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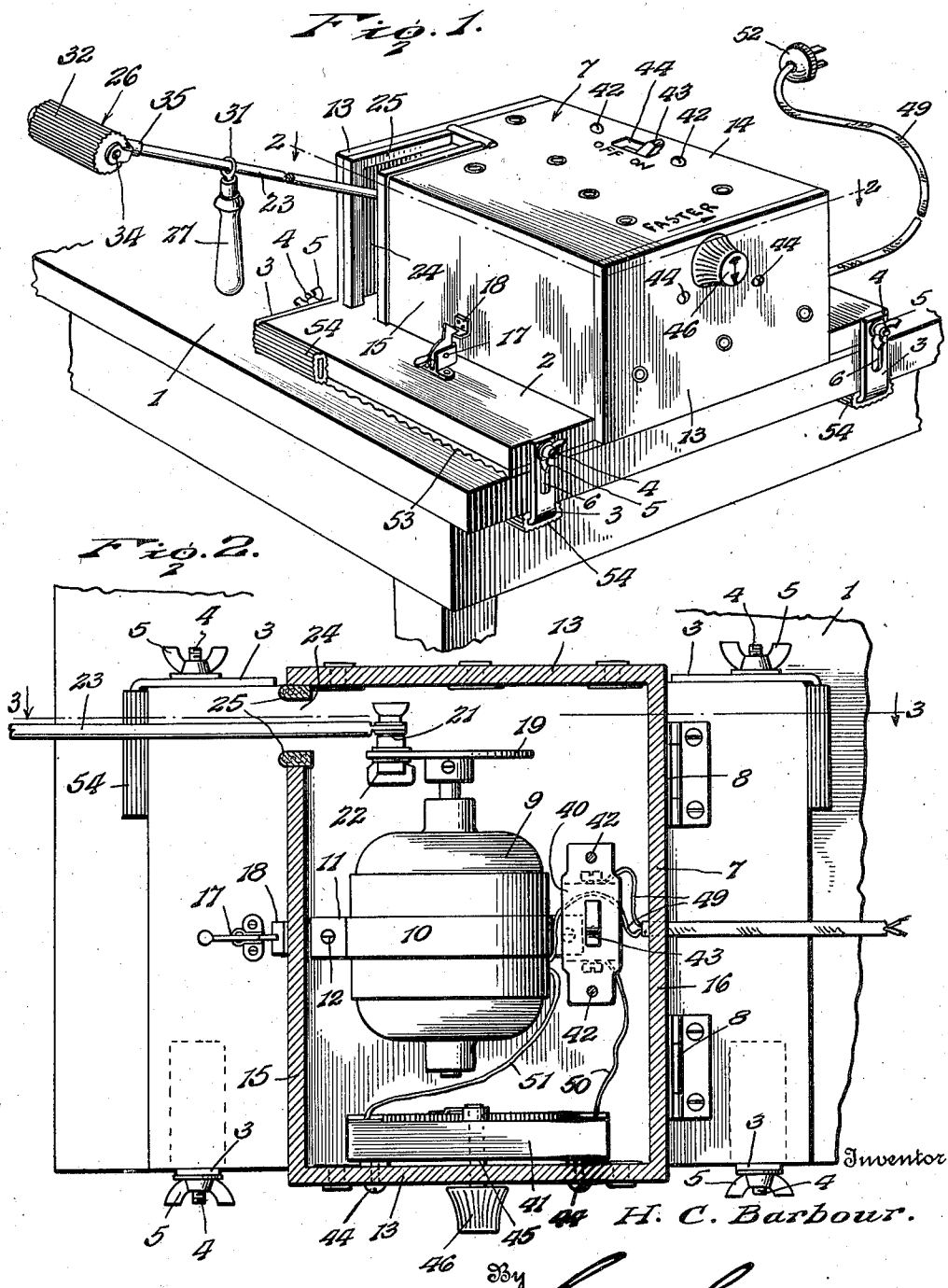
H. C. BARBOUR

2,128,790

MASSAGING APPARATUS

Filed July 20, 1936

2 Sheets-Sheet 1



Aug. 30, 1938.

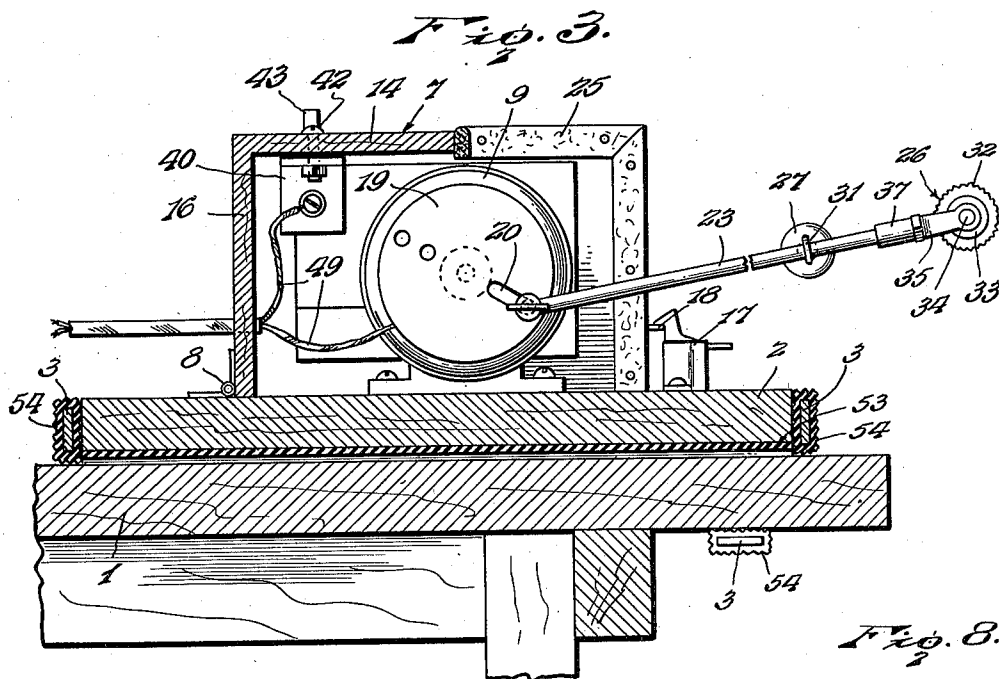
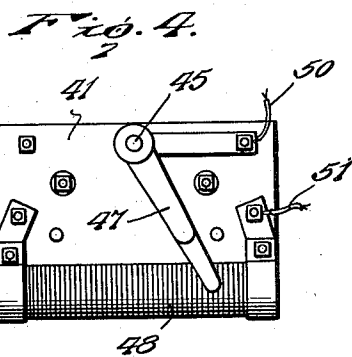
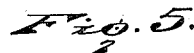
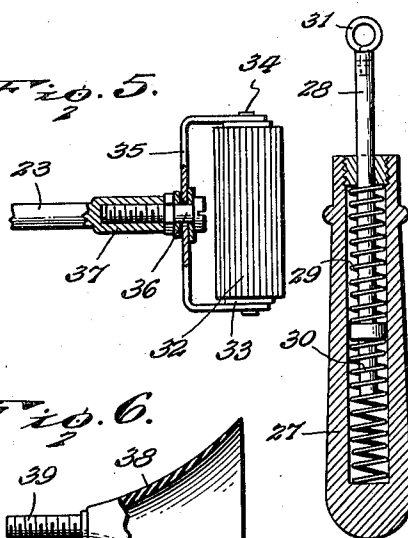
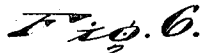
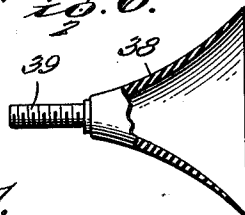
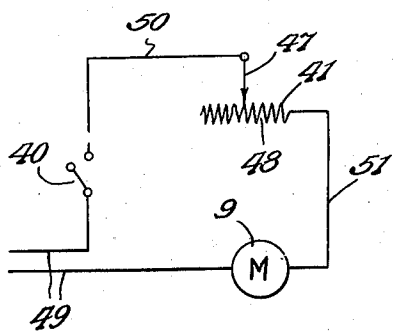
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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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MASSAGING APPARATUS

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Application July 20, 1936, Serial No. 91,588

5 Claims. (Cl. 128—52)

This invention relates to a massaging apparatus and one object of the invention is to provide in an apparatus of this character, means for massaging the face and other portions of the body and thus stimulating circulation and also smoothing the flesh and eliminating wrinkles.

Another object of the invention is to so construct the device that when it is used for massaging the face, the flesh engaging member may be caused to have substantially reciprocating movement in a vertical direction and will make contact with the face during upward movement. Therefore, the flesh and muscles of the cheeks and adjacent portions of the face will be urged upwardly during the massaging operation and sagging flesh along the jaws and under the eyes eliminated.

Another object of the invention is to so construct this apparatus that the flesh engaging member may be caused to have either a reciprocating motion or a vibrating motion and thus either a vibratory or a pushing motion imparted.

It is also an object of the invention to permit the length of the reciprocating motion to be controlled and thus eliminate danger of injury due to excessive length of movement.

Another object of the invention is the provision of an improved handle by means of which the massaging implement may be guided and have the desired movements without the handle being subjected to excessive vibrations which would make it difficult to hold.

Another object of the invention is the provision of an improved housing for the motor and other elements of the massaging apparatus, the housing having a base provided with improved means for securing it upon a table or other support and a hood movable from a lowered or closed position to a raised position so that access may be had to the motor, switch and rheostat.

The invention is illustrated in the accompanying drawings, wherein

Figure 1 is a perspective view showing the improved massaging apparatus mounted upon a table in position for use.

Figure 2 is a sectional view, taken along the line 2—2 of Figure 1.

Figure 3 is a sectional view, taken along the line 3—3 of Figure 2.

Figure 4 is a view of the rheostat by means of which speed of the motor is controlled.

Figure 5 is a view partially in elevation and partially in section of a roller constituting a flesh engaging element.

Figure 6 is a sectional view of a suction cup which may be used in place of the roller.

Figure 7 is a wiring diagram.

Figure 8 is a view of the handle.

This improved massaging machine is primarily intended for use in a home although it may be used in commercial establishments such as beauty parlors and the like. It has a housing which is to be firmly but detachably secured upon a table or equivalent support 1 and in order to do so, the base 2 of the housing carries clamps 3 which are secured to opposite side edge faces of the base by threaded stems 4 and winged nuts 5. Slots 6 through which the threaded stems pass are formed in the clamps and the clamps are of angular formation in order that they may be disposed in depending relation to the base, as shown at the right in Figure 1, and engage under the table top, or disposed horizontally against side and end edges of the base, as shown at the left of Figure 1. It will thus be seen that the housing may be secured upon the table by either the right or left hand clamps being swung downwardly to engage under the table top and then shifted upwardly into gripping engagement with the under face of the table top and the winged nuts tightened. The clamps at the other side of the base will remain in the position shown at the left of Figure 1 when not in use where they will be out of way. It will be obvious that if so desired the housing may be set upon a shelf or the like corresponding to the width of the base, in which case all of the clamps may be swung downwardly into position for use.

The hood or body portion 7 of the housing is hinged to the base, as shown at 8, in order that this hood may be swung upwardly to permit access to the motor 9 when necessary, and upon referring to Figure 2 it will be seen that the motor rests upon the base where it is secured by a clamping band 10 which straddles the motor and is formed with seats 11 secured upon the base at opposite sides of the motor by screws 12. The end walls 13 of the hood extend downwardly from the top wall 14 beyond the front and rear walls 15 and 16 and when the hood is in the lowered or closed position, the lower end portions of the end walls overlap side edge faces of the base to brace the hood against transverse movement which might shift it out of its proper position when the apparatus is in use. A latch 17 carried by the base engages a keeper 18 projecting from the front wall when the hood is in the closed position. Therefore, the hood will be held in the closed position but may be released and

swung upwardly to an opened position when access to the motor is necessary.

To the shaft of the motor is fixed a disc 19 and in this disc is formed a radially extending slot 20 through which extends a pin or stem 21 carrying a winged nut 22 which, when tightened, secures the stem in a set position. Therefore, the stem may be adjusted radially of the disc and a rod 23 loosely carried by the stem and extending through a slot 24 formed in the front wall and top of the hood may be caused to have either a long or a short reciprocating stroke during rotation of the disc. Marginal edges of the slot are padded, as shown at 25, so that if the rod makes contact with marginal edges of the slot during reciprocating motion, the hood and the rod will not become scarred or worn.

During rotation of the disc, the rod has reciprocating motion through the slot 24 and by properly holding the rod, the flesh engaging element 26 at the outer or front end of the rod may be caused to have movement along the face or other portion of the body which it engages or it may be caused to reciprocate towards and away from the flesh to be operated upon and have tamping or vibratory engagement therewith. In order to selectively permit the massaging or tamping action to take place, there has been provided a handle 27 of such length and thickness that it may be easily grasped in a person's hand. This handle is hollow, as shown in Figure 8, and carries a plunger 28 which is slidable longitudinally of the handle and yieldably held against sliding movement by the springs 29 and 30. It will thus be seen that the plunger may have sliding movement in either direction but will be yieldably held in a normal position by the two springs. The plunger projects from the handle and terminates in an eye 31 which fits loosely about the rod 23. Therefore, the handle may be slid along the rod and serve not only to guide the element 26 into engagement with a desired portion of the body but also constitute a shiftable fulcrum. The plunger 28 is not only slidable longitudinally in the handle but also rotatable therein and, therefore, it may be easily held in a person's hand and moved longitudinally of the rod 23. It will also be obvious that the rod may be shifted vertically or transversely and that during movement of the rod, the plunger may be shifted longitudinally in the handle without the handle being itself moved with the rod. Therefore, the handle may be firmly held in a person's hand. By shifting the handle along the rod towards the housing, the eye serving as a fulcrum will be so located with respect to the rod that the element 26 will be moved vertically quite a distance, whereas when the handle is shifted along the rod to the outer end thereof, the element 26 will have practically no vertical movement but merely a reciprocating movement towards and away from the surface to be treated and have tamping engagement therewith instead of massaging engagement.

In Figures 1 and 2, the operating element 26 has been shown in the form of a roller 32. This specific embodiment of the operating element is also illustrated in Figure 5, and referring to Figures 1, 3 and 5 it will be seen that the roller is formed of soft rubber fitting tightly about a core 33 through which extends a shaft 34 serving to rotatably mount the roller. This shaft or axle 34 is carried by the arms of a yoke 35 which fits loosely about the stem or shank 36. This stem or shank is in the form of a bolt screwed

into a threaded socket 37 at the outer or free end of the rod 23 and, therefore, the roller will be connected with the rod in such a manner that it will be removable therefrom when another type of operating element is to be used. In Figure 6 there has been shown a modified form of operating element consisting of a soft rubber vacuum cup 38 carrying a threaded stem 39 which may be screwed into the socket 37. It will be obvious that other forms of operating elements may be used.

In order to control operation of the motor and the speed at which it runs, there have been provided a switch 40 of a conventional construction and a rheostat 41. The switch is secured against the under or inner face of the top wall 7 by bolts 42 in such position that its operating member 43 projects upwardly through a slot 44 formed in the top wall. Therefore, the switch may be turned on or off without raising the hood. The rheostat 41 is secured against the side wall 13 of the hood or housing at the opposite side thereof from the slot 24 by bolts 44 and its stem 45 extends outwardly through the side wall and carries a turning knob 46 by means of which the stem may be turned to swing the arm 47 along the coil 48. The power wires 49 extend into the housing through the rear wall 16, one of these wires being connected with the switch 40 and the other with one side of the motor. Other wires 50 and 51 connect the switch with the rheostat and the rheostat with the motor, and upon referring to the wiring diagram in Figure 7 it will be readily seen that when the arm of the rheostat is shifted along the coil thereof, the speed at which the motor runs may be controlled.

When this apparatus is in use, it is set upon a table or other convenient support where it is firmly secured by the clamps 3. The terminal plug 52 is engaged in a wall socket so that current will be supplied to the motor when the switch is turned on and an operating element 26 of the type which it is desired to use is applied to the outer end of the rod 23. The handle 27 is held in one hand and the switch 40 turned on, after which the rheostat is adjusted to control the speed of the motor and the speed at which the rod 23 is reciprocated during rotation of the disc 19. The operator sits in front of the table if the face is to be treated or may stand if other portions of the body are to be massaged. It will be assumed that the face is to be treated. Cold cream or the like is applied to the cheeks and other portions of the face and neck, and, by holding the handle 27, the roller or suction cup is moved into position to make contact with the skin. By shifting the handle along the rod, the extent to which the roller or cup moves vertically during reciprocating movement of the rod may be controlled and either a long or a short stroke obtained. If the handle is shifted along the rod, to the socket 37, practically all vertical movement of the operating element will be eliminated and it will merely have reciprocating motion towards and away from the face and a tamping or vibrating action will take place. In view of the fact that when the handle is shifted along the rod to a position in which vertical movement of the operating element is permitted, this element will only have contact with the skin during its upward movement and then move away from the face and downwardly out of contact with the skin, the skin will be subjected to a lifting motion and sagging tissues corrected. The suction cup not only applies a massaging action to the skin but also creates a

suction which stimulates circulation and draws blackheads and the like out of pores of the skin. When repairs to the motor, switch or rheostat are necessary, or it is desired to adjust the inner end of the rod 23 radially of the disc 19, the latch 17 is moved out of engagement with the keeper 18 and the hood or casing swung upwardly and rearwardly to a raised position in which the motor will be fully exposed and easy access may be had to the switch and rheostat. This also permits the rod 23 to be easily detached from the disc when the apparatus is to be put away. As the under face of the base 2 and the clamps 3 are covered by soft rubber, as shown at 53 and 54, a polished table will not be scratched or otherwise marred when the apparatus is in use and secured upon the table.

Having thus described the invention, what is claimed as new is:

20 1. An apparatus of the character described, comprising a motor, a disc carried by and rotating with the shaft of said motor, a rod carried by said disc and having reciprocating motion imparted to it during rotation of the disc, an operating element at the outer end of said rod, and a handle disposed laterally of the rod and loosely engaged with said rod and constituting a fulcrum for the rod shiftable along the rod.

2. An apparatus of the character described 30 comprising a drive member, a rod connected with said drive member and receiving reciprocating motion during operation of the drive member, an operating element carried by said rod, a handle, a plunger loose in the handle and slidable longitudinally therein, resilient means in the handle yieldably resisting sliding movement of the plunger longitudinally of the handle in either direction, and an eye at the outer end of said plunger loosely engaged about said rod whereby the handle may be shifted along the rod.

3. An apparatus of the character described 40 comprising a housing having a base and a hood hinged to the base for movement from a closed position upon the base to a raised position, a passage being formed in the hood, a latch for releasably holding the hood in its closed position,

said hood having side walls extending downwardly below its front and rear walls to provide side walls with depending portions for engaging side edge faces of the base and placing the hood against transverse movement when closed, a drive member carried by the base and enclosed by the housing when the hood is in the lowered position, a rod extending outwardly through the passage and having its inner end connected with the draft member for actuation thereby, and an operating element at the outer end of said rod.

4. An apparatus of the character described comprising a housing having a base, clamps carried by said base at opposite sides thereof and shiftable from a horizontal position against edge faces of the base to a depending position for engaging under a support and detachably securing the base upon the support, a hood hinged to said base and having side walls engaging opposite side edge faces of the base when in a lowered position, a slot being formed in the hood, a motor mounted upon said base and enclosed in the housing when the hood thereof is in the lowered position, a disc carried by the shaft of said motor, a rod pivoted to said disc and extending outwardly through the passage, an operating element at the outer end of said rod, and a handle carried by said rod between the hood and the outer end of the rod.

5. An apparatus of the character described 30 comprising a housing having a base and a hood, the hood having a passage formed therein, a motor mounted upon said base and enclosed in the housing, a switch for said motor mounted in the hood and having an operating element extending outwardly through an opening in the hood, a rheostat for controlling speed of the motor mounted in the hood and having an operating member extending outwardly through a wall of the hood, a disc carried by the shaft of said motor, a rod pivoted to said disc and extending out of the hood, an operating element at the outer end of said rod, and a handle carried by the rod between the hood and the outer end of the rod.

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