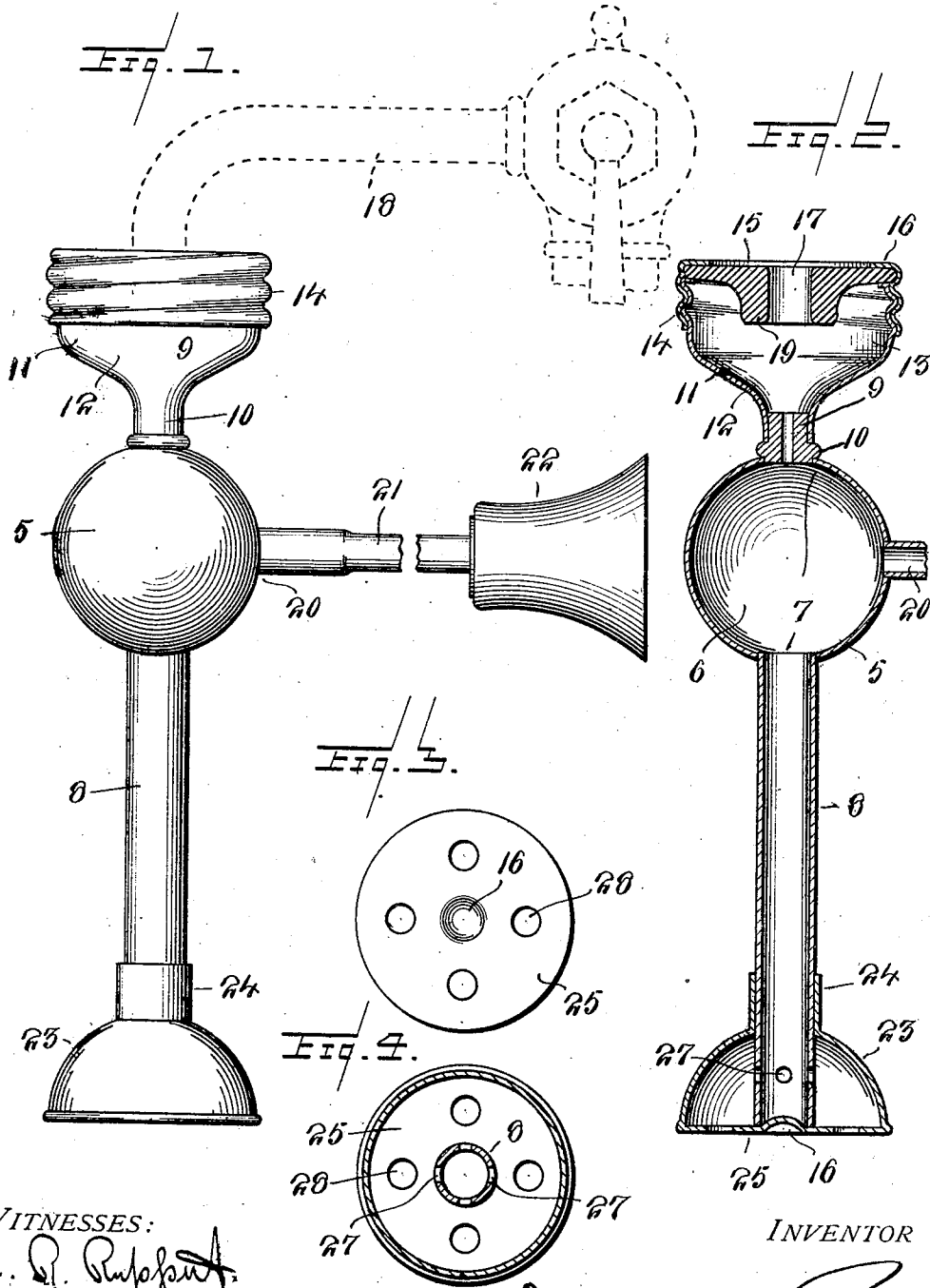


F. O. PARKER.
VACUUM MASSAGE DEVICE.
APPLICATION FILED FEB. 29, 1912.

1,060,852.

Patented May 6, 1913.



WITNESSES:

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1,060,852.

Specification of Letters Patent.

Patented May 6, 1913.

Application filed February 29, 1912. Serial No. 680,641.

To all whom it may concern:

Be it known that I, FRANK O. PARKER, a citizen of the United States of America, residing at Washington city, District of Columbia, have invented certain new and useful Improvements in Vacuum Massage Devices, of which the following is a specification.

The invention relates to a massage apparatus and more particularly to the class of vacuum massage devices.

The primary object of the invention is the provision of a device of this character in which maximum vacuum can be attained with a minimum water pressure, so that the vacuum can be applied directly to the body and skin of a person, thus obviating vibratory action upon the part treated for massage purposes.

Another object of the invention is the provision of a device in which the water under pressure will intersect a vacuum chamber thereby generating a high efficiency of vacuum for creating maximum suction in an applicator, whereby on applying the same to the body it will effect a circulation in the tissues of the skin for the massaging of the same without causing the bruising of the skin or otherwise injuring it.

A further object of the invention is the provision of a massage device of this character in which a positive vacuum for producing suction in an application will be formed, without requiring excess or increase water pressure in the device.

A further object of the invention is the provision of a device of this character which is simple in construction, strong, durable, light in weight, reliable and efficient in operation and inexpensive in manufacture.

Other objects of the invention will be in part obvious and in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combination of elements and arrangement of parts which will be exemplified in the construction hereinafter set forth, and the scope of the application of which will be indicated in the following claims.

In the drawings:—Figure 1, is a side elevation of a device constructed in accordance with the invention applied to a water faucet which is shown by dotted lines. Fig. 2, is a vertical longitudinal sectional view of the

same. Fig. 3, is an end elevation. Fig. 4, is a transverse sectional view near the lower end of the device.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

Referring to the drawings by numerals, the device comprises a spherical hollow body 5, forming a vacuum chamber 6, and in diametrically opposite points thereof are provided openings 7, one of which receives the inner end of a water outlet or discharge pipe 8, extending vertically down from the said body, the pipe being of any desired length and is fixed to the body in any preferred manner, so as to form a fluid tight joint therebetween. Fixed in the other opening 7, is the inner end of a water injector or jet nozzle 9, the same being in vertical alinement with said outlet or discharge pipe 8, and is formed with a coupling nipple 10, to which is connected the inner contracted end 11, of a shell 12, forming a bulb, which is preferably constructed from metal, the outer end being formed with screw threads 13, struck therefrom for the detachable engagement thereon of a retaining ring 14, adapted to removably secure in the outer end of said shell a centrally perforated resilient disk 15, preferably constructed from rubber. The ring 14 is formed with an annular inturned flange 16, adapted to lie against the outer face of the disk 15, to prevent the detachment of the same when fastened in the shell.

The central aperture or hole 17 in the disk 15, is designed to fit snugly over the end of the faucet 18, a depending lip or flange 19, being formed around said aperture or hole 17, within the bulb, whereby when water under pressure is admitted to said bulb the pressure thereof will operate to force the flange 19, into frictional contact or engagement with said faucet and to secure the same firmly in position thereon.

Leading from one side of the body 5, in communication therewith and at right angles to the axis of said pipe 8, is an air inlet nozzle 20, to which is connected a flexible tube 21, the same being also connected with an applicator 22, which is of any approved form and is detachably connected with the tube 21, in the ordinary manner.

On the outer end of the outlet or discharge pipe 8, is a semi-spherical shaped

shield or guard cap 23, the inner end being formed with a boss 24, which surrounds said pipe 8, and is connected thereto in any suitable manner. The outer end of the cap 23, carries a disk 25, formed with a central depression or indentation 26, telescoped within the outer end of said pipe 8, for closing the same, the pipe 8, being extended within the cap 23, and is provided with outlet ports 27, spaced from its closed end for permitting water to discharge into the cap. The disk 25 is formed with discharge holes 28, concentrically disposed about the depression or indentation thereon for allowing the water in the cap 23 to be delivered therefrom without splattering or discharging with great force, and in this manner the water column is broken up before being discharged from the device into a basin or other receiver to avoid splashing of the water therein.

What is claimed is:

1. In a massage device a water outlet pipe having a spherical vacuum chamber, means located wholly outside and communicating with the chamber for reducing the water column supply when admitted thereto, means for detachably connecting said means to a water pressure delivery element, a semi-spherical shaped cap on the lower end of the outlet pipe and having a perforated outer end, the said outlet pipe being provided with outlet ports opening into the cap, and a depression struck in from the outer end of the cap for closing the lower open end of the pipe.

2. In a massage device, a spherical vacuum chamber, an injector in communication therewith, an outlet pipe in communication with the chamber, and an air inlet pipe in communication with the said chamber, all of said points of communication being beyond the inner wall of the vacuum chamber, whereby to present an uninterrupted spherical surface for the air and water currents.

3. In a massage device, a spherical vacuum chamber, an injector in communication therewith, an outlet pipe in communication with the chamber and in alignment with the injector, and an air inlet pipe in communica-

tion with the chamber, the injector, outlet pipe, and air inlet pipe being connected to the wall of the spherical vacuum chamber and inwardly terminating in alignment with the inner surface of said wall to avoid interruption of the spherical surface of said chamber.

4. A massage device including a spherical vacuum chamber, an injector and an outlet pipe communicating with said chamber and diametrically opposed to each other, an air inlet pipe leading into the chamber intermediate the injector and outlet pipe, the connection of the injector, outlet pipe, and inlet pipe avoiding projection within the vacuum chamber, whereby the currents therein are uninterrupted in their free rotary movement.

5. A massage device including a spherical vacuum chamber, an air inlet pipe communicating with but not extending into the chamber, an outlet pipe communicating with but not extending into the chamber, and an injector communicating with but not extending into the chamber, said injector having an admission channel in communication with the chamber of materially reduced diameter as compared with the diameter of the channel of the outlet pipe.

6. A massage device including a spherical vacuum chamber having a completely free uninterrupted interior spherical surface, means for connecting said chamber with a water supply under pressure, an injector arranged intermediate said water supply under pressure and chamber to increase the pressure of the fluid at its point of admission to the chamber as compared with the pressure of the water supply, an outlet pipe communicating with the chamber and constructed to decrease the pressure of the fluid at the outlet as compared with the inlet, and an air inlet pipe communicating with the chamber.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK O. PARKER.

Witnesses:

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