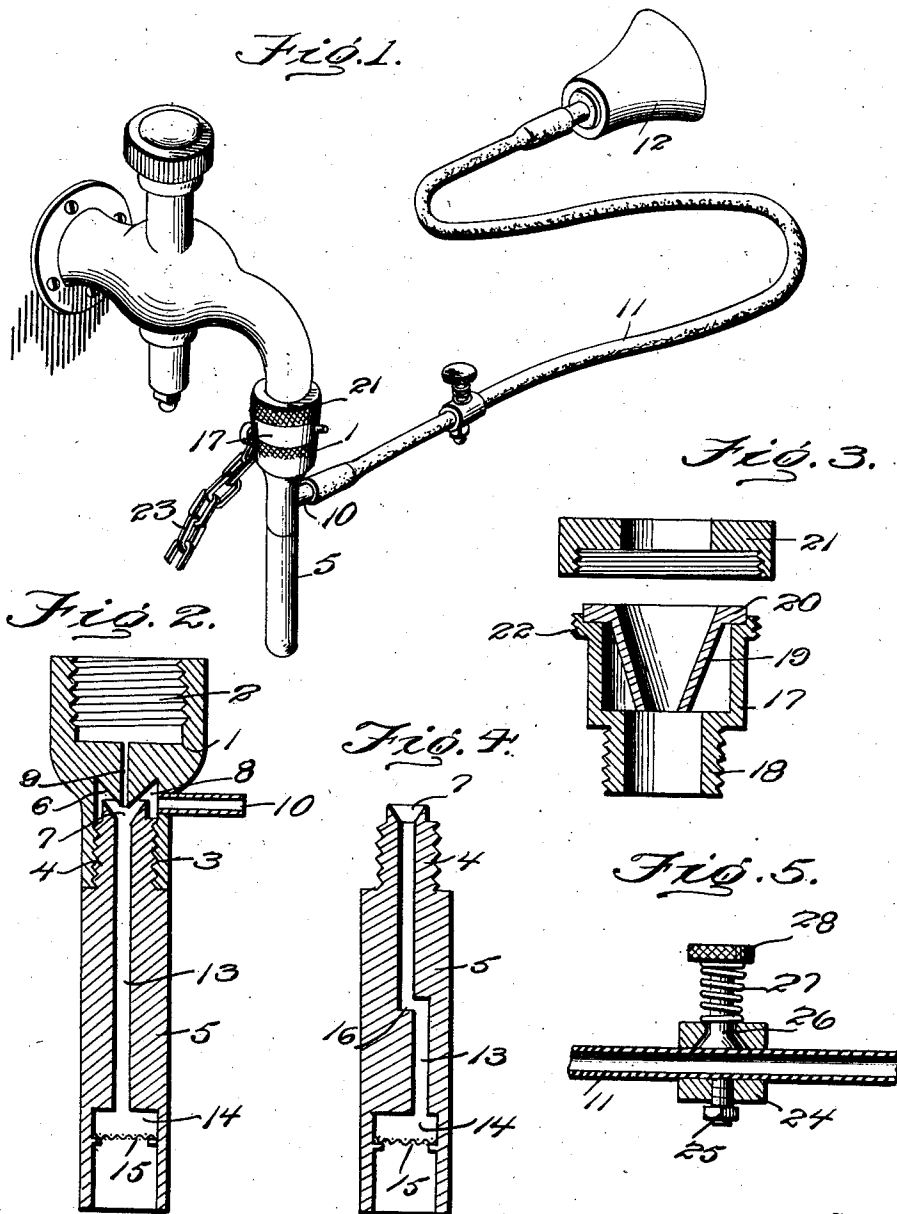


A. L. & E. F. PAGE.
 MESSAGE APPARATUS.
 APPLICATION FILED AUG. 7, 1911.

1,058,330.

Patented Apr. 8, 1913.



Witnesses

Coral M. Handy.
Juana M. Fallon.

Inventors

AL. Page.
E. F. Page.

By

H. A. M. Acy. Attorneys.

UNITED STATES PATENT OFFICE.

ARTHUR L. PAGE AND ELMER F. PAGE, OF MALDEN, MASSACHUSETTS.

MASSAGE APPARATUS.

1,058,330.

Specification of Letters Patent.

Patented Apr. 8, 1913.

Application filed August 7, 1911. Serial No. 642,639.

To all whom it may concern:

Be it known that we, ARTHUR L. PAGE and ELMER F. PAGE, citizens of the United States, residing at Malden, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Massage Apparatus, of which the following is a specification.

This invention comprehends certain new and useful improvements in massaging devices of the type that depend upon the action of a jet of water to entrain the air and produce the required suction, and the invention has for its primary object a simple, durable and efficient construction of apparatus of this character, including an aspirator composed of comparatively few parts that may be easily manufactured and readily assembled and detached from each other for the purposes of repair or cleaning, and which will be so arranged that it may be easily and securely applied to smooth faucets, as well as those that are provided with exterior screw-threads, and the invention also aims to generally improve this class of devices and to render them more useful and commercially desirable.

With these and other objects in view, as will more fully appear as the description proceeds, the invention consists of certain constructions, arrangements and combinations of the parts that we shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing, in which:

Figure 1 is a perspective view showing one application of our improved massage apparatus; Fig. 2 is a longitudinal sectional view of a portion of the device; Fig. 3 is a detail sectional view of an attaching member that may be employed; Fig. 4 is a detail sectional view of one embodiment of a vacuum pipe; and Fig. 5 is a detail sectional view of a vibrator which may be used.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawing by the same reference characters.

Our improved massaging apparatus comprises a preferably metallic shell or casing 1 which is formed at one end with interior screw-threads 2 for attachment to an ordinary sink faucet or the like, said casing being also formed at its other end with in-

terior screw-threads, designated 3, the latter being designed for engagement with the exterior threads that are formed on the reduced neck 4 of a vacuum pipe 5.

The casing 1 is formed intermediate of its ends with a tapered jet nozzle 6, the discharge end of which is designed to fit in a tapered socket 7 formed in the extremity of the neck 4, such extremity being of less diameter, exteriorly, than the opening in the casing 1 in which the said extremity fits, whereby to produce, around the extremity of the neck and at the discharge end of the nozzle 6, an annular air compartment 8.

9 designates the relatively narrow opening or water passage through the nozzle 6.

10 designates a nipple which projects perpendicularly from the casing 1, being formed integral therewith or secured thereto in any desired way, said nipple opening at one end into the air compartment or chamber 8 which surrounds the nozzle. A rubber tube 11 is intended to be detachably secured upon the nipple 10. Suction cups 12 of any desired character, according to the particular action to be secured or effect to be produced, are intended to be secured detachably to the tube.

The vacuum pipe 5 is formed with a longitudinal bore or water passage extending entirely therethrough from end to end, said passage being straight in that embodiment of the invention illustrated in Fig. 2, and opening at the discharge end of the pipe into a relatively large chamber 14.

A screen 15, preferably formed of fine wire cloth is secured in any desired way in the chamber 14 in spaced relation to the adjoining end of the passage 13, the water flowing through the passage 13 being not only prevented from splashing by the screen 15, but being sealed or banked up against the screen, to a certain extent, so as to assist in the action of producing a partial vacuum or suction.

It is to be understood that our invention is not limited to a straight port or passage 13, but that said passage may, as best illustrated in Fig. 4, be offset as at 16, the offset operating to bank up the water and thereby prevent the air from drawing back through the discharge pipe.

In order that our apparatus may be easily applied and secured to faucets that are formed with smooth exteriors, we have pro-

vided an attaching section 17 which is formed at one end with a threaded nipple 18 designed to engage the screw-threads 2 of the shell or casing 1. A tapered rubber 5 thimble or gasket 19 fits loosely within the body portion of the attaching member 17, said gasket being formed at its upper end with an outstanding flange 20 adapted to rest within a recess formed in the upper end 10 of the member 17, a clamping collar 21 screwing down upon the flange 20 and engaging the threaded portion 22 of the member 17 whereby to clamp the bushing 19 in place.

15 From the foregoing description in connection with the accompanying drawing, the operation of our improved massaging apparatus will be apparent.

In the practical use of the device, if the 20 direct source of water supply be a faucet provided at its discharge end with exterior screw threads, the attaching member 17 will not be used, but the shell or casing 1 will be directly secured to the faucet. When the 25 water is turned on, it is obvious that the jet nozzle 6 and its relation to the socket 7 and the reduced extremity of the neck 4 of the vacuum pipe 5, will result in the air within the nipple 10, tube 11 and suction cup 12, 30 being entrained, a partial vacuum being thereby produced and a suction resulting, the same being regulated in any desired way, as for instance by regulating the force of water at the faucet. If the faucet be 35 smooth it is only necessary to screw the nipple 18 into the shell or casing 1 and to thrust the attaching member 17 upon the discharge end of the faucet, the expansible thimble or bushing 19 closing tightly upon 40 the faucet, the attaching member 17 being secured upon the faucet by a chain 23 or similar fastening device.

If desired, the apparatus may include a 45 vibrator which may be secured to any part of the device and which in the present instance is shown in the drawing as a collar 24 secured in any desired way as by a set-screw 25 upon the tube 11, said collar containing a spring-closed valve 26. The 50 spring 27 of the valve may be regulated by

a thumb-screw 28 mounted on the valve stem. When this device is used and when the vacuum in the tube 11 becomes great enough, the valve 26 will be opened by outside air pressure. As soon as the vacuum 55 is broken, the spring 27 will again close the valve, a vibratory effect being thereby produced.

While the accompanying drawing discloses what we believe to be the preferred 60 embodiments of our invention, it is to be understood that the invention is not limited thereto, but that various changes may be made in the construction, arrangements and proportions of the parts without departing 65 from the scope of the invention as defined in the appended claim.

Having thus described the invention, what we claim as new is:

An aspirator, embodying a casing formed 70 at one end for attachment to a faucet and provided at its opposite end with interior screw-threads and formed intermediate of its ends with a jet nozzle and with an air 75 compartment surrounding the same and an opening leading into said compartment, the casing being arranged for attachment to a suction tube at said opening, and a vacuum pipe provided with a screw-threaded neck 80 adapted to engage the screw-threads of the casing, the extremity of said neck being formed with a tapered socket adapted to extend around the discharge end of the jet 85 nozzle and be surrounded by said air compartment, said pipe being formed with an opening extending therethrough for the discharge of water, with a chamber at the discharge end of said opening, and a screen secured in said chamber in spaced relation to 90 the discharge end of the opening.

In testimony whereof we affix our signatures in presence of two witnesses.

ARTHUR L. PAGE. [L. s.]

ELMER F. PAGE. [L. s.]

Witnesses to signature of Arthur L. Page:

JOHN MCCRILLIS,

L. MARGUERITE WILMARTH.

Witnesses to signature of Elmer F. Page:

CLARENCE E. CARNEY,

ARTHUR R. CARLSON.