons leaving the tables as all of the patrons after leaving the tables pass forwardly and finally by the cashier's desk 9 interfering in no manner with those who continue to dine. Further than this, it will be noted that the patrons do not have to hunt for their tables thereby annoying those who are dining, but that the tables pass continuously by the incoming patrons.

Upon passing through the wall 21 the tables pass forwardly by a dishwashing outfit 25 where the dishes are removed, washed and redistributed through the openings 11 in the partition 3 to the operators upon the other side thereof. As the tables pass forwardly along the path 26 through the kitchen they may be wiped off, reset, or otherwise operated upon to prepare them for the subsequent diners.

Figures 2 and 3 show one of the units which comprises a platform 27 mounted upon four casters 28. The platform 27 is adapted to be moved along the closed path as previously described by means of a power driven chain 29 which is connected to the platform by means of a link 30 engaging a pin 31 fastened to the chain 29 and a pin 32 fastened to the platform 27. The rollers of the casters travel upon rails 33 which are provided with flanges 34 upon each side thereof and may be supported, not from the floor of the cafeteria, but from the foundation 35. Either pin 31 or 32 or a portion of the link 30 may pass through a slot 36 in the floor 37 of the cafeteria.

The platform 27 has rigidly mounted thereon a table 37 and a pair of chairs 38 set at opposite sides of the table. These chairs may be made so that each may accommodate two people if so desired. In order to facilitate passing around corners, the ends of the platform 27 and the backs of the chairs 38 are rounded as indicated at 39 in Fig. 1. The table and the front of the chairs may be correspondingly curved if so desired.

Figure 4 illustrates diagrammatically the driving mechanism which may consist of a motor 40 belted or otherwise connected with a reducing mechanism indicated generally by the reference character 41, such reducing mechanism, in turn being connected to a driving sprocket 42 for the chain 29. This sprocket 42 may be any of the sprockets shown in Fig. 1 and may be located at the most convenient place.

It will thus be seen that a cafeteria has been provided in which congestion of the patrons is prevented and in which annoyance is not caused the diners by the outgoing or incoming patrons. It will also be seen that the units substantially fill the doorways between the different compartments, thereby preventing unauthorized passage of the patrons from one compartment into the other.

I claim:

1. A cafeteria comprising a serving stand and a kitchen, a series of units arranged to pass successively and continuously in front of such stand and through said kitchen, each unit comprising a platform carrying a table and a chair.

2. A cafeteria comprising a main compartment or dining room having an exit door, a kitchen located adjacent said dining room, a smaller compartment located between said kitchen and dining room and having an entrance door, a serving stand, and a series of movably mounted tables and chairs arranged to pass in a regular sequence through said kitchen, through said smaller compartment, by said serving stand, and thereafter follow a sinuous path through the main compartment.

3. A cafeteria comprising a serving stand, a kitchen arranged upon one side of said serving stand, and a main dining room upon the other side thereof, a series of units connected to an endless conveyor, each unit comprising a platform, a table, and a chair and arranged to pass around said serving stand through said kitchen and back and forth through the main dining room, the relative interval, occupied by a travelling unit in passing through the main dining room and through the kitchen being properly proportioned to the time required for an average meal and the time required for cleaning the tables, respectively.

4. In combination a cafeteria comprising a kitchen, an entrance compartment, and a main dining room, the kitchen, entrance

compartment, and dining room having doorways placing them in communication; and an endless traveling conveyor comprising a series of units each including a platform, and a table and chair carried thereon, said conveyor passing through said kitchen, entrance compartment, and dining room, and co-operating with said doorways to prevent unauthorized passage of the patrons from one compartment or room into another.

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

GEORGE L. N. MEYER.

Witnesses:

PERCY W. YARD,

THOS. H. ARMSTRONG.