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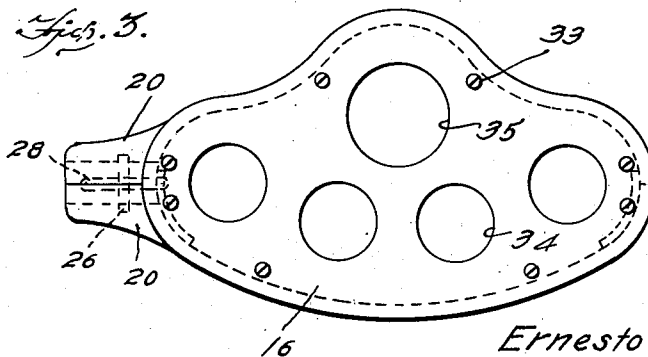
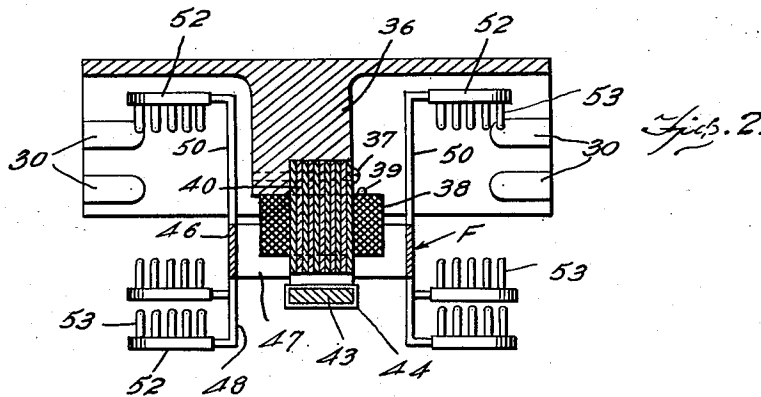
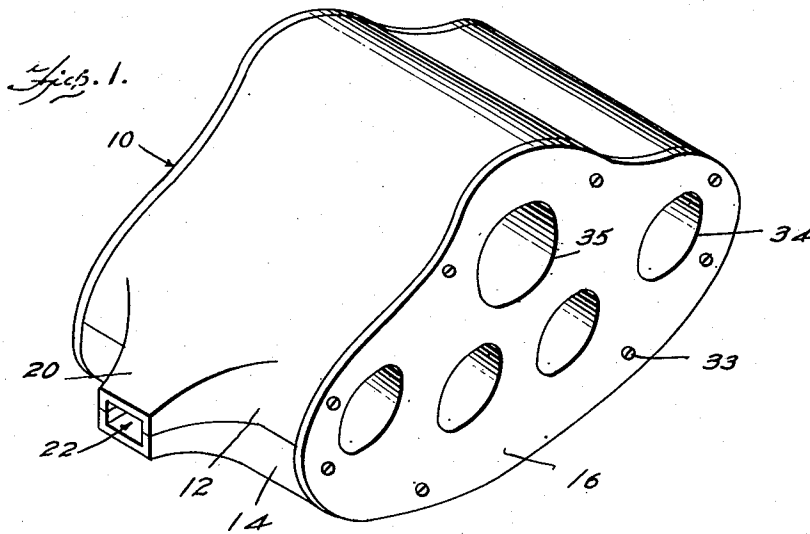
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2,644,446

FINGER TIP MASSAGING INSTRUMENT

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2 Sheets-Sheet 1



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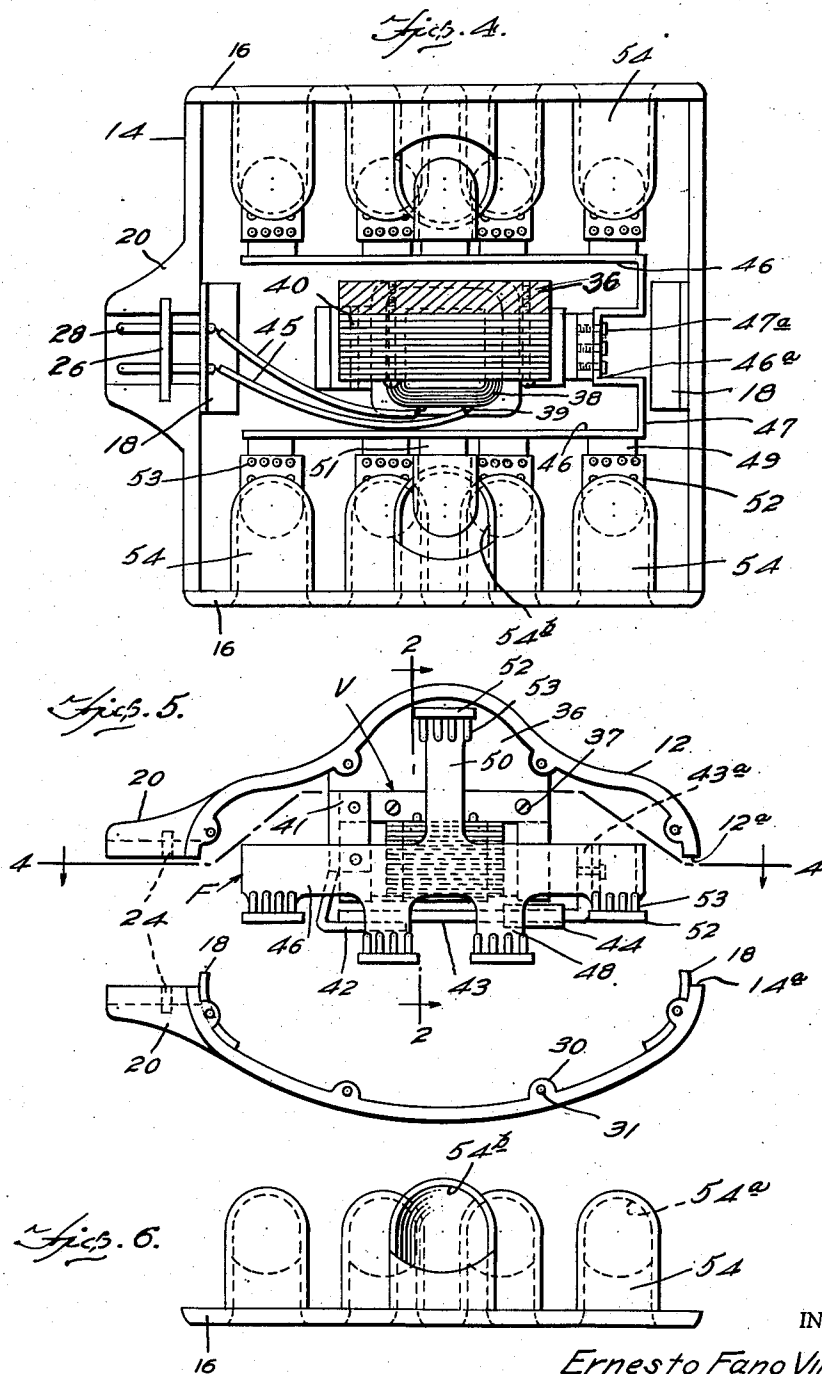
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FINGER TIP MASSAGING INSTRUMENT

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2 Sheets-Sheet 2



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FINGER TIP MASSAGING INSTRUMENT

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7 Claims. (Cl. 128—41)

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This invention relates generally to massaging apparatus and is directed particularly to an instrument for massaging the finger tips, more especially the finger nails.

The present invention has for a primary object to provide an instrument which may be of particular value in the treatment of tropic conditions affecting the tips of the fingers, resulting in anesthesia, hyperesthesia or paresis originating from traumatic or circulatory nervousness, or in any condition where there is a need of improving the circulation and sensibility in the extremities.

The present invention is designed to be of particular value to pianists, massagists or others who might suffer manual fatigue, by improving the circulation in the roots of the finger nails to thereby better the condition of the same.

Another and more specific object of the invention is to provide a small, compact instrument by means of which a vibratory massaging action may be produced directly upon the nails of the fingers for the purpose stated.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawings forming a part of the specification, with the understanding, however, that the invention is not to be limited to the exact details of construction shown and described since obvious modifications will occur to a person skilled in the art.

In the drawings:

Figure 1 is a view in perspective of the instrument constructed in accordance with the present invention.

Figure 2 is a vertical transverse section taken substantially on the line 2—2 of Figure 5.

Figure 3 is a view in elevation of one side of the device shown in Figure 1.

Figure 4 is a horizontal section taken substantially on the line 4—4 of Figure 5.

Figure 5 is a view in side elevation of the two halves of the casing structure separated and with the side plates removed and showing in side elevation the mechanism which is attached to the top half of the casing.

Figure 6 is a top edge view of one side plate showing the receiving thimbles for thumb and fingers.

Referring now more particularly to the drawings the reference numeral 10 generally designates the instrument casing. This comprises four major parts which are the relatively long, wide longitudinally arcuate top half 12, the cor-

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responding bottom half 14 and the two side plates 16. The top half as here illustrated differs slightly from the bottom by having the center part bulged upwardly slightly, but this is not an essential difference as it may be made as an uninterrupted arc like the bottom.

The two end edges 12a and 14a of the halves abut, and are held in proper relation by the tongues 18 which extend up from the inner sides of the edges 14a to engage the inside of the top.

At one end of the casing each half thereof is molded to provide an outwardly projecting half 20 of an electric current conductor plug socket 22.

Each half 20 of the socket has a transverse slot 24 to receive, in the assembled casing, a part of a division plate 26 of insulation material carrying the electrodes 28, with the outer ends of which a current conductor may be connected.

Along each longitudinal edge of each of the halves 12 and 14 are formed, upon the inner wall thereof, the lugs 30 having threaded bores 31, for the purpose about to be set forth.

When the two halves 12 and 14 of the casing are fitted together each of the sides of the casing is closed by a side plate 16 and each plate has apertures through which are passed securing screws 33, which enter the bores 31 of the lugs 30.

The lower part of each side plate 16 has an arcuate row of four apertures 34 each of which is adapted to receive a finger of one hand, and above the row of apertures 34, is a single aperture 35 for the reception of the thumb.

Upon the underside of the top half 12 of the casing is fixed the depending web or bridge 36, to which is secured for suspension in the casing, by the screws 37, an electric vibrator motor which is generally designated V, and which comprises the coil 38 having the two terminals 39, and the metal laminations or plates 40.

The plates 40 are held, at one side of the motor, between the spaced flanges 41 forming an integral part of a spring 42, to which is secured one end of an armature 43 which is disposed lengthwise beneath the coil and plates as shown in Figure 5.

At its other end the armature has the short upturned terminus 43a and the free end portion of the armature adjacent to the terminus is encased in insulation tape 44.

Electric current conductors 45 are connected between the inner ends of the electrodes 28 and the coil terminals 39 as shown in Figure 4.

Enclosing the lower part of the vibrator motor is a substantially U-shaped frame, generally designated F, formed of resilient material of band

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or strap form and having the spaced parallel, long side arms 46 and the transverse end bar 47 connecting the arms as shown in Figure 4.

The bar 47 has the inset portion 46a which is positioned against the terminus 43a of the armature and secured thereto by screws 47a.

The lower edge of each arm has four depending portions 48, from each of which there extends outwardly, or toward the adjacent side plate 37, a tongue 49.

From the top edge of each arm there extends upwardly, at a position substantially midway between the two innermost portions 48, an upwardly extending portion 50, from the top of which extends a tongue 51.

Each of the tongues 49 and 51 has applied thereover a cap or cot 52 from one side of which project a number of slender, resilient massaging points or tips 53. The points 53 upon the four tongues 48 are directed toward the top of the casing while the points 53 upon the tongue 51 are directed downwardly.

Covering each of the openings 34 and 35, and secured to the inside of each side plate 16, is a thimble 54 to receive the tip of a finger, or thumb, inserted into the opening which the thimble covers.

Each of the thimbles covering a finger opening, has in its under side, a window 54a, opening downward while the thimble covering the thumb opening 35 has a window 54b in its top side, opening upwardly.

As shown in Figure 4, the tongues 49 and 51 and the adjacent thimbles 54 are so designed and positioned, that when the instrument is assembled the group of massaging points of a cot will be disposed opposite to a window of a thimble so that a finger inserted into the thimble will have its nail lightly contacted by the points.

When the vibrator motor is energized, vibratory motion will be imparted to the resilient frame F and to the tongues 49 and 51 and this will be transferred to the nails of the fingers in the thimbles by the vibrating points or tips 53.

Due to the novel manner in which the finger and thumb openings are arranged in the opposite side wall plates 16, it will be seen that the instrument may be conveniently held between the hands and the fingers and thumb thereof maintained without effort in position within the instrument to have the nails gently massaged.

By the means set forth it will be seen that a gentle stimulation may be produced which will be of material benefit in improving circulation whereby to overcome fatigue and other conditions.

I claim:

1. An instrument for massaging the finger tips comprising a casing having a side wall, said side wall having openings therein for the reception of the tips of the fingers and thumb of a hand, an electric vibrator motor within the casing, means for conducting electric current to the motor from outside the casing, and movably supported massaging elements connected with and vibrated by the motor and positioned relative to the side wall

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openings for contact with the fingers and thumb in the openings.

2. An instrument as set forth in claim 1, wherein a second side wall is provided with openings for receiving the fingers and thumb of another hand, a second group of massaging elements, the second group of elements being adjacent to the openings of the said second side wall, and all of said massaging elements being connected to the motor by a common means.

3. The invention as defined in claim 1, with a thimble element covering each of said openings upon the inside of said wall, each thimble having a window opening toward which a massaging element is directed.

4. A finger tip massaging instrument comprising a casing having two opposite side walls, each of said walls having an arcuate row of four finger receiving openings in the lower part thereof and a thumb receiving opening in the top part, an electric vibrator motor within the casing, means for conducting electric current thereto, an element supported adjacent to the motor to be given vibratory movement thereby, and a finger tip contacting and massaging element positioned adjacent to each opening in each wall and supported by the first named element to be moved thereby.

5. A massaging instrument as set forth in claim 4, with a finger tip receiving thimble covering each opening upon the inside of each side wall, each of said thimbles having a window opening therein through which the nail of an inserted finger tip is exposed toward and to be engaged by an adjacent massaging element.

6. A massaging instrument as set forth in claim 4, wherein the said element which is given vibratory movement by the motor comprises an elongated substantially U-shaped frame having two long side arms between which the motor is positioned and a transverse end bar coupled to a vibrating part of the motor, each of said arms carrying five tongues directed toward the adjacent side wall, and each of said tongues carrying one of said massaging elements.

7. A massaging instrument as set forth in claim 4, wherein the said element which is given vibratory movement by the motor comprises an elongated substantially U-shaped frame having two long side arms between which the motor is positioned and a transverse end bar coupled to a vibrating part of the motor, each of said arms carrying five tongues directed toward the adjacent side wall, and each of said massaging elements comprising a cap engaged over a tongue, and a plurality of resilient points carried by the cap for contact with a finger.

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