Jan. 1, 1963 D. C. LUCHT 3,071,132

FOOT VIBRATION MASSAGE DEVICE

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Fig. 1

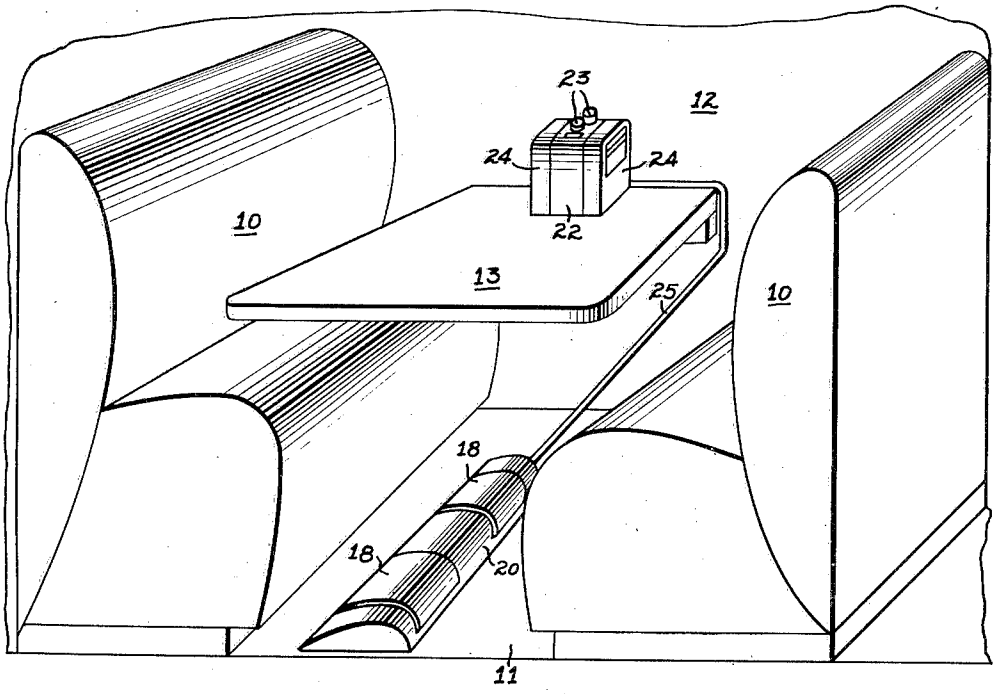
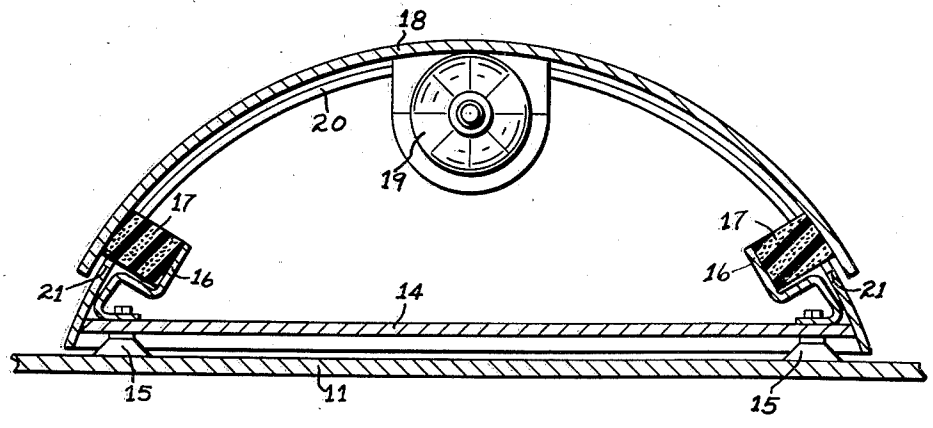


Fig. 5



INVENTOR.
Donald C. Lucht
BY Wells & St. John
Attys.

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Fig. 2

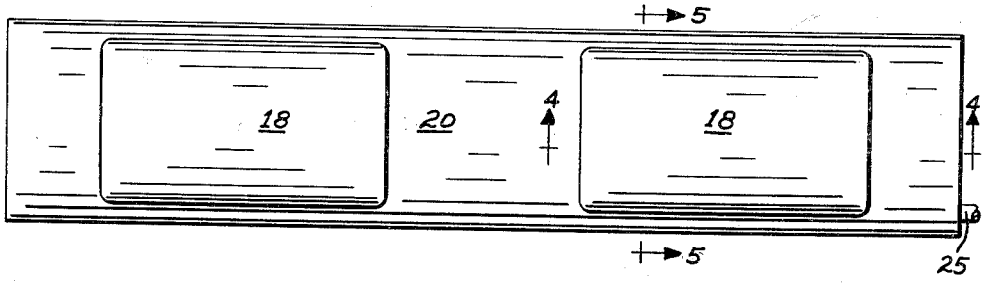


Fig. 3

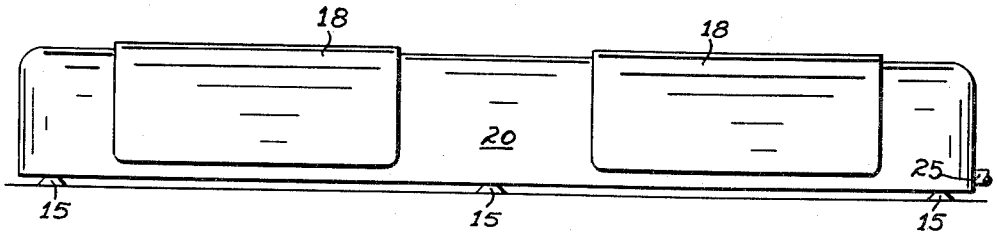
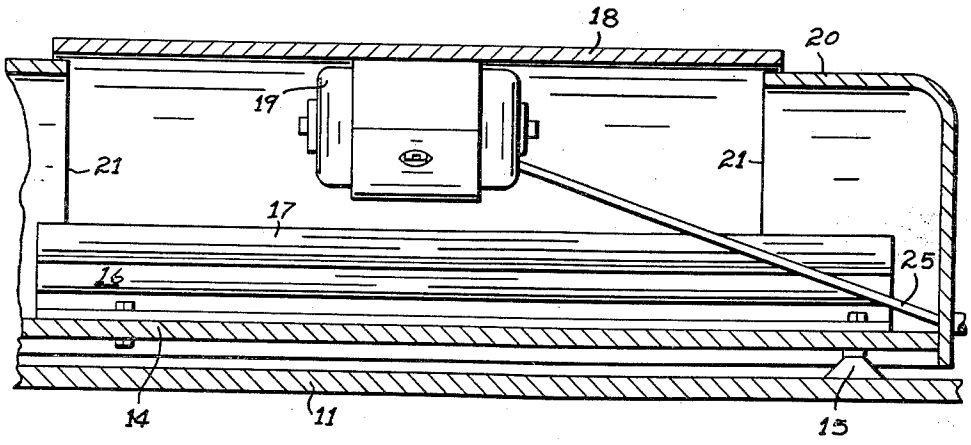


Fig. 4



INVENTOR.
Donald C. Lucht
BY Wells & St. John
Attys.

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3,071,132
FOOT VIBRATION MASSAGE DEVICE

Donald C. Lucht, P.O. Box 142, Harrington, Wash.

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3 Claims. (Cl. 128—33)

This invention relates to a novel foot vibration massage device particularly adapted for restaurant use.

The present invention contemplates a foot vibration massage device adapted to particularly relax the feet of restaurant patrons while seated in a booth. The invention is designed for permanent installation in a restaurant booth so that persons seated in the booth may operate the vibration massage unit and thereby relax their feet. The apparatus is particularly useful in restaurants located at shopping areas and provides added incentive to tired shoppers to utilize the restaurant facilities.

It is a first object of this invention to provide a fully enclosed vibration massage device which may be readily mounted on the floor of a restaurant booth intermediate the two seats so as to be available to persons seated on either side of the booth.

It is another object of this invention to combine the controls for such a foot vibration massage device with a napkin holder which may be mounted on the table top of the booth in which the device is located.

Another object of this invention is to provide a very simple structural apparatus which may be readily dismounted and repaired when necessary.

These and further objects will be evident from a study of the following description taken in conjunction with the accompanying drawings which illustrate one preferred form of the invention. This form is not intended to limit the scope of the application which is defined by the annexed claims.

In the drawings:

FIGURE 1 is a perspective view of a restaurant booth equipped with the present invention;

FIGURE 2 is a top view of the foot vibration massage device;

FIGURE 3 is an elevation view of the device shown in FIGURE 2;

FIGURE 4 is a section view taken along line 4—4 in FIGURE 2 at an enlarged scale; and

FIGURE 5 is an enlarged section view taken along line 5—5 in FIGURE 2.

This invention is particularly devised for restaurant use and presents a fully coin operated apparatus which may be selectively operated by a person seated in the booth. As shown in FIGURE 1, a typical booth includes a pair of inwardly facing seats **10** fixed to a floor surface **11**. The seats **10** are mounted adjacent a wall **12** on which is mounted a table top **13**, which extends between the two seats **10** at a position parallel to and vertically spaced from the floor surface **11**. Such booth arrangements are very common in restaurants and vary considerably in the design of the various components. The particular features of the booth are unimportant to the present invention and are not intended in any manner to limit the scope of the invention.

The vibration massage device includes a rectangular mounting base **14** which is fixed by means of suction cups **15** to the floor surface **11** at a position intermediate the two seats **10** and below the table top **13**. The location of the mounting base **14** should be selected so as to be convenient to persons seated in each seat **10**. The mounting base **14** is positioned parallel to the floor surface **11** and is slightly elevated therefrom. Fixed to the upper surface of the mounting base **14** are longitudinal rails **16** which extend along the edges of the base **14**. The rails **16** mount resilient strips **17** which extend

along the lengths of the rails **16** respectively. These strips **17** are faced outwardly along the rails **16** and support the lateral edges of an arcuate plate **18** having its lower concave surface fixed to the strips **17**. The device illustrated in the drawings utilizes a pair of arcuate plates **18** mounted in side by side longitudinal positions. Each plate **18** is individually mounted on separate rails **16** and separate resilient strips **17** so as to be completely isolated from one another. The plates **18** have a convex upper surface which faces upwardly from the floor surface **11**. Mounted at the center line of each arcuate plate **18** and fixed to the lower concave surface thereof, is a vibrator unit **19**. This vibrator unit **19** may be of any conventional construction and is not illustrated in detail in the drawings. As an example, the unit **19** might be a conventional electric motor with a central shaft having an offset weight distribution so that rotation of the shaft will cause the entire unit **19** to vibrate in a random fashion.

In order to provide a tamper proof and safe mechanism, a cover **20** is utilized to cover the entire device. The cover **20** extends along the complete longitudinal length of the rectangular mounting base **14** and further extends across the width of the base **14** concentrically to the arcuate plate **18**. The cover **20** is spaced radially inward from the inner surfaces of the arcuate plates **18**. Cut through the cover **20** are apertures **21** whose edges overlap the edges of the arcuate plate **18**, as may be best seen in FIGURES 4 and 5. Thus the convex surfaces of the plates **18** are fully exposed in order to allow a person using the device to support his feet directly on the plates **18**.

In order to control the vibrator unit **19** of each plate **18**, a control box **22** is mounted on the table top **13**. This control box may be of any suitable construction and preferably includes a pair of selector knobs **23** and napkin holders **24** so as to make this unit doubly useful on the table top **13**. The selector knobs **23** are to be interrelated with a coin operated mechanism of conventional design. The knobs **23** will select the proper vibrator unit **19** which is to be energized when a coin is deposited in the box **22**. A cable **25** will provide the electrical connection between each control box **22** and the vibrator units **19**. Thus the control box **22** is adapted to complete a power circuit from a suitable electrical source to the selected vibrator unit **19** to thereby energize that unit **19** which is to be used by a person seated on one of hte seats **10**. The control box **22** should preferably be timed by an automatic mechanism so that the vibrator unit **19** will be energized for a limited duration, after which it will turn itself off and reset the control box **22** for future operation.

The operation of the device should be evident from the above description. Each plate **19** is completely isolated from the fixed mounting base **14** by the resilient strip **17**. This strip **17** may be formed of sponge rubber or a plastic foam of a suitable resiliency. Thus the plate **18** is free to vibrate in any plane and thereby provide a very relaxing massage to a person's foot resting on the upper surface thereof.

The present invention is susceptible to many design changes without deviating from the basic concepts described above. For this reason, only the following claims are presented as limiting definitions of the scope of the invention.

Having thus described my invention, I claim:

1. A vibrator unit, comprising:

a mounting base adapted to be secured to a floor surface including a rectangular plate adapted to be positioned parallel to the floor surface;

a pair of transversely spaced longitudinal side rails

fixed to the upper surface of said base as mounted on a floor surface;

an outwardly facing strip of resilient material fixed to one exposed top surface of each rail;

an arcuate plate having a convex upper surface, said plate being of a width extended across said rails and having its lower concave surface fixed to said strips of resilient material;

and an electrical vibrator assembly fixed to the lower concave surface of said plate.

2. A vibrator unit as defined in claim 1, further comprising:

a cover plate bent concentrically with said arcuate plate and extending across the rectangular plate of said base, said cover plate being spaced outwardly from said rails and inwardly from said arcuate plate; and an open aperture cut through said cover plate radially inward of said arcuate plate and within the boundaries thereof so that the edges of said plate cover the edges of said aperture.

3. A vibrator unit, comprising:

a mounting base adapted to be secured to a floor surface including a rectangular plate adapted to be positioned parallel to the floor surface;

a pair of transversely spaced longitudinal side rails located along the upper surface of said base as mounted on a floor surface;

a semi-cylindrical cover spanning the width of said rails and yieldably mounted on said rails for vibratory motion relative thereto;

and an electrical vibrator assembly fixed to the lower concave surface of said plate.

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