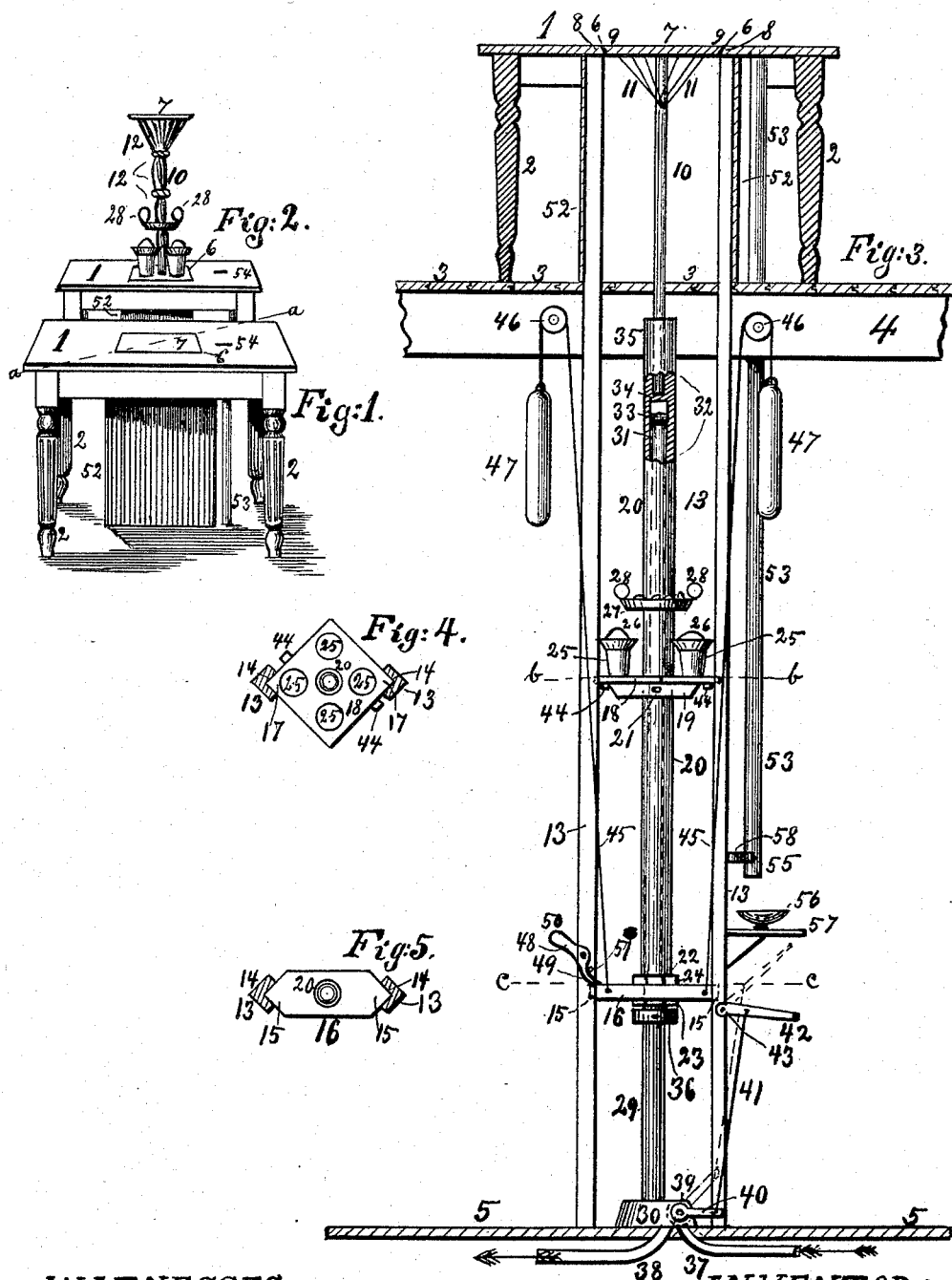


(No Model.)

J. G. SMITH.  
ELEVATOR TABLE.

No. 526,505.

Patented Sept. 25, 1894.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOSHUA GEO. SMITH, OF ST. PAUL, MINNESOTA.

## ELEVATOR-TABLE.

SPECIFICATION forming part of Letters Patent No. 526,505, dated September 25, 1894.

Application filed November 8, 1893. Serial No. 490,390. (No model.)

*To all whom it may concern:*

Be it known that I, JOSHUA GEO. SMITH, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Elevator-Tables for Ice-Cream Parlors; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in tables of the class used in restaurants, taverns and more especially for ice-cream parlors.

The object of my invention is to provide a table of such construction that the persons waiting on the table may furnish the dishes without appearing at or near the table, by sending everything up through an aperture in the table from the kitchen, wine-cellar or ice-cream cellar, &c., below the floor on which the table stands, so that in the case of a restaurant the steam, heat, appearance and noise of the kitchen will not annoy the visitors or guests; and in an ice cream parlor or a wine house the ice cream, wine, beer, &c., may be kept in a cool cellar, from which only the quantities ordered are served upon the table as soon as paid for. The numerous benefits derived from this arrangement are so obvious that I need not dwell further on the merits of the invention.

I attain my object by the novel construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1, is a perspective view of my improved table as it appears when not in use. Fig. 2, is a perspective view of the table as it appears when a few dishes of ice cream have been ordered and furnished on it ready for the guests to help themselves. Fig. 3, is a sectional side view on the line *a, a*, in Fig. 1, cutting through the floor on which the table stands and exposing the arrangement below the floor in the cellar or lower story. Fig. 4, is a sectional top view on the line *b, b*, in Fig. 3. Fig. 5, is a sectional top view on the line *c, c*, in Fig. 3.

Referring to the various parts of the draw-

ings by reference numerals, 1, is the table proper, which is provided with ordinary legs 2, standing on the floor 3, of which 4, is one of the joists.

5, represents the cellar floor shown in section. In the center of the table 1, I provide an aperture 6, which in the normal condition of the table is covered by a lid 7, which is beveled at its edges 9, shown in Fig. 3, so as to guide easily down into the aperture 6, until its upper surface comes flush with the top of the table where it is retained by the flaring edges 8, of the table, adjoining the edges 9, of the lid, and by the weight of the rod 10, (see Fig. 3,) which hangs down, from the lid 7, in which its upper end is centrally secured and braced by the wires 11, which also serve as a part of the frame for an ornamentally rayed or corrugated paper or cloth cover 12, (shown in Fig. 2,) by which the rod 10, and its lower extension (hereinafter to be described) are covered so as to form an ornamental column when appearing above the table as in Fig. 2.

13, are two uprights extending from the cellar floor 5, up under the table 1, near two opposite corners of the aperture 6. These uprights 13, are at their inner sides provided with angular grooves 14, (shown in Figs. 4, and 5,) which serve as guides for the ends 15, of the crosshead 16, and also for the corners 17, of the waiter or elevator platform 18, which is secured upon a cleat or block 19. The waiter 18, and block 19 has a pipe 20, passed through their centers and are secured to the pipe by the set screw 21. The pipe 20, has its lower end 22, secured in the center of the crosshead 16, by means of the screw-threaded nuts 23, and 24. Besides the waiter or platform 18, which in Fig. 3, is shown as carrying two glasses of water, 25, with the ice cream dishes 26, on the top of them, I secure a little higher up on the pipe 20, a cake dish 27, having napkin rings 28, secured at several points of its brim.

29, is a water pipe secured at its bottom end in the hollow casting 30, which is secured to the floor 5. This pipe 29, extends up into the pipe 20, and is at its upper end 31, (shown through the cut-away 32,) provided with a packing 33, of rubber, leather or other suitable materials, adapted to fit and act as a

piston in the pipe 20. Near above the piston 33, (as shown in Fig. 3,) the pipe 20 has a bottom 34, upon which rests the end of the rod 10, loosely inserted in the upper end 35, of the pipe 20.

36, is an adjustable set screwed stop collar for the crosshead 16, to rest on.

37, is a water pipe leading water pressure into the pipe 29, and 38, is another water pipe leading the water out of the standpipe 29. The two pipes 37, and 38, are connected to a three-gated valve 39, having the arm 40, rod 41, and hand lever 42, pivoted at 43, to one of the uprights 13, so that when the operator swings the lever 42, upward, as shown in dotted lines, the water runs through the valve 39, fills the pipe 29, and by pressing under the partition 34, of the pipe 20, causes the latter to ascend until the stops 44, which are secured at the under side of the traveling table or platform 18, touch under the table 1, which brings the top of the traveling table 18, flush with the top of the stationary table 1, as shown in Fig. 2. When the lever 42, is swung downward the water in the pipes 29, and 20, escapes through the valve 39, and pipe 38, thus allowing the elevator that is, the platform 18, dish 27, crosshead 16 and pipe 20 to descend to the position shown in Fig. 3. Where there is no water pressure to be had for the operation of the elevator, the standpipe 29, and everything belonging to the operation by water, may be dispensed with and the elevator is then sent up and down by hand-power.

The operator after placing the ordered dishes, on the platform 18, takes hold of the crosshead 16, and pushes it upward, and likewise pulls it down when wanting it down again. In this case the elevator is counter-balanced by having two cords 45, secured with their lower ends to the crosshead 16; passed over rope pulleys or sheaves 46, pivotally secured to the joist 4, and provided with the balance weights 47, which are calculated to fully balance the elevator, even when loaded. Hence in order to retain the elevator down I pivot to one of the uprights 13, a pawl or dog 48, of which the lower end 49 engages the upper side of the crosshead 16. The upper end 50, of the pawl leans outward and is sufficiently heavy to keep the lower end inward against the stopping pin 51, secured in the upright 13. When the crosshead 16, passes down by the point of the pawl, it pushes it away and after getting below it the weighted arm 50, swings the pawl in again above the crosshead locking it. When the elevator is to move upward the operator gives the dog 48, a touch so as to release the crosshead and up goes the elevator almost by itself. If heavily loaded the operator may assist it by lifting under the crosshead 16, or pulling down on the weights 47, or both, as he may find convenient. 52, is a box or screen under the table 1, for guarding the way of the elevator and may be termed the elevator

shaft. 53, is the signal tube, which may be arranged in various ways. In the present instance it consists of a plain tube having its upper end registering with a small hole 54, in the table 1, and its lower end 55, registering with and suspended over an inverted bell 56, secured upon the bracket 57, projecting from the upright 13.

58, is a brace securing the tube 53, to the upright 13.

In operation the person or persons wishing to buy, for instance ice-cream buys from the cashier when entering the ice-cream parlor, brass checks on which are indicated the flavor of ice-cream wanted; he takes his seat at one of the tables, drops the check or checks into the slot 54, in the table and as the check drops into the bell 56, the sound of the bell is observed by the person or persons in the cellar, the check is at once picked up and the order filled by placing the dishes on the little platform 18, and elevating it either by hand and weights or by water, or any other power which may be at disposal.

As indicated by the numeral 25, in Fig. 4, I may place four dishes at a time upon even a small platform, and bigger platforms may be provided for purposes requiring such.

Where the elevator is driven by water power the platform 18, and lid 7, may be made round, and the uprights 13, and crosshead 16, dispensed with, as the pipe 29, may be all the guide that is needed for the elevator. When water power is not used the bottom 34, is dispensed with and the top end 35, of the tube 20, moves upward to the wires 11, before it lifts the lid 7. This makes the lid 7, stand a shorter distance above the table than when the bottom 34, must be used.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a device of the class described, the combination with the table 1, having the legs 2, the central aperture 6, and the flared lid 7, of the elevator consisting of a traveling upright having its upper end secured to the lid 7, for raising the same above the table when the elevator platform is up and closing the aperture with the lid when the platform is down; the guides 13, the platform or waiter 18, and crosshead 16, secured to the traveling rod 20, and guided by the said guides 13, substantially as shown and described.

2. The combination of the table 1, having the aperture 6, and lid 7, the inclosure 52, extending from the table to the floor and registering with the openings in the table and in the floor; the upright guides 13, the traveling upright 20; the platform 18, the crosshead 16, and the dog 48, with the cords or chains 45, sheaves 46, and weights 47, substantially as and for the purpose set forth.

3. In a device of the kind described, the combination with a counter balanced upright traveling rod or tube of a waiter or platform as 18, having the stops 44, the cake dish 27,

provided with the napkin rings 28, and being centrally secured upon the traveling rod and means for stopping the downward motion of the elevator, substantially as shown and described.

4. The table elevator having two telescoping upright tubes, as 20 and 29, of which the inner tube is stationary and the outer tube slides on the inner one, and carries a dish as 27, a platform as 18, and in its top end an ornamental column as 10—12 having a cap or lid as 7, substantially as and for the purpose set forth.

5. The combination of a table having a central opening and an elevator shaft registering therewith and extending down into a cellar or lower story, of a signal device consisting of a tube extending from beneath a small hole or slot as 54, in the table adapted to receive and convey order checks or tickets to the waiters attending in the story below; the inverted bell 56, suitably secured a short dis-

tance below the lower end of the signal tube, substantially as shown and for the purpose set forth.

6. The combination of an ice-cream parlor and an ice-cream cellar below it, said parlor being provided with a table having a centrally located opening registering with an elevator shaft extending into the cellar, a traveling platform for delivering dishes from the cellar upon the table, a signal device for sending the order from the parlor down into the cellar and means for covering the opening in the table when the elevator stands still in either a lowered or raised position, substantially as shown and described and for the purpose specified.

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

JOSHUA GEO. SMITH.

Witnesses:

A. M. CARLSEN,  
THOS. P. BRENNAN.