FOOT VIBRATION MASSAGE DEVICE

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 any 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 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 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 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 his 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 a rubber or a plastic form 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 concept 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

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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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