

Jan. 20, 1959

L. L. SIVELLS

2,869,158

SHAMPOOING AND MASSAGING DEVICE

Filed Oct. 25, 1956

3 Sheets-Sheet 1

Fig. 1.

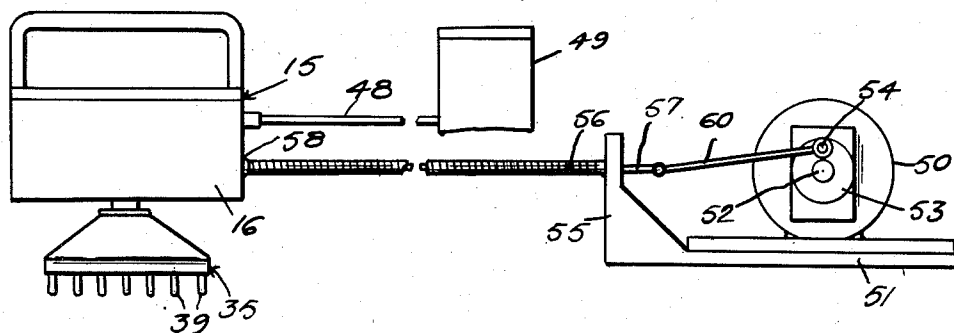


Fig. 2.

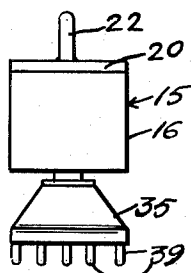


Fig. 3.

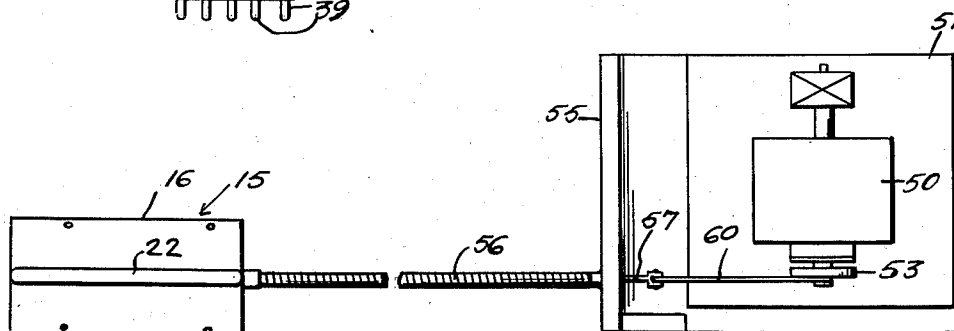
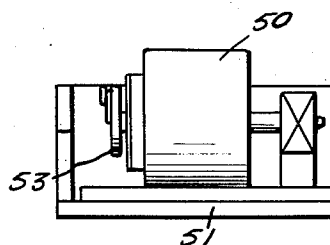


Fig. 4.

Letha L. Sivells

INVENTOR

BY *C. A. Snow & Co.*
ATTORNEYS.

Jan. 20, 1959

L. L. SIVELLS

2,869,158

SHAMPOOING AND MASSAGING DEVICE

Filed Oct. 25, 1956

3 Sheets-Sheet 2

Fig. 5.

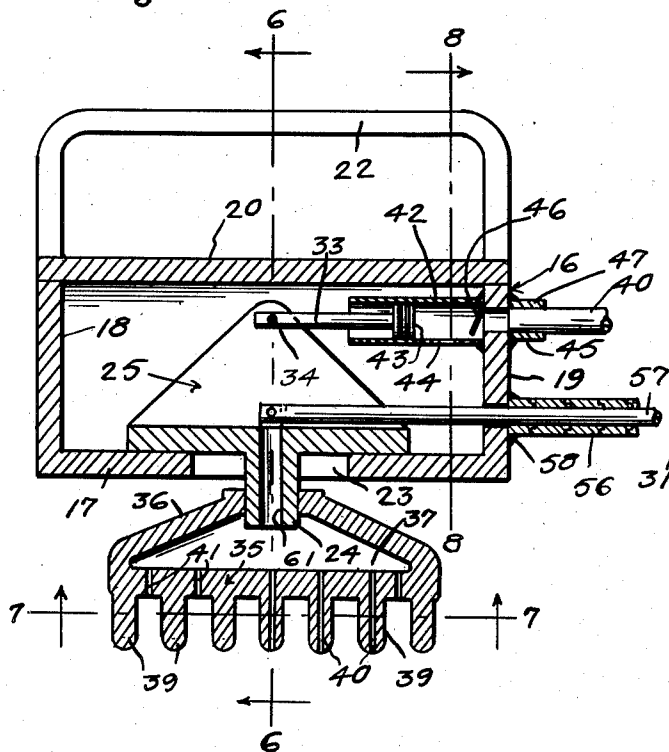


Fig. 6.

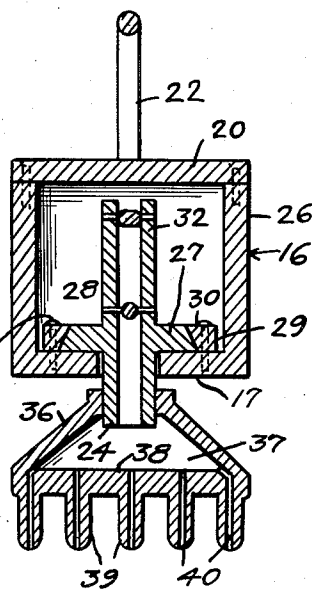


Fig. 7.

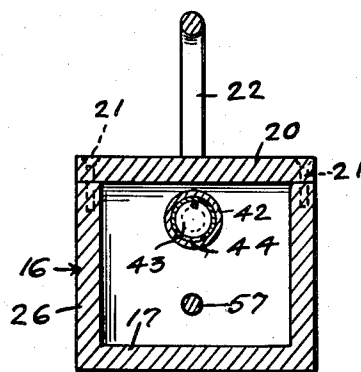
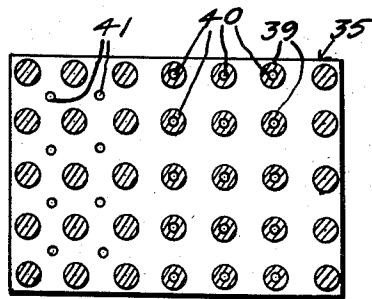


Fig. 8.

Letha L. Sivells

INVENTOR

BY *Chenoweth*
ATTORNEYS.

Jan. 20, 1959

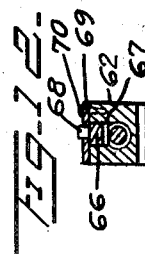
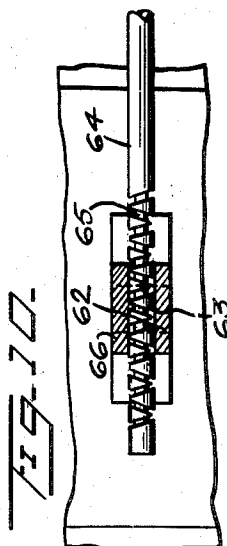
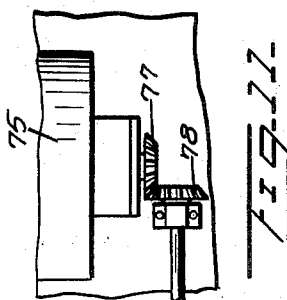
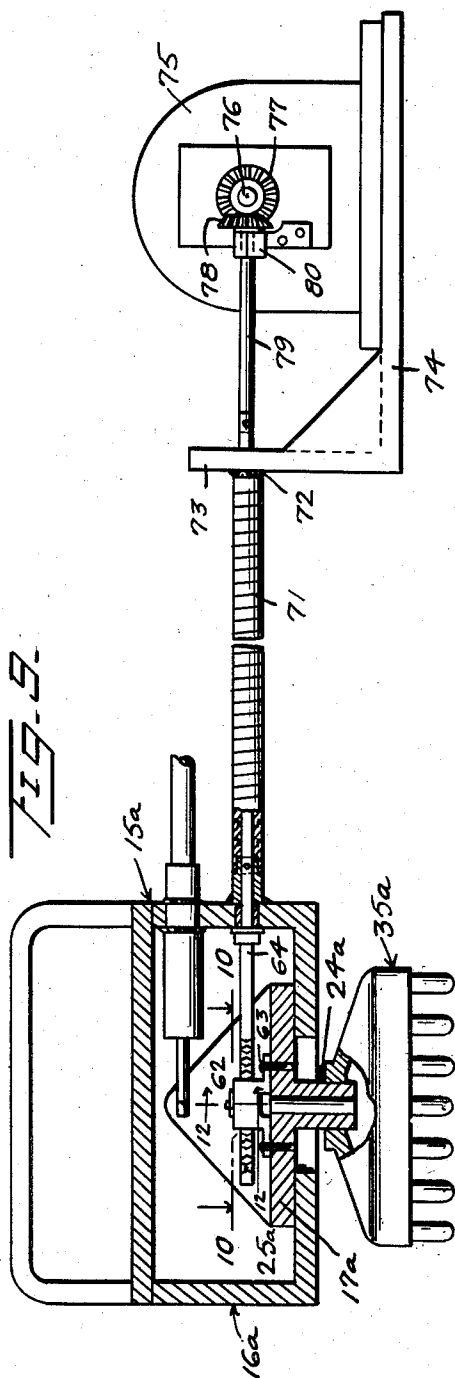
L. L. SIVELLS

2,869,158

SHAMPOOING AND MASSAGING DEVICE

Filed Oct. 25, 1956

3 Sheets-Sheet 3



Inventor
Letha L. Sivells

By *Casnow & Co.*

Attorneys.

1

2,869,158

SHAMPOOING AND MASSAGING DEVICE

Letha L. Sivells, Fulton, Tex.

Application October 25, 1956, Serial No. 618,306

1 Claim. (Cl. 15—22)

This invention relates to a shampooing and massaging device.

An object of this invention is to provide a combined shampooing and massaging means including a fountain head with means for reciprocating the head end for pumping a liquid from a supply source to the head.

Another object of this invention is to provide a combined shampooing and massaging means wherein the fountain head is secured to a reciprocating slide engaging in a housing or reservoir which is connected to a liquid supply source. Reciprocation of the slide will effect operation of the pump and on one stroke of the pump the liquid will be drawn into the reservoir, whereas on the other stroke of the slide the liquid in the reservoir will be placed under pressure so that the liquid in the reservoir will be forced out through the massaging head.

In one form of the invention the head is reciprocated by means of a crank, and in a modified form of the invention the head is reciprocated by means of a continuously rotating shaft having a double spiral or screw thread therein, with a nut element engaging in the thread.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts, hereinafter more fully described and pointed out in the claim, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawings:

Figure 1 is a detail side elevation of a shampooing and massaging device constructed according to an embodiment of this invention.

Fig. 2 is a front elevation of the massaging head.

Fig. 3 is a detail end elevation of the operator for the massaging head.

Fig. 4 is a plan view of the device.

Fig. 5 is a vertical section on an enlarged scale taken through the massaging head.

Fig. 6 is a sectional view taken on line 6—6 of Fig. 5.

Fig. 7 is a sectional view taken on line 7—7 of Fig. 5.

Fig. 8 is a sectional view taken on line 8—8 of Fig. 5.

Fig. 9 is a detail side elevational partly in longitudinal section of a modified form of this invention.

Fig. 10 is a fragmentary sectional view taken on line 10—10 of Fig. 9.

Fig. 11 is a fragmentary plan view of the operator and connection for the agitating means in the head.

Fig. 12 is a sectional view taken on line 12—12 of Fig. 9.

Referring to the drawings, and first to Figs. 1 to 8, inclusive, the numeral 15 designates generally a combined shampooing and massaging head constructed according to an embodiment of this invention. The head 15 is formed of a housing 16 having a bottom wall 17, end walls 18 and 19, and a top wall 20 secured to the upper edges of the side and end walls by the fastening means 21.

2

The top wall 20 has a U-shaped handle or bail 22 extending upwardly therefrom.

The bottom wall 17 has an elongated slot 23 there-through which is elongated lengthwise of the bottom wall 17 and a tubular stud 24 loosely extends through the slot 23. The stud 24 is fixed to a slide member generally indicated at 25, which is slidable within the housing 16. The housing 16 also includes a pair of side wall members 26. The slide member 25 is formed of a bottom plate 27 which is slidable on the upper or inner side of the bottom wall 17 and the opposite longitudinal edges of the plate 17 are beveled as indicated at 28. A pair of guide members 29 having beveled inner edges 30 are secured by fastening means 31 to the bottom wall 17 and provide for slidably holding the plate 27 on the upper side of the bottom wall 17. The slide member 25 also includes a pair of upwardly projecting triangular plates 32 between which a piston rod 33 is secured as by a pin 34. The stud 24 has fixed thereto a massaging member generally indicated at 35. The massaging member 35 is formed of a hollow back 36 through which the stud 24 extends and the back 36 forms a chamber 37 in which a liquid is adapted to be discharged. The massaging member 35 also includes a lower wall 38 having a plurality of resilient pins 39 extending therefrom and the pins 39 are provided with openings 40 extending therethrough, and communicating with the chamber 37. The wall 38 is also provided with a plurality of openings 41 communicating with the chamber 37.

The housing 16 has fixed therein a cylinder 42 which is fixed to wall 19. The cylinder 42 has a piston 43 slidable therein, the piston being fixed to rod 33. The cylinder 42 is provided with a discharge opening 44 adjacent the outer end thereof and wall 19 is formed with an opening 45 communicating with the outer end of cylinder 42. A flap and outwardly closing check valve 46 is secured to the inner side of wall 19 and is adapted upon outward movement of piston 43 to close opening 45. Wall 19 is provided on the outer side thereof with a nipple 47 and one end of a flexible tubing 48 is secured in the nipple 47. The other end of the tubing 48 is connected to a liquid reservoir 49 which is disposed remote from the head 15.

In order to provide for reciprocation of the slide member 25, I have provided a power member or motor 50 which is mounted on a base 51. The motor 50 includes a shaft 52 on which a plate 53 is secured and the plate 53 has an eccentrically disposed crank pin 54 secured thereto. The base 51 is formed with a vertically disposed guide member 55 and one end of a flexible sheath 56 is secured to the guide 55. An elongated rod 57 is slidable in the sheath 56 and the latter is secured at the opposite or outer end thereof, as indicated at 58, to the housing wall 19. The forward or outer end of rod 57 is disposed between the triangular plate 32 and is secured therebetween by means of a pin 59. The rear end of rod 57 has a pitman 60 pivotally secured thereto and the pitman 60 is pivotally mounted on the crank pin 54.

The cylinder and piston 43 constitute a pump whereby the shampooing liquid may be pumped or drawn from the supply member 49 and discharged into the housing 16. On the outward stroke of piston 43 the liquid within the housing 16 is placed under pressure and this liquid is then forced downwardly through the bore 61 of stud 24, into the chamber 37 of massaging member 35 and then discharged through the openings 40 and 41 in the massaging member 35.

Referring now to Figs. 9 to 12, inclusive, there is disclosed a modified form of this invention. The combined shampooing and massaging head 15^a is constructed similar to the massaging head 15 and has a massaging member 35^a which is secured to a tubular stud 24^a. A slide mem-

3

ber 25^a is disposed within the housing 16^a and slide member 25^a is reciprocated, as will be hereinafter described. A sleeve 62 is secured by fastening means 63 to the upper side of the bottom plate 17^a and the sleeve 62 has the forward end of a rotatable slide operating shaft 64 loosely disposed therein. The shaft 64 is provided with a double thread 65 and the sleeve 62 has a pin 66 extending therein from the upper side, which is formed with a thread engaging member 67. The pin 66 is provided with a reduced stud 68 and the pin 66 is secured in operative position by means of a plate 69 which is secured to the upper side of the sleeve 62 by fastening means 70. The shaft 64 is a flexible shaft and extends through a flexible sheath 71 which extends from the housing 16^a and the rear end of the sheath 71 is secured as at 72 to a vertical guide member 73 carried by a base 74. A motor 75 is secured to the base 74 and includes a shaft 76 having a beveled gear 77 secured thereto. A second beveled gear 78 is secured to a shaft extension 79 which extends from the rear end of shaft 64 and extension 79 is rotatably disposed through a bearing 80. In other respects the structure shown in Fig. 9, particularly with respect to the combined massaging and shampooing head 15^a, is identical with the structure shown in Figs. 1 to 8, inclusive.

In the use and operation of this device, a suitable shampooing liquid is disposed in the supply member 49. When motor 50 is operated slide member 25 will be reciprocated within the housing 16 and at the same time the pump formed by the cylinder 42 and the piston 43 will draw the shampooing liquid from the supply member 49. On the outward stroke of piston 43 the liquid drawn into housing 16 will be placed under pressure and forced downwardly and outwardly through bore 61 of stud 24 into chamber 37 and from chamber 37 the liquid will pass upwardly through openings 40 and 41. The pins or fingers 39 carried by the massaging head 35 are preferably formed of rubber or other suitable flexible or resilient

4

material and upon reciprocation of slide 25 the massaging member 35 will reciprocate or vibrate therewith.

What is claimed is:

A combined shampooing and massaging apparatus comprising a housing having a slot formed in the bottom thereof, a slide member having beveled edges in said housing, guide members for said slide member, said guide member having edges beveled oppositely to the edges of said slide member, a tubular stud depending from the lower edge of said slide member and projecting through said slot in the bottom of said housing, a fountain massaging member fixed to said stud, said massaging member having a chamber connected with said housing through said hollow stud, said massaging member having discharge openings through which liquid discharges, a pair of spaced triangular plates secured to said slide, a first rod connected at one end between said plates, mechanism including a second reciprocable rod connected between said plates for reciprocating said slide, a pump cylinder parallel with said slide member and fixed at one end of said housing, a tubular liquid supply line fixed at one end of said housing and communicating with said one end of said cylinder, an outwardly closing check valve between said cylinder and said supply line, said cylinder having a discharge opening adjacent said one end, a piston slidable in said cylinder, and a connection between said first rod and said piston for transmitting movement of said slide member to said piston operating said piston and massaging member simultaneously.

References Cited in the file of this patent

UNITED STATES PATENTS

766,970	Pfanschmidt	Aug. 9, 1904
1,730,030	Bernstein	Oct. 1, 1929
2,277,195	Alpaugh	Mar. 24, 1942
2,671,914	Rucker	Mar. 16, 1954