

H. BEHM.
VIBRATOR.
APPLICATION FILED SEPT. 17, 1914.

1,141,373.

Patented June 1, 1915.

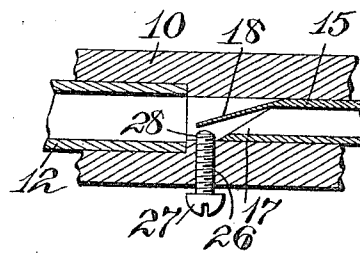
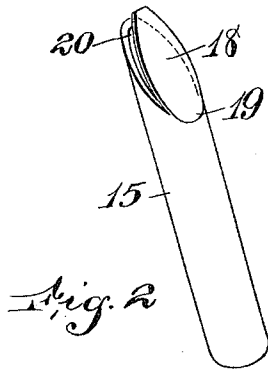
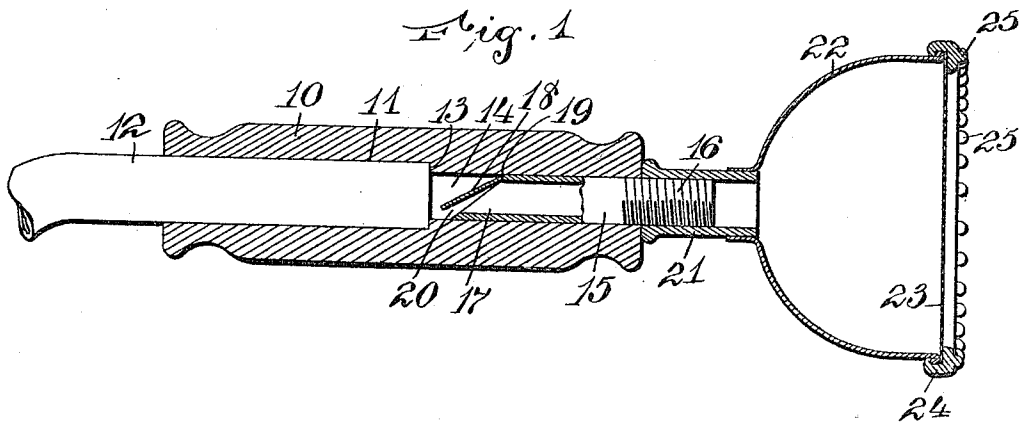


Fig. 3

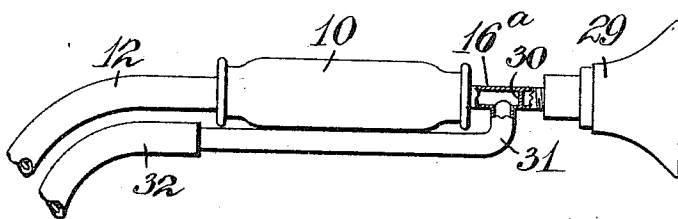


Fig. 4

WITNESSES:
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UNITED STATES PATENT OFFICE.

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VIBRATOR.

1,141,373.

Specification of Letters Patent.

Patented June 1, 1915.

Application filed September 17, 1914. Serial No. 862,189.

To all whom it may concern:

Be it known that I, HENRY BEHM, a subject of the Emperor of Germany, and a resident of Elizabeth, county of Union and State of New Jersey, have invented certain new and useful Improvements in Vibrators, of which the following is a specification.

This invention relates to a vibrator which is adapted for use in massaging and in like manipulations, being of the type that is attached to a flexible hose and is thus freely vibratory.

The invention is further designed to provide a vibrator of the above type which is vibrated by a reed or leaf placed in the handle or holding element of the vibrator, the leaf being secured to the handle within the channel or passage for the liquid, the leaf being placed in vibration when liquid is passed through the handle.

The vibrator is one in which the handle is adapted for use with different tools, as for massaging, and can also be used in connection with a douche, the different attachments being adapted to be placed on the outlet end of the handle and thus permitting the use of the tool and the liquid simultaneously.

A further object of the invention is to provide a vibrator of this type having a device on the handle and manipulated from the exterior, the device being arranged so that it can be caused to engage the vibrating leaf so as to control the vibration.

The invention also comprises certain details of construction which are more fully described hereinafter.

The invention is illustrated in the accompanying drawing, in which—

Figure 1 is a section of one form of my improved vibrator. Fig. 2 is a perspective view of one form of tube used in the invention. Fig. 3 is a section of part of the handle of the vibrator showing a form of means for controlling the vibration. Fig. 4 is a side view partly broken away, illustrating a modified form of construction.

The invention can be made in different forms and of many different dimensions, but in the form illustrated I show the supporting element or handle 10 formed with a grip so that it can be easily held in the hand as a means for manipulating the vibrator, the handle 10 having a longitudinally arranged bore 11. To one end of the

handle is attached a flexible hose 12 which leads from any suitable source of liquid supply, being preferably provided, on the end that is not shown, with an attachment by means of which it is secured to a faucet. In the device shown in the drawing the hose abuts against a shoulder 13 which is caused by the smaller end 14 of the longitudinal bore 11. The bore forms a channel for the passage of liquid which comes into the handle through the hose 12, and in the channel I place a vibrator leaf or reed, this vibrating leaf being secured to the handle, and by reason of the vibration it undergoes by reason of the passage of liquid through the handle, it vibrates the handle and in turn any tool or attachment which is secured to the handle for application to the human body or to any object to be vibrated.

In the form shown I arrange the vibrating leaf on a tube 15, the tube 15 projecting into the bore 14 and having its projecting end 16 arranged for attaching a massage tool or other implement on the end of the handle. The inner end 17 of the tube is provided with a vibrating leaf 18 attached at one end as at 19 to the tube, the leaf being inclined toward the entrance or inlet end of the handle. In other words, it projects into the stream of liquid passing through the handle and is thus caused to vibrate the liquid passing around the vibrating leaf and through the opening 20 into the tube 15.

In the form shown in Fig. 1 the end 16 is screw-threaded and receives a screw-threaded neck 21 of a cup-shaped holder 22 provided on its open end with a strainer or screen 23 which causes the water coming from the vibrator to emerge as a spray. I illustrate a ring 24 provided with buttons 25, this being one form of tool that can be used in massaging the body. It will be readily understood that other tools or massage implements can be placed on the projecting end 16 of the tube 15, such as nozzles used in douches and other appliances. The form of device shown in Fig. 1 permits the use of the vibrating tool along with the application of water through the same device.

In Fig. 3 I show the vibrating leaf or reed 18 as projecting beyond the end 17 of the tube 15, and in the side of the handle 10 I arrange a screw 26 which can be operated

from the exterior of the handle as by means of the head 27, the inner end 28 of the screw being adapted to be screwed toward and from the leaf 18 and in line with its vibrating motion, this screw being adapted to control the vibration of the leaf and consequently of the apparatus without altering the flow or the amount of liquid passing through the device.

10 In the form shown in Fig. 1 the vibration can be regulated from the faucet by increasing or decreasing the flow of water, but in the type shown in Fig. 3, the vibration can be regulated without affecting the amount of water passing through the vibrator.

15 In Fig. 4 I show a modified form of vibrator, this form having means for using a dry vibrating tool on the device. In the form shown I extend the pipe or tube 15 so that its outer end 16^a is extended so that on its outer end it receives any suitable form of massage tool 29, the end of the pipe, however, being closed. In the form shown this is done by a partition 30, the pipe 16^a having a return pipe 31 attached thereto which is adapted to conduct water that is passed through the handle back to any suitable outlet pipe 32 which can be placed in a basin or disposed of as desired. In this form of apparatus the water does not engage the body of the person using the massage tool, and a dry massage is possible. It will be noted that this apparatus is free of revolving or sliding parts and of course the consequent wear is avoided.

35 The materials of which the device can be made are various and the vibrating leaf can be installed in different manners, but I prefer to make the vibrating leaf 18 of metal thinner than the tube 15 to which it is attached by soldering or other means, whereby the vibration of the leaf is positively communicated to the tube and consequently to the handle in which the tube is inserted. The tube 15 and hose 12 can be secured in the handle by any well known or suitable means, as will be evident. The device is economical to make, is simple in its operation, easily regulated and is light, thereby being easy to manipulate.

Having thus described my invention, I claim:

1. In a vibrator, a handle adapted to vibrate, the handle having a bore therein for the passage of liquid, a tool on the end of the handle, and a vibrating leaf secured in said bore and projecting toward the inlet end thereof.

2. In a vibrator, a handle adapted to vibrate, a flexible hose connection on said handle, the handle having a longitudinal bore for the passage of liquid, a tube in said handle and projecting into and from the end of the bore, a tool secured to the projecting end of the tube, and a vibrating leaf arranged at an incline on the inner end of the tube.

3. In a vibrator, a handle, a flexible hose attached to one end of the handle, a vibrating tool at the other end of the handle, the handle having a longitudinal bore for the passage of liquid from the hose to the tool, and a vibrating leaf secured at one end in the bore and inclined toward the inlet end thereof.

4. In a vibrator, a handle, a flexible hose attached to one end of the handle, the handle having a bore extending longitudinally through it for the passage of liquid, a tube in the bore and projecting therefrom, a tool secured on the projecting end of the tube, and an inclined vibrating leaf secured to the inner end of the tube.

5. In a vibrator, a handle, a flexible hose attached to one end of the handle, the handle having a bore extending longitudinally through it for the passage of liquid, a tube in the bore and projecting therefrom, the projecting end of the tube being screw-threaded, a vibrating tool secured on the end of the tube, and a vibrating leaf secured to the inclosed part of the tube.

In testimony that I claim the foregoing, I have hereunto set my hand, this 16th day of September, 1914.

HENRY BEHM.

Witnesses:

WM. H. CAMFIELD,
M. A. JOHNSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."