No. 828,439. PATENTED AUG. 14, 1906.

M. STRUNSKY.

APPARATUS FOR REMOVING DANDRUFF AND FOR REMOVING DUST FROM IRREGULAR SURFACES.

APPLICATION FILED MAY 26, 1905.

Fig. 2.

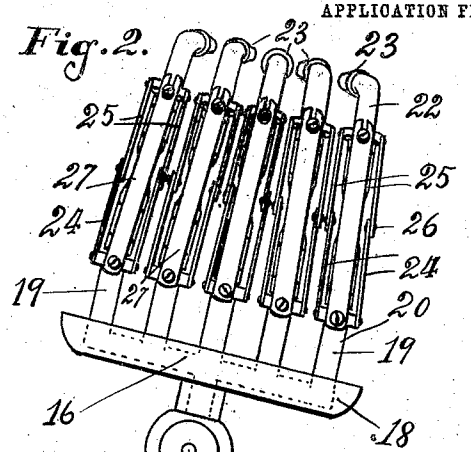

Fig. 4.

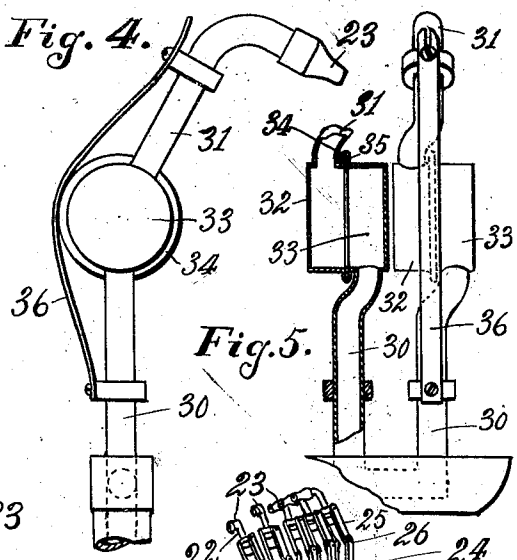

Fig. 5.

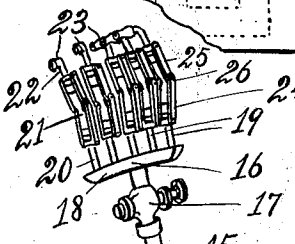

Fig. 1.

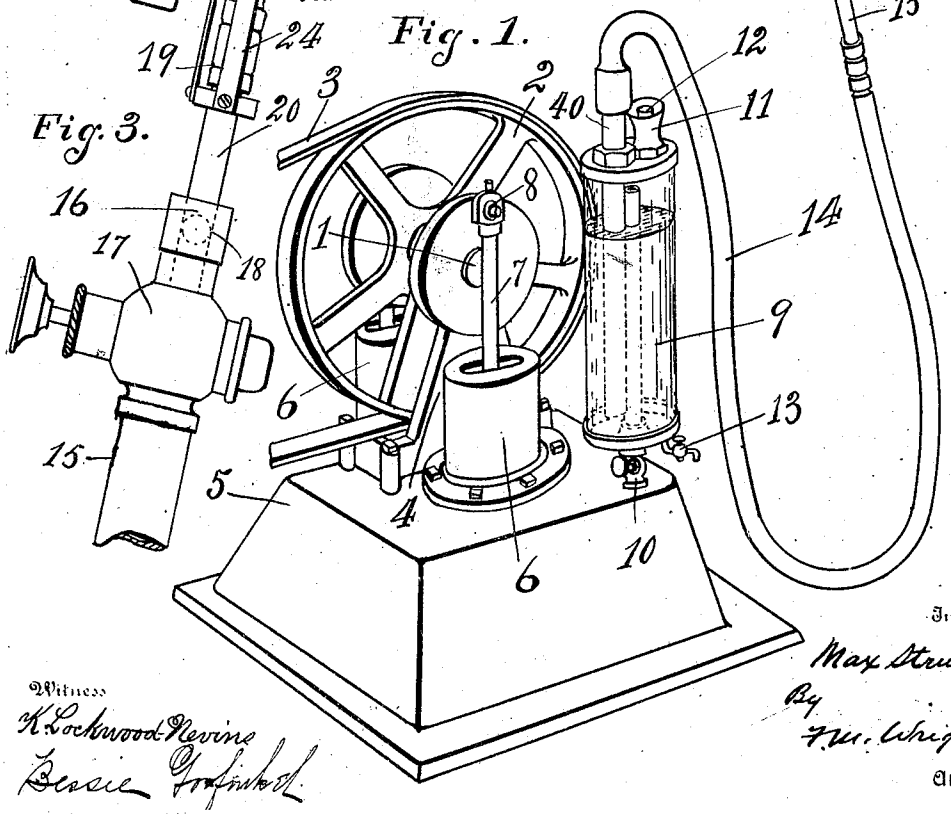

Fig. 3.

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UNITED STATES PATENT OFFICE.

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APPARATUS FOR REMOVING DANDRUFF AND FOR REMOVING DUST FROM IRREGULAR SURFACES.

No. 828,439. Specification of Letters Patent. Patented Aug. 14, 1906.

Application filed May 26, 1905. Serial No. 262,354.

To all whom it may concern:

Be it known that I, MAX STRUNSKY, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Apparatus for Removing Dandruff and for Removing Dust from Irregular Surfaces, of which the following is a specification.

This invention relates to improvements in apparatus for removing dandruff from the scalp or for removing dust from the skin of a horse or other animal or for similar purposes, the object of the invention being to provide an apparatus which will perform these functions conveniently, rapidly, and effectively.

In the accompanying drawings, Figure 1 is a perspective view of the apparatus in use. Fig. 2 is a detail perspective view of the handpiece. Fig. 3 is a side view of one of the nozzles. Fig. 4 is a broken perspective view of a modified form of handpiece. Fig. 5 is an enlarged section.

Referring to the drawings, 1 indicates a shaft carrying a pulley 2, driven by a belt 3 from any suitable source of power. Said shaft is mounted in bearings 4 upon the top of an exhaust-reservoir 5. 6 indicates a pump mounted upon the top of said reservoir and operated by a pitman 7, driven by a crank 8 from the shaft 1. By this means a constant suction may be created in the suction-reservoir 5. Upon said reservoir is also mounted a receiver 9, connected with the reservoir by a pipe 10, which extends from said reservoir up to a point near the top of the receiver. Water can be supplied to said receiver through a funnel 11 (closed by a cork stopper 12) and drawn off therefrom by means of a faucet 13.

14 indicates a flexible tube which is connected with the receiver by a pipe 40, extending to a point near the bottom thereof. Upon the end of said flexible tube 14 is secured a handpiece 16, which comprises the inlet-pipe 15, the valve 17 therein, the conduit 18, and the branch conduits 19. Each conduit includes a short rigid tube 20, connected to the handle, a flexible tube 21, and a rigid tube 22, on the end of which is secured the rubber nozzle 23. Each tube 22 has therefore on account of the flexible tube 21 freedom of motion relatively to the tube 20; but this motion is limited to a movement in a plane at right angles to the general plane in which all the tubes 20 lie by means of a pair of strips of metal 24, pivoted to the tube 20, and another pair of strips of metal 25, pivoted to the tube 22, said strips being themselves pivoted to each other, as shown at 26. The axes of all of said pivots are parallel with the general plane of the tubes 20, so that the swinging motion can take place only at right angles to said general plane. Each tube 20 has connected thereto a spring 27, which bears down upon the tube 22, bending the same downward in the form of a flexible finger.

In the modification shown in Figs. 4 and 5 the inner tubes (numbered 30) are connected with the outer tubes 31 by being provided at their connecting ends with cylindrical box-like terminals 32 33, open on one side, said open sides being opposite to each other, said terminals being provided with coengaging flanges 34 35. Springs 36 are secured to the inner tubes and press down upon the outer tubes in like manner as in the first form of the device.

The operation of the apparatus is as follows: The pump having been set in motion, exhaust is created in the exhaust-reservoir, which draws the air through the nozzles or tips 23. Said tips having been applied to the scalp or to the skin of the horse or other surface which it is desired to clean, the valve is opened. This produces a suction at the end of said tips 23, which draws the dandruff or dust therethrough. The nozzles can be passed between the hairs and brought into close contact with the scalp or skin. Thus the dandruff or dust can be effectively removed.

A very important feature of this invention consists in the provision for causing the row of suction-nozzles to conform to the inequalities in the surface of the scalp or skin. When the device is passed over such uneven surface, the individual springs cause the nozzles to adjust themselves to such irregularities. Thus at no time is any one of the nozzles out of contact with the surface over which the device is being passed, and suction is created at such surface at all points over which the device is passed.

I claim—

1. In an apparatus of the character described, the combination of means for creating an exhaust, a flexible pipe connected therewith, a handpiece at the end of said

pipe comprising flexible hollow fingers, and individual springs for normally pressing said fingers in a uniform direction, substantially as described.

2. In an apparatus of the character described, the combination of means for creating an exhaust, a flexible pipe connected therewith, a handpiece at the end of said pipe comprising flexible hollow fingers, having flexible tips, and individual springs for normally pressing said fingers in a uniform direction, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

MAX STRUNSKY.

Witnesses:
FRANCIS M. WRIGHT,
BESSIE GORFINKEL.