

Feb. 19, 1935.

F. LE R. FRANCISCO

1,992,064

CIGAR MAKER'S TABLE

Filed June 16, 1933

2 Sheets-Sheet 1

Fig. 1.

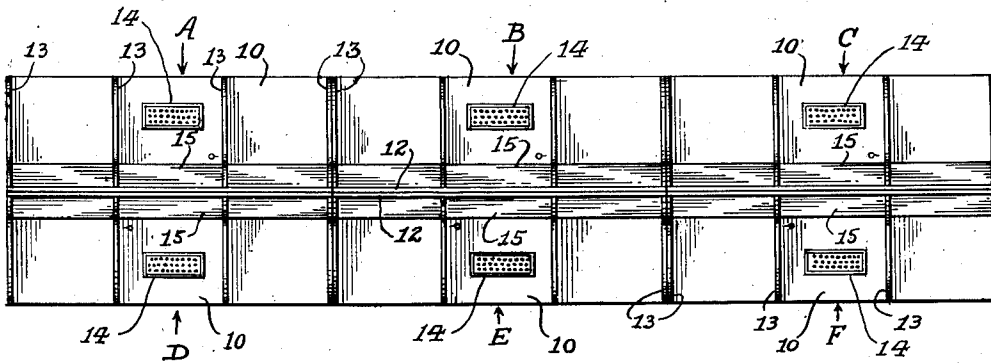


Fig. 2.

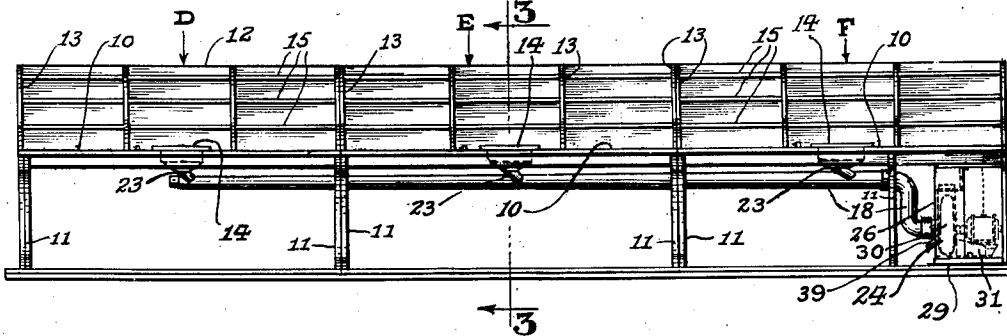
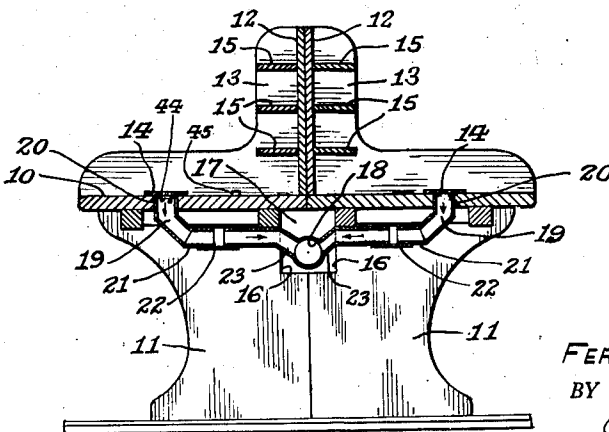


Fig. 3.



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Fig. 4.

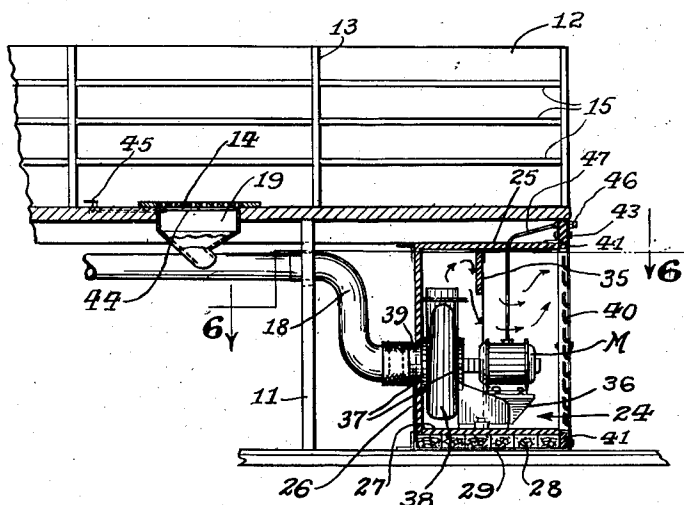


Fig. 6.

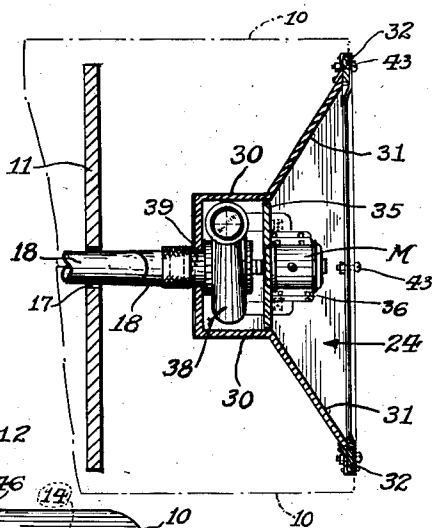


Fig. 5.

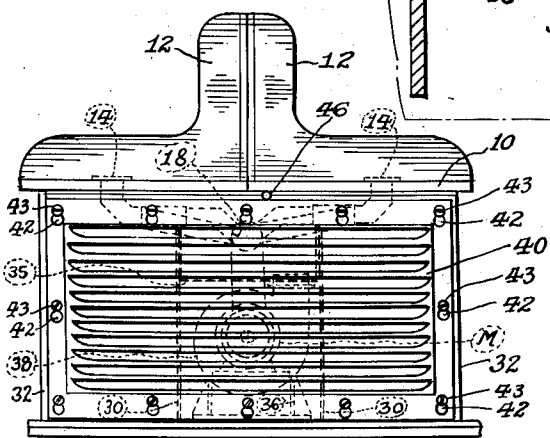


Fig. 7.

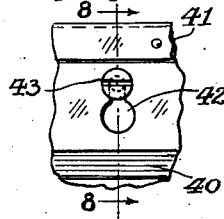
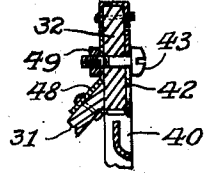


Fig. 8.



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1,992,064

CIGAR MAKER'S TABLE

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Application June 16, 1933, Serial No. 676,174

9 Claims. (Cl. 131—48)

My invention relates to cigar makers' tables and the like, and especially to means for creating suction to hold the wrappers flat while wrapping the cigars or other articles.

In cigar factories where cigars are made by hand, long tables are provided at which the cigar makers sit and at definite intervals on the tables there are provided, one for each cigar maker, a perforated suction plate over which he spreads the cigar leaf wrapper, so that it will be held out smoothly by suction for rolling purposes. As a rule, these suction plates are arranged in what may be termed a battery formation depending upon the number of cigar makers working at each table. These tables are located in a room in one part of the building and in another part of the building the factories provide a large suction creating mechanism, most usually located in the basement of the building. Such mechanism is generally high powered and expensive in construction and operation. Leading therefrom to the room where the tables are located are pipe connections with branch connections leading to each of the suction plates on the table. Regardless of the number of operators employed at different times, it is necessary to operate at considerable expense this large suction apparatus capable of serving all of the tables; and when only a few operators are employed and only a few of the tables are used, the suction apparatus must be kept in operation, and this involves when only a few tables are in use, a waste of power and increase in overhead and cost.

With the foregoing in mind, the general object of my invention is to provide a relatively small and inexpensive cheaply operated suction creating apparatus for each table, whereby whether a great number of operators are employed or only a few operators are employed, the suction creating apparatus may be operated at a relatively small cost.

Other objects of the invention are to provide a housing for said apparatus, preferably designed to be placed under the table, constructed and arranged to deaden the noise of the operating parts, and to discharge the air directly into the room where the tables are located without creating noticeable or objectionable drafts; and to provide such housings and apparatus as units for quick and easy installation.

The foregoing and other objects and advantages of the invention and the means by which they are accomplished will become apparent and will be pointed out during the course of the following detailed description of the accompanying

drawings, wherein is shown a preferred embodiment of the invention and in which

Fig. 1 is a top plan view of an assembled table embodying my invention;

Fig. 2 is a side elevation of the assembly shown in Fig. 1;

Fig. 3 is a view taken on the line 3—3 of Fig. 2;

Fig. 4 is a vertical sectional view taken at the exhausting end of the table;

Fig. 5 is an elevation of the same end of the table;

Fig. 6 is a view taken on the line 6—6 of Fig. 4;

Fig. 7 is a fragmentary plan view of a portion of the end closure shown in Fig. 5 showing one of the detachable fastening means therefor; and

Fig. 8 is a view taken on the line 8—8 of Fig. 7.

In Figs. 1 and 2, the reference letters A, B, C, D, E and F designate respectively, units of a table assembly, and each unit comprising a top 10 supported upon uprights or legs 11. Above the top 10 of each unit are longitudinal partitions 12, and transverse partitions 13 dividing each unit into three divisions. The intermediate division of each unit has an opening over which is mounted a perforated plate 14. Between the transverse partitions 13 and along the partitions 12 are shelves 15 on which the workers or cigar makers may place the completed cigars. The units are assembled end to end, as shown in Figs. 1 and 2, so that on each side of the table there are three divisions having perforate plates 14 each located between divisions not provided with perforate plates. Each cigar maker sits in front of a division of the table having a perforated plate 14, which is connected to suction apparatus hereinafter described, so that the cigar leaf wrappers may be placed on the perforate plates and held in flat position so that the cigar fillers may be rolled thereover and completely wrapped. The bunchers, that is, the workers who form the fillers to be wrapped, sit on each side of the workers who do the wrapping, there being usually two bunchers for each wrapper.

In Fig. 3, the uprights or legs 11 of each unit are recessed or notched as at 16, so that when the uprights of each unit are placed together as shown in Fig. 3, there are openings 17 aligned between the ends of the table and through which extends the pipe 18.

Beneath the tables and each of the perforated plates 14, there is a flue or inverted hood 19, each extending through an opening 20 in the tables and having their upper ends connected to or closely abutting the plates 14. To the lower ends of each of the hoods or flues 19 is connect-

ed a pipe 21, also connected by a flexible sleeve 22 to a branch pipe 23 communicating into the pipe 18. One end of the pipe 18 terminates in branches 23 at the left end of the tables as viewed in Fig. 2, and the other end is connected by a flexible sleeve to collar 39 which leads into a housing designated generally in Fig. 2, at the right end thereof, by the numeral 24. This chamber is disposed immediately beneath the first two divisions of the table units, and the details of construction are shown in Figs. 4 and 6.

The chamber 24 includes a top 25, rear wall 26, and bottom 27 of sound-proof material, that is, material having sound wave absorbing properties. The bottom 27 preferably rests on cushioning blocks 28 which are disposed between the bottom 27 and a plate 29, as shown in Fig. 4, although the blocks may rest directly on the floor. In Fig. 5, the side walls 30 of the chamber, also of sound wave absorbing material, are shown as arranged at right angles to the back 26 and connected to flaring walls 31 which, at their outer ends, are connected to the uprights 32 of a frame disposed at the end of the table. Beneath the top 25 in alinement with the inner ends of the walls 31 is a depending plate 35 extending between the sides 30, and which, as hereinafter explained, serves as a baffle. That portion of the housing between the flaring walls 31 and baffle 35 serves as an expansion chamber. A bracket 36 supports an electric motor "M" and journals 37 for the exhauster fan 38.

When the motor actuates the exhauster, air is sucked through the perforations in the plates 14, flues 19 and branches connecting the flues to the main pipe 18 and is discharged from the exhauster as shown by the arrows in Fig. 4 at the top of the housing 24, where it is deflected downwardly by the baffle 35. The air then enters the expansion chamber and escapes through the openings in the louver plate 40. As shown clearly in Figs. 5, 7 and 8, the louver plate 40 is detachably connected to the front of the frame composed of the side pieces 32 of Fig. 6, and the top and bottom cross pieces 41 of Fig. 4, by means of key-hole slots 42 provided in the louver plate and which engage over bolt heads 43 on the parts 32 and 41. The said supporting frame may be connected by any suitable means to the end table units if desired.

By the foregoing construction and arrangement of the exhauster housing, baffle, expansion chamber and louver plate, and by employing a relatively small motor and exhauster, the air is discharged through the louver without noticeable or objectionable velocity. This is important because under the construction and arrangement of parts forming the unitary exhauster the air is discharged within the room where the operators are working. Furthermore, by constructing the exhauster housing of sound deadening material, it is practically impossible to audibly detect the operation of the parts. In actual practice, I have found a one-quarter H. P. motor to be sufficient for ten to twelve rolling plates.

In addition to the foregoing advantages, another important one is that the tables may be moved in units and assembled to fit spaces of different lengths. There may be any number of the tables assembled on a relatively large floor space and each group provided with exhausting apparatus and motor capable of providing a sufficient suction through ten to twelve of the plates without creating noise or noticeable draft

in the room. Of course, if it is necessary to reduce the number of operators so that only one table or a limited number of divisions thereon are in use, it is only necessary to operate one small motor instead of a large exhausting apparatus as has been the case prior to my invention.

In connection with the last above stated advantage, I may further provide a slide or damper plate in connection with each perforated plate 14, so that those which are not in use may be completely closed, or so that the operators may control the amount or extent of the openings in the perforated plates to suit their individual desires. Such plate 44 is shown in Fig. 4 as comprising a damper shown in dotted lines below the surface of the table and slidable beneath the perforated plate by handle 45, it being understood that the plate 44 would have openings at definite intervals which could be brought into partial registry with the openings in the perforate plates 14 to partially close said latter openings, or, if desired, to completely close them. A switch 46 may be conveniently provided at the end of the table and connected by wires 47 with the motor to control operation thereof.

The manner of mounting or connecting the parts of the housing is not material to the invention but I have shown a preferable form, wherein the uprights 32 have an angle strip 48 preferably of metal clamped thereagainst by the nuts 49 on the bolts 43 and the ends of the flaring boards 31 are beveled to flushly engage against the rear surface of the uprights 32 with a portion of the rear surface also engaging against strips 48. The other walls of the housing may also be connected at the corners by angle plates or clips, so that the entire housing including the louver plate and exhauster mechanism may be moved as a unit.

In operation, and with the parts assembled as shown in Figs. 1 and 2, as many operators as are needed are seated on opposite sides of the table, one at each division in front of a perforated plate 14 on which the cigar wrappers are placed and held when the motor is operating. To start operation of the motor, the switch 46 is closed and the dampers 44 are adjusted by the operators as desired, so that air will be sucked through the plates 14 in the manner previously described and discharged through the exhauster against the baffle 35 and then into the expansion chamber where the velocity, which is not great due to the small size of the motor and exhauster, is further reduced, and the air is discharged through the louvers in the plate 40. I found in actual practice, that any number of assembled table units may be operated within a room without creating noticeable noise or draft and at a relatively low cost. Furthermore, the tables and exhauster housings may be moved at will with little trouble.

I do not limit the invention to the precise number of table units shown for the purposes of illustration in the drawings and which are made from an actual installation, nor do I limit it to any definite size of exhausting housing or expansion chamber. The housing is preferably of a size to fit under the tables, and I find that by mounting the louver plate at the end of the table, I provide not only an attractive appearance and conceal the apparatus, but afford ready access thereto if necessary at any time.

I claim:

1. Wrapping equipment including a table having a top with a plurality of perforate plates on

which wrappers may be placed, an air conduit beneath the top, branch pipes leading from the conduit to the said plates, an exhaustor housing beneath the table, low pressure exhausting mechanism in said housing connected to said conduit to draw air therethrough and through said branches and perforate plates, and a removable cover for said housing having openings for escapement of the air from said exhausting mechanism.

2. Wrapping equipment including a table having a top with a plurality of perforate plates on which wrappers may be placed, an air conduit beneath the top, branch pipes leading from the conduit to the said plates, an exhaustor housing beneath the table, low pressure exhausting mechanism in said housing connected to said conduit to draw air therethrough and through said branches and perforate plates, and a baffle in said housing against which the air is projected.

3. Wrapping equipment including a table having a top with a plurality of perforate plates on which wrappers may be placed, an air conduit beneath the top, branch pipes leading from the conduit to the said plates, an exhaustor housing beneath the table, low pressure exhausting mechanism in said housing connected to said conduit to draw air therethrough and through said branches and perforate plates, a baffle in said housing against which the air is projected, and an expansion chamber in said housing through which the air passes after leaving the exhausting mechanism.

4. Wrapping equipment including a table having a top with a plurality of perforate plates on which wrappers may be placed, an air conduit beneath the top, branch pipes leading from the conduit to the said plates, an exhaustor housing beneath the table, low pressure exhausting mechanism in said housing connected to said conduit to draw air therethrough and through said branches and perforate plates, a baffle in said housing against which the air is projected, an expansion chamber in said housing through which the air passes after leaving the exhausting mechanism, and a removable cover for said chamber having openings for escapement of the air from said exhausting mechanism.

5. A cigar maker's table composed of several similar units each having a top with openings therein, a perforate plate across each opening, an air conducting flue leading from each of said openings, said units being adapted for assembled alinement to form an elongated table, a conduit beneath the tops of said alined units, means detachably connecting said flues to said conduit, an exhaustor housing beneath the end

units, and low pressure air exhausting mechanism in said housing connected to said conduit to draw air therethrough and through said flues and perforate plates.

6. A cigar maker's table composed of several similar units each having a top with openings therein, a perforate plate across each opening, an air conducting flue leading from each of said openings, said units being adapted for assembled alinement to form an elongated table, a conduit beneath the tops of said alined units, means detachably connecting said flues to said conduit, an exhaustor housing beneath the end units, and low pressure air exhausting mechanism in said housing connected to said conduit to draw air therethrough and through said flues and perforate plates, and a closure at the end of the table for the housing and provided with openings for escapement of the air from said exhaustor mechanism.

7. Apparatus for use with a wrapping table of the type having openings in its top, an air conduit and branches connecting said conduit and openings, comprising a housing of sound wave absorbing material to fit beneath the table, low pressure exhausting mechanism in said housing for connection with said conduit to draw air through said openings, and a removable closure for said housing having openings for escapement of air discharged by said exhausting mechanism.

8. Apparatus for use with a wrapping table having a top and a plurality of openings therein, an air conduit, and flues leading from said openings and communicating into the conduit, comprising an exhaustor housing to fit beneath the table, low pressure exhausting mechanism in said housing for connection with said conduit to draw air therethrough and through said openings and flues, a baffle in said housing arranged with respect to the discharge end of the exhaustor to deflect the air and particles carried thereby downwardly, and an expansion chamber in the housing into which the air is discharged.

9. A cigar maker's table comprising a top having a plurality of openings, a perforate plate across each opening, an air conduit beneath the top, flues leading from each of said openings into the conduit, an exhaustor housing beneath the table adjacent one end thereof, low pressure exhausting mechanism in said housing connected to said conduit to draw air therethrough and through said perforate plates and flues, an expansion chamber into which the air is discharged, and a removable closure for said chamber provided with openings through which the air may escape.

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