May 12, 1942. S. A. HAMILTON 2,282,577

SCALP MASSAGING APPARATUS

Filed June 10, 1940 3 Sheets-Sheet 1

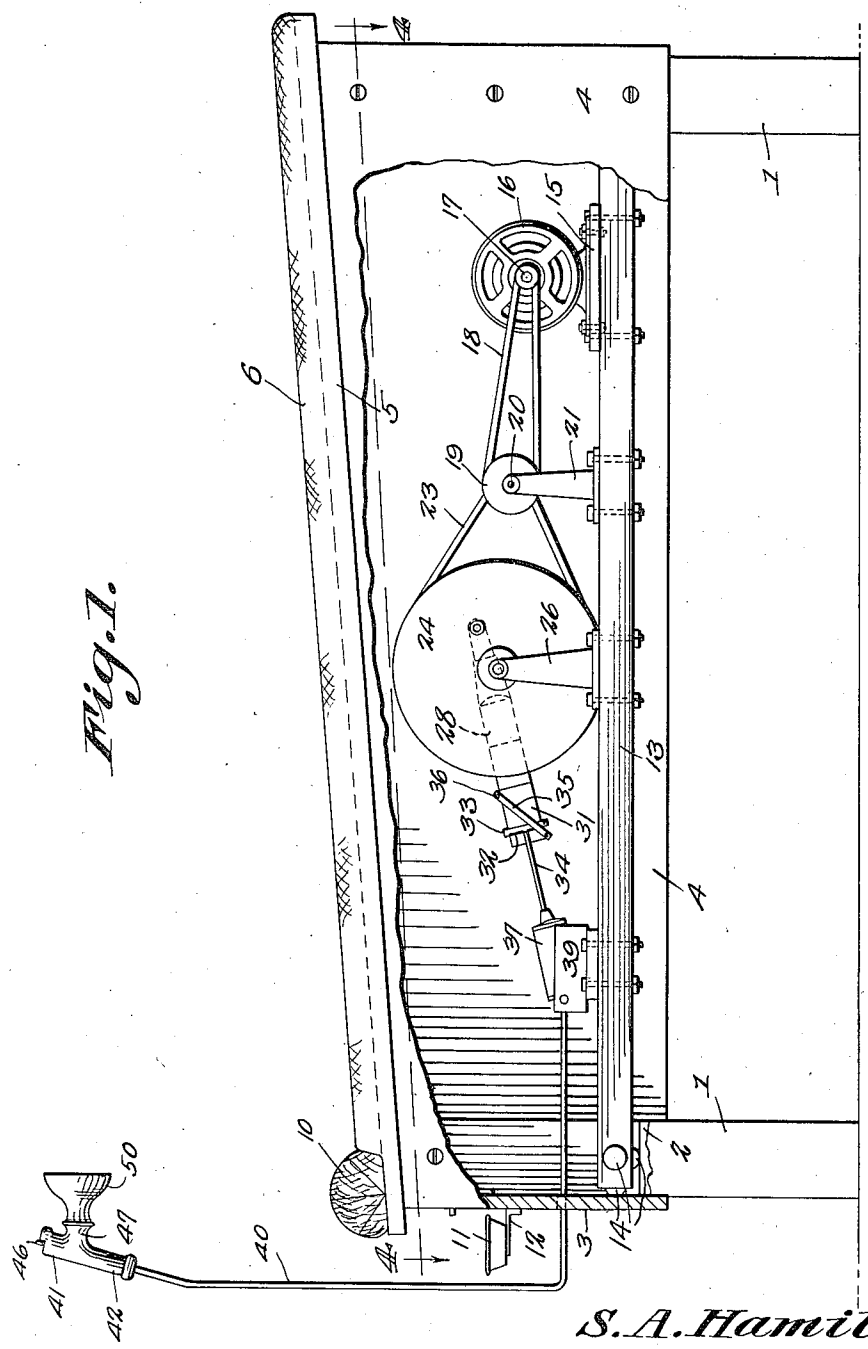


Fig. 1.

S. A. Hamilton
INVENTOR.

BY C. A. Snow & Co.

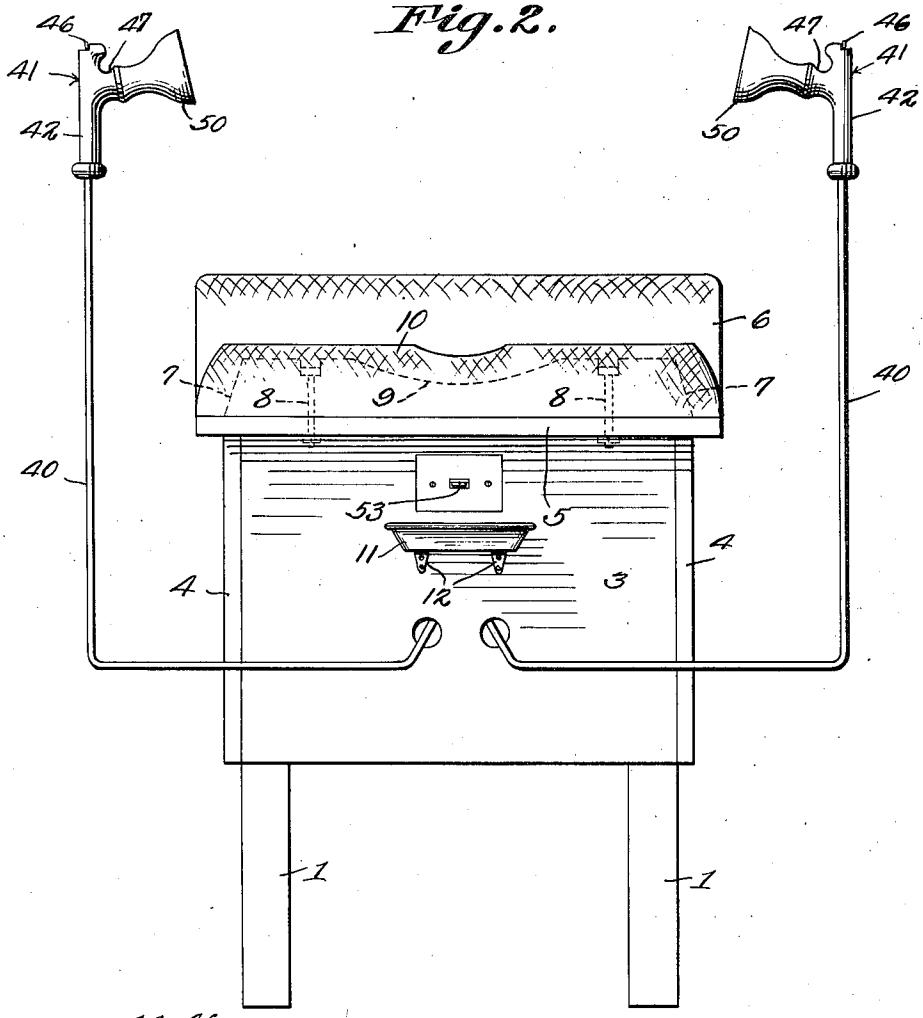
ATTORNEYS.

May 12, 1942. S. A. HAMILTON 2,282,577

SCALP MASSAGING APPARATUS

Filed June 10, 1940 3 Sheets-Sheet 2

Fig. 2.



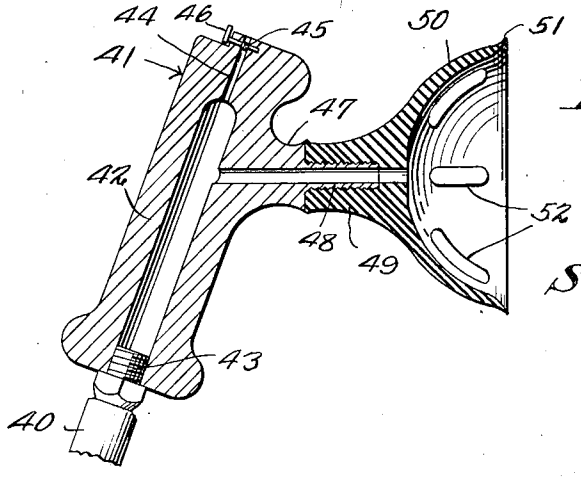


Fig. 5.

S. A. Hamilton

INVENTOR.

BY Albert & Co.

ATTORNEYS.

May 12, 1942. S. A. HAMILTON 2,282,577

SCALP MASSAGING APPARATUS

Filed June 10, 1940 3 Sheets-Sheet 3

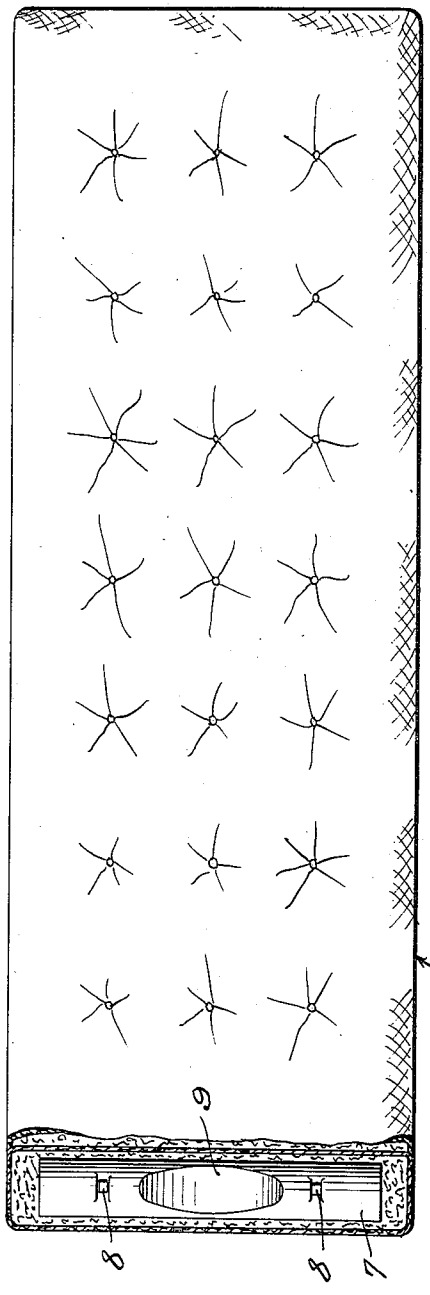


Fig. 3.

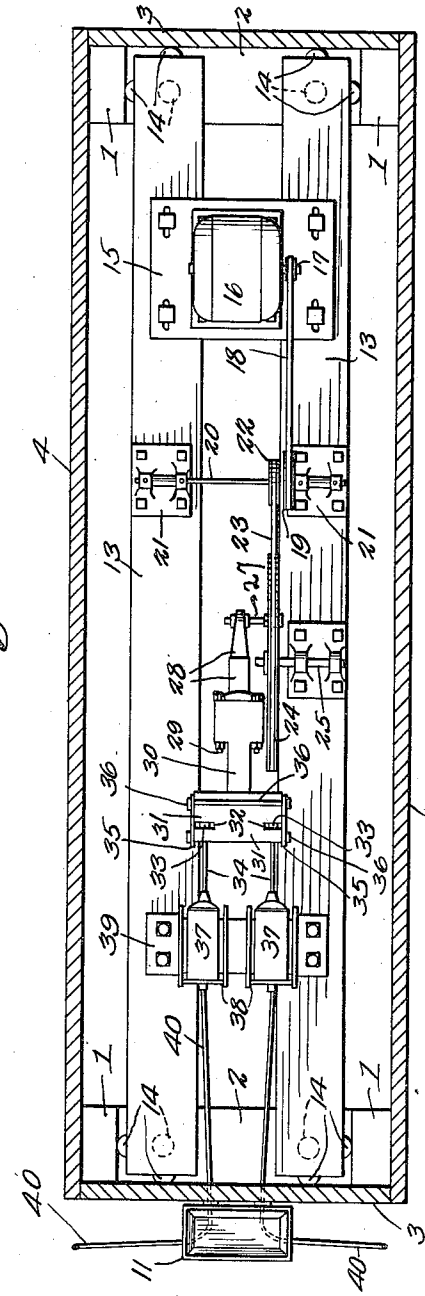


Fig. 4.

S. A. Hamilton.

INVENTOR.

BY Albert Lee.

ATTORNEYS.

Patented May 12, 1942

2,282,577

UNITED STATES PATENT OFFICE

2,282,577

SCALP MASSAGING APPARATUS

Sidney A. Hamilton, Shreveport, La.

Application June 10, 1940, Serial No. 339,795

1 Claim. (Cl. 128—300)

This invention relates to apparatus for use in massaging the scalp and is designed primarily for use by professional operators.

One of the objects is to provide a structure which will support a patron in such position as to cause the blood to flow to the scalp, there being means contained within and extending from the structure whereby the desired massaging effect can be produced on the scalp at will, thereby to stimulate circulation therein.

Another object is to utilize power driven suction producing means normally concealed from view and so mounted as to eliminate objectionable vibration.

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 claims, 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.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:

Figure 1 is a side elevation, a part of the housing being broken away.

Figure 2 is an elevation of one end.

Figure 3 is a plan view showing the pillow in section, projecting parts thereunder being removed.

Figure 4 is a section on line 4—4, Figure 1.

Figure 5 is an enlarged section through a suction cup.

Referring to the figures by characters of reference, 1 designates corner posts or legs arranged in end pairs. The legs of each pair are connected by a cross-strip 2 and also by end panels 3 forming walls of a housing. The end panels are in turn connected by side panels 4 forming side walls of the housing.

A top 5 closes the upper portion of the housing and is inclined toward one end. This top is covered with a suitable cushion 6 and across the lower end thereof is arranged a rounded strip 7 of wood or other suitable material fastened to the top 5 as shown at 8. A recess 9 is formed in the top of this strip at the center and the entire strip is covered by a pillow 10 joined thereto. Thus when a patron is placed on the cushion 6, with the head on the pillow 10, a recess will be formed by the pillow above recess 9 to provide a comfortable rest for the head while, at the same time, the shoulders will be positioned against the pillow which thus serves to hold the patron from sliding downwardly while being treated.

A drip pan 11 is supported by brackets 12 below the pillow to receive any excess treatment fluids used during the massaging operation.

The mechanism of the apparatus is located in the housing and is readily removable therefrom simply by first detaching one of the panels 4 from the posts 1. It includes parallel base strips 13 provided at their ends, bottoms and sides with resilient cushions or pads 14 of rubber or the like which bear downwardly against the strips 2, laterally against the legs or posts 1 and endwise against panels 3. Thus vibrations created by the mechanism on strips 13 will not be transmitted to the housing structure and to the patron supported thereon.

The strips 13 support and are connected by the base 15 of an electric motor 16, this base being firmly secured to the strips and to the motor, as shown. The motor has a drive pulley 17 for transmitting motion through a belt 18 to a pulley 19 secured to a shaft 20 which is journaled in standards 21 fastened to strips 13. Another pulley 22 is secured to the shaft and transmits motion through a belt 23 to a large pulley or flywheel 24, the shaft 25 of which is journaled in standards 26 on one of the strips 13.

The flywheel or pulley 24 has a wrist-pin 27 on which is mounted a member 28 bolted at 29 to a connecting rod section 30 extending from a cross-head 31. This cross-head has grooves in opposite sides as shown at 32 to receive the T-shaped ends 33 of piston rods 34. The heads are held in place by side straps 35 connected by bolts 36.

Pump cylinders 37 are pivotally mounted side by side at 38 on a base 39 secured to and connecting the strips 13. The rods 34 extend from the usual pistons in the cylinders so that when cross-head 31 is reciprocated and oscillated the cylinders will oscillate while the pistons therein will draw air into the cylinders through intake tubes 40. These latter are flexible and one of them leads to each cylinder. The tubes extend through one end of the housing and each of them is provided at its outer end with a suction cup 41.

As shown particularly in Figure 5, each suction cup includes a tubular handle 42 connected at one end of the tube 40 as at 43 while its other end has a vent 44 normally closed by a valve 45 which can be opened when desired, by

shifting the handle **46** of the valve out of normal position.

An arm **47** extends from and opens into the handle and has a threaded nipple **48** which is seated firmly but detachably in a tubular arm **49** extending from and integral with a suction cup **50** formed preferably of soft rubber. The free edge portion **51** of the cup is flared and reduced in thickness so as to be capable of adapting itself readily to the contour of the surface under treatment. Stiffening ribs **52** of soft rubber can be be molded on the inner surface of the cup.

In practice the motor is started, as by throwing a switch **53**. The pumps immediately begin to function by intermittently sucking air into the respective cups **50**. With the patron positioned as heretofore explained, the cups are applied to opposite portions of the scalp and will pull thereon simultaneously. The cups can be moved to different positions and as the circulation to the scalp has been increased because of the posture of the patron, this action of the cups will relax and stimulate the tissues.

By providing two cups, one can be used to pull simultaneously with but in the opposite direction to the other, thus avoiding pulling the head out of position. A further advantage is found in the fact that should one cup become clogged with foreign substances, the operation can continue with the other without interruption. If desired, however, only one cup can be used at a time.

By opening valve **45**, suction through the corresponding cup can be broken at will.

What is claimed is:

In a scalp massaging apparatus the combination with a housing having a top proportioned to support a person in a prone position thereon, of a suction pump in the housing having separate inlets, means in the housing for operating the pump, said pump and operating means being beneath the patient-supporting top of the housing, flexible tubes extending to the respective inlets and outwardly from the housing, a manually shiftable suction cup connected to the outer end of each tube and positioned to engage the head of the supported patient, and means under the control of the hand holding each cup for making and breaking suction in said cup.

SIDNEY A. HAMILTON.