April 5, 1927. 1,623,124

H. C. LAUFE

MASSAGE AND SHAMPOOING APPARATUS

Filed Nov. 23, 1925

Fig. 1.

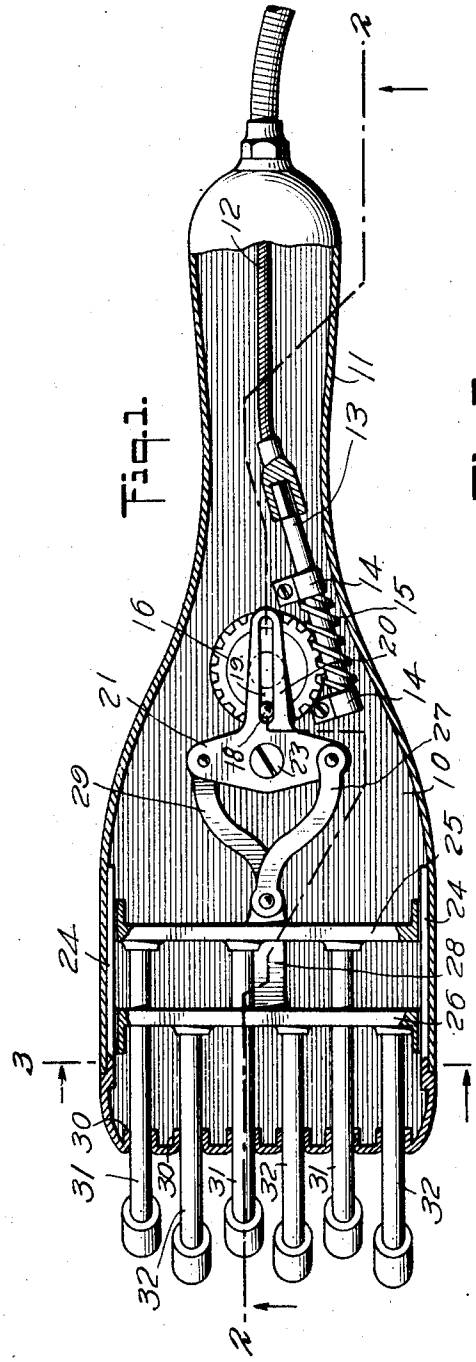


Fig. 2.

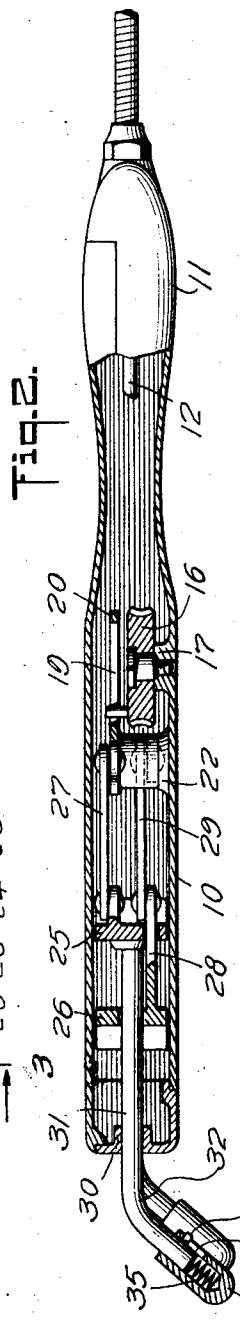
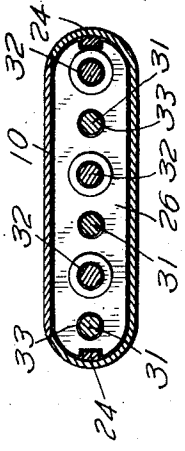


Fig. 3.



INVENTOR

Henry Charles Laufe

BY

ATTORNEY

Patented Apr. 5, 1927. 1,623,124

UNITED STATES PATENT OFFICE.

HENRY CHARLES LAUFE, OF NEW YORK, N. Y.

MASSAGE AND SHAMPOOING APPARATUS.

Application filed November 23, 1925. Serial No. 70,814.

The present invention relates to apparatus employed in hair and scalp treatment and among the principal objects thereof are:

The provision of a portable apparatus for mechanical massaging by a structure arranged to simulate the kneading action of fingers in the operation of massaging and scalp treatment; the provision in an apparatus of this character of mechanical fingers and operating mechanism therefor; the provision of an apparatus of this character to be held in the hand of an operator and moved over an area to be treated; and generally to provide for a novel and improved form of massage and shampooing apparatus. tus.

Drawings.

Figure 1 is a transverse longitudinal section through an apparatus constructed in accordance with the principles of the invention,

Figure 2 is a section substantially on the line 2—2 of Figure 1;

Figure 3 is a section on the line 3—3 of Figure 1.

Description.

In detail the apparatus comprises a substantially flat paddle shaped casing 10 having a reduced shank 11 adapted to be gripped by the hand of an operator, through the end of which shank extends a flexible shafting 12 having operative connection with a worm shaft 13 journaled through brackets 14, attached to the bottom of the casing and having a worm drive 15 in constant mesh with the teeth of a gear wheel 16 rotatably mounted upon a supporting post 17 formed on the bottom of the casing.

Adjacent its periphery the gear wheel 16 is provided with an upstanding stud 18 engaged in a slot 19 formed longitudinally in an arm 20 which projects laterally from a rocking lever 21 rotatably mounted upon a supporting post 22 formed on the bottom wall of the casing. The arm 20 of the rocking lever 21 extends in the direction of the shank over the top of the gear wheel 16 and it is obvious that upon rotation of the gear wheel the engagement of the stud 18 in the slot 19 will cause the arm 20 to oscillate thereby rocking the lever 21 upon its pivot stud 23 disposed in the post 22.

At the flared end of the casing the side walls thereof are disposed in parallel relation and are provided with longitudinal guide bars 24 received in recesses formed in the opposite ends of a pair of cross heads 25 and 26 arranged for slidable movement longitudinally within the casing.

One end of the rocking lever 21 is in operative connection with the innermost cross head 25 through the medium of a link 27 pivoted at one end to the rocking lever and at its opposite end to the cross head. The outermost cross head 26 has formed integral therewith a rearwardly extending arm 28 passed through an aperature provided in the innermost cross head for that purpose and having its free end in operative connection with the other end of the rocking lever 21 by means of a link 29 connected as in the manner of the link 27. It will be apparent that upon oscillation of the arm 20 to rock the lever 21 that through the medium of the connecting links 27 and 29 the two cross heads 25 and 26 will be moved relative to one another and longitudinally within the casing to advance the cross head 25 on retraction of the cross head 26 and to retract the cross head 26 upon advance of the cross head 25, there being an alternate reciprocative movement between the two cross heads..

The front end of the casing 10 is provided with a series of spaced bushings 30 through which are mounted for reciprocation a plurality of alternately long and short fingers, respectively designated as 31 and 32. The short fingers 32 are secured at their inner ends to the cross head 26 for movement therewith while the long fingers 31 pass through apertures 33 formed in the cross head 26 and are secured at their inner ends to the cross head 25 for movement therewith.

Each of the fingers is downwardly inclined at its outer end to extend below the bottom of the casing and carries a tip 34 of some soft material, which is resiliently mounted for sliding movement over the end of the finger. These tips 34 are in the form of caps provided with a cylindrical recess containing a spiral expansion spring 35 bearing against the end of the finger and normally projecting the cap outwardly therefrom, the cap being retained upon the finger by the engagement of a stud 36 on the finger end with the end of a slot 37 formed longitudinally in the cap whereby

a limited reciprocatory movement of the cap over the finger is permitted.

In operation the casing 10 gripped at the shank 11 is moved over the head of a person being treated with the tips 34 of the fingers engaged against the scalp. The fingers are so spaced and are of such dimensions that they will pass readily through the hair without tangling therein. Power transmitted through the gearing mechanism previously described causes a relative reciprocation between the fingers in parallel planes whereby a kneading or massaging action is obtained at the finger tips which is practically identical with the movement of the fingers of a person performing the operation of massaging or shampooing. The apparatus of the present invention is more efficient and sanitary than human fingers in conducting the operation of massaging or shampooing as a more direct and positive action of the reciprocating finger tips is secured and bearing directly upon the skin of the scalp. The caps 34 are detachable and may be readily replaced by new ones as desired.

Claims:—

1. A scalp treating apparatus comprising a group of fingers, a second group of fingers, the fingers of said second group being disposed between the fingers of the first, and means for causing relative movement between the groups.

2. A scalp treating apparatus comprising a portable casing, a cross head mounted in said casing for longitudinal reciprocation therewithin, a plurality of fingers carried by said cross head and projecting beyond one end of the casing, a second cross head mounted for longitudinal reciprocation within said casing, a plurality of scalp engaging fingers carried by said second cross head said fingers extending through apertures in the first cross head and projecting beyond the end of the casing in parallel spaced relation to the first named fingers, and means in said casing for imparting alternate reciprocation to said cross heads for relative movement between said fingers.

HENRY CHARLES LAUFE.