

No. 751,681.

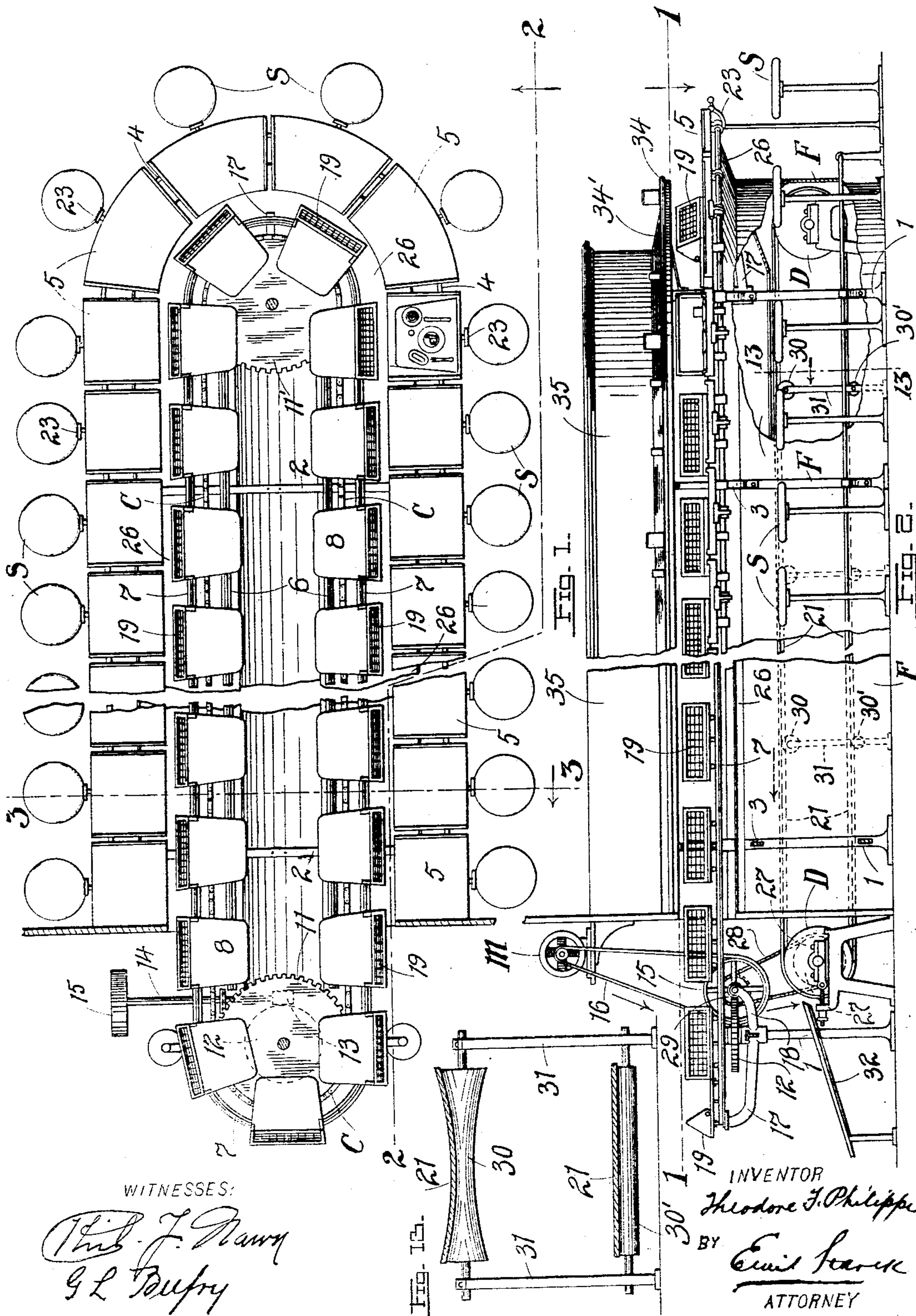
PATENTED FEB. 9, 1904.

T. F. PHILIPPI.  
SELF WAITING LUNCH COUNTER.

APPLICATION FILED JULY 24, 1903.

NO MODEL.

3 SHEETS—SHEET 1.



WITNESSES:

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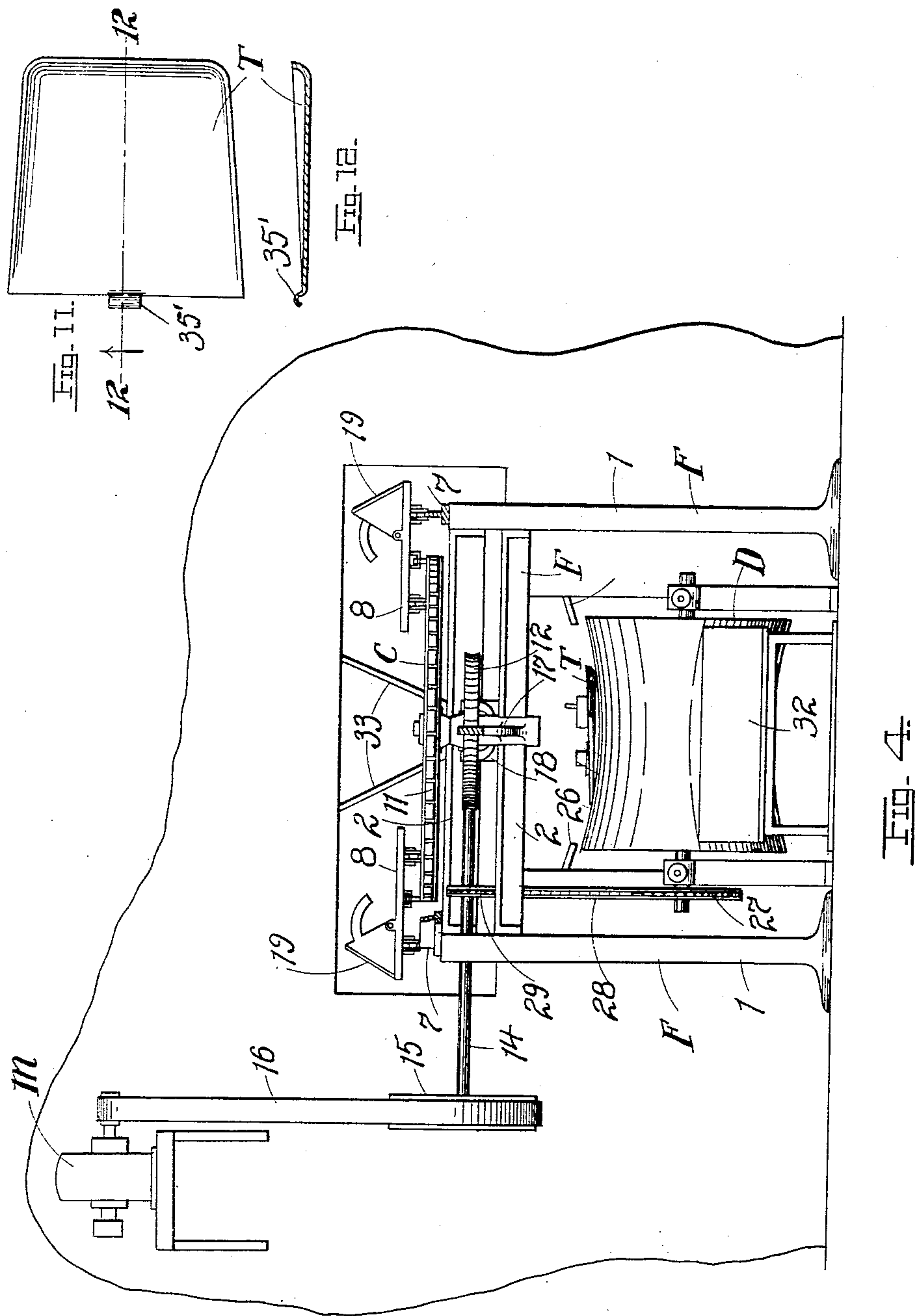
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# UNITED STATES PATENT OFFICE.

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## SELF-WAITING LUNCH-COUNTER.

SPECIFICATION forming part of Letters Patent No. 751,681, dated February 9, 1904.

Application filed July 24, 1903. Serial No. 166,882. (No model.)

*To all whom it may concern:*

Be it known that I, THEODORE F. PHILIPPI, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Self-Waiting Lunch-Counters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in self-waiting lunch-counters; and it consists in the novel construction of counter more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a top plan of the device with condiment-shelf omitted, being virtually a section on line 1 1 of Fig. 2. Fig. 2 is a combined section and elevation on line 2 2 of Fig. 1. Fig. 3 is a transverse vertical section on line 3 3 of Fig. 1. Fig. 4 is a rear end elevation. Fig. 5 is a vertical section on line 5 5 of Fig. 6, showing detail of one of the tilting tables. Fig. 6 is an end view of the table. Fig. 7 is a front elevation of one of the traveling tray-supporting sections. Fig. 8 is an end elevation showing wire-screen door closed. Fig. 9 is a top plan. Fig. 10 is a perspective of one of the links of the drive-chain for the tray-supporting sections. Fig. 11 is a plan of one of the trays. Fig. 12 is a section on line 12 12 of Fig. 11; and Fig. 13 is a transverse section on line 13 13 of Fig. 2, showing idlers for supporting the laps of the conveyer-belt.

The object of my invention is to construct a lunch-counter contiguous to which shall be located a conveyer for delivering the food to the diners seated along the counter, such conveyer being divided into a series of sections or compartments each designed for delivering a meal of selected articles to suit the taste of the diner, special provision being made for access to any compartment as the same passes in front of the person seated at the counter.

A further object is to insure provision for returning the dishes at the conclusion of the meal back to the kitchen or any place available for their removal.

The device, in effect, becomes a self-waiting lunch-counter, dispensing with waiters altogether, as will more fully appear from a de-

tailed description of the invention, which is as follows:

Referring to the drawings, F represents a suitable oblong counter-frame composed of a series of standards 1 1, cross-bars 2, brackets 3, and enveloping gas-pipe 4, by which the several operating parts are supported. Disposed around the frame and mounted to the gas-pipe 4 are a series of tilting tables 5, normally held locked in a horizontal position while the diner is seated at the table. In front of each table is a seat S of the usual design. Disposed longitudinally along the frame F, on each side of the center line thereof, are the inner rails or tracks 6 and the outer endless rails or tracks 7, along which are adapted to travel a chain of linked tray supports or sections 8, each tray-support being mounted on two pairs of rollers 9 10, respectively, traveling on the aforesaid rails, the rollers 9 traveling on the inner rails 6 and the rollers 10 traveling on the outer endless rail or track 7. The tray-supports are linked together by a sprocket-chain C, to which motion is imparted at one end by a sprocket-wheel 11, mounted at one end of the frame F, said sprocket having connected thereto a worm-wheel 12, to which rotation is imparted by a worm-pinion 13 on the drive-shaft 14, at one end of which is secured a belt-pulley 15, to which power is communicated through a belt 16 from a suitable motor M. The opposite end of the chain C passes over a sprocket-wheel 11', mounted at the opposite end of the frame F. The closed ends of the outer track 7 are supported by the arms 17, projecting from the cross-beam between the terminal standards of the general framework F, the drive-shaft 14 being supported by an arm 18, forming a part of the same casting with the arm 17, Figs. 2, 3, 4.

Each tray-support 8 is provided with an inclined screen-door 19, which is normally locked, but which upon the introduction of a suitable coin or check (sold by the cashier) into the coin-slot 20, Fig. 7, permits the door to open, when the diner can draw out the tray T, with the meal, and place the same before him on the table 5, at which he may be seated. The coin-controlled device is shown diagrammatically and not in detail, as the same forms no part of the present invention.



The tray T, with its dishes left after a meal on the table 5, may be dumped onto an endless belt or conveyer 21 by the next patron who may chance to occupy the same table, this being accomplished by the following mechanism: Each table 5 is mounted so as to rock, with its bearings 22, about the supporting gas-pipe 4. The table is normally held supported in a horizontal position by the weighted locking-pawl 23, pivoted below the outer edge of the table, Fig. 5, the pawl engaging the eccentric tooth 24 of a collar 25, rigidly clamped to the pipe between the bearings 22. Upon disengaging the pawl from the tooth 24 (see dotted position, Fig. 5) the table, being mounted to one side of its center of gravity, tilts rearwardly, allowing the tray T, with its dishes, to slide down the incline 26, the tray finally landing on the conveyer or belt 21, Fig. 4. This belt passes over terminal spool-shaped skeleton drums D D, mounted on suitable bearings within the frame F, the shaft of the driving-drum carrying a sprocket-wheel 27, over which passes a sprocket-chain 28, the opposite end of the chain engaging a sprocket-pinion 29 on the drive-shaft 14. At intervals the upper and lower laps of the conveyer-belt are supported on idler-pulleys 30 30', Fig. 13, mounted between standards 31. As the trays reach the rear of the conveyer they are deposited on an incline 32, from which they are taken back to the kitchen to be washed and refilled.

Surmounting the general frame F and overhanging the series of tray-supporting sections and secured to the frame by straps 33 is a condiment-supporting ledge 34, having an inner panel of glass 34' to admit light from above onto the food carried in the trays and supported on the sections 8. The whole is capped by an ornamental frieze 35.

To facilitate the withdrawal of the tray T, the latter is provided with a lip 35', by which it may be seized.

Parts shown and not herein specifically referred to are old and well known in fixture construction and are not claimed herein.

It is apparent, of course, that the present device is susceptible of various ornamentations and changes of details; but these would in no wise affect the nature or spirit of my invention.

The operation of the device is apparent from the foregoing description; but as a resumé I may state that a person entering the dining-room seats himself in front of one of the tables, the series of sections 8 with their food contents slowly advancing toward him. At the proper moment or as soon as any particular section is within reach the patron deposits the necessary coin or check into the coin-slot of the particular section, the screen-door opens, and the tray T may be withdrawn and placed on the table. The next patron can dump the tray, with its dishes, as previously indicated,

by tilting the table, the tray landing on the endless conveyer, where it is taken back to the kitchen. By reengaging the pawl 23 with the tooth 24 the table is again in proper position for use. The entire mechanism may be timed so as to give ample opportunity to accomplish the purpose here outlined. In turning the corners at either end of the frame F the rollers 9 of course momentarily leave the inner rails 6 and pass over the terminal wheels 11 11', as is obvious.

Any suitable means may be improvised for keeping the meals warm while on the tray supports or sections 8, such as a gas-jet, steam-coils, and the like.

Having described my invention, what I claim is—

1. A self-waiting lunch-counter comprising a series of tilting tables, a conveyer located adjacent thereto for advancing the food along the counter, and a second conveyer located below the tables, the contents of the tables being adapted to be deposited on said bottom conveyer by a tilting of the tables in proper direction, substantially as set forth.

2. A self-waiting lunch-counter comprising a series of tilting tables, a series of linked tray-supporting sections located contiguous thereto, means for advancing said sections, an endless conveyer located below the tables, and devices for releasing the tables and permitting them to tilt for depositing the trays onto said conveyer, substantially as set forth.

3. A self-waiting lunch-counter comprising a series of tilting tables, means for normally holding said tables locked in a horizontal position, a chain of linked tray-supporting sections adapted to be advanced along said tables, a conveyer located below the tables and disposed centrally the length of the counter, inclines leading from the tables toward the conveyer, and means for simultaneous advancing the tray-supporting sections and the conveyer, substantially as set forth.

4. A self-waiting lunch-counter comprising a series of tilting tables, a conveyer located adjacent thereto for advancing the food along the counter, and separate means for receiving the objects discharged from the tables upon a proper inclination of the latter, substantially as set forth.

5. A self-waiting lunch-counter comprising a suitable counter, a conveyer located adjacent thereto for advancing the food along the counter, a conveyer located below the counter, and means for mechanically discharging the dishes from said counter to the bottom conveyer, substantially as set forth.

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

THEODORE F. PHILIPPI.

Witnesses:

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