

(No Model.)

J. W. JAMES.

ELECTRICAL BATHING MACHINE.

No. 398,731.

Patented Feb. 26, 1889.

Fig. 1.

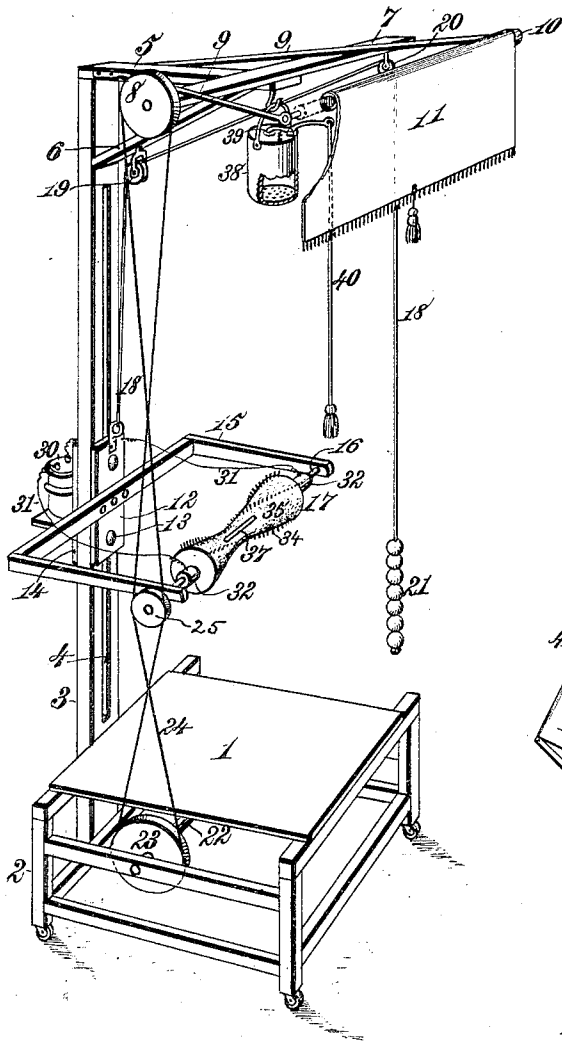


Fig. 2.

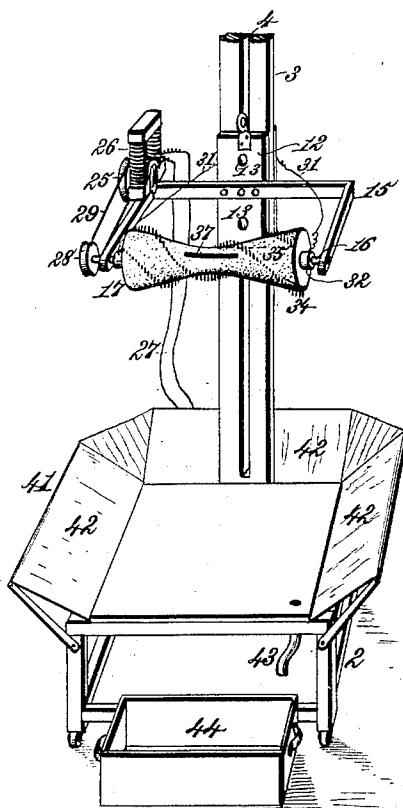
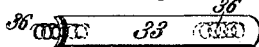
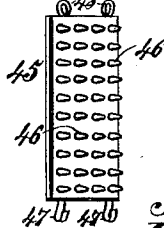


Fig. 3.



Witnesses:
Robert G. Watt,
J. A. Rutherford.

Fig. 4.



Inventor:
Jack W. James.
By *James L. Norris*
Atty.

UNITED STATES PATENT OFFICE.

JACK W. JAMES, OF CUBA, TENNESSEE.

ELECTRICAL BATHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 398,731, dated February 26, 1889.

Application filed June 14, 1888. Serial No. 277,031. (No model.)

To all whom it may concern:

Be it known that I, JACK W. JAMES, a citizen of the United States, residing at Cuba, in the county of Shelby and State of Tennessee, have invented new and useful Improvements in Bathing-Machines, of which the following is a specification.

My invention relates to improvements in bathing-machines of the kind described in Letters Patent granted to me October 12, 1886, Nos. 350,489 and 350,490, and July 5, 1887, No. 366,110; and it consists in the construction and combination of devices, hereinafter set forth and claimed.

In the annexed drawings, Figure 1 is a perspective of my improved bathing-machine. Fig. 2 is a partial front elevation illustrating a modification in the machine. Figs. 3 and 4 are detail views.

The numeral 1 designates a platform supported on a frame, 2, that may be provided with rollers or casters, as shown. To the rear side of the platform and its supporting-frame is attached an upright, 3, having a vertical slot or guideway, 4, that may extend nearly the entire length of the upright. On the top of the upright 3 is secured a forwardly-projecting arm, 5, said upright and arm being also connected by a brace, 6, arranged beneath said arm. The arm 5 supports a cross-bar, 7, to one end of which may be journaled a pulley, 8, for a purpose hereinafter explained. The cross-bar 7 supports a pair of forwardly-projecting rods, 9, to which is attached a roller, 10, carrying a curtain, 11, which may be drawn down to screen the machine when not in use.

On the front of the upright 3 is a vertically-sliding board, 12, having bolts 13, that are passed through the slot 4 to serve as guides for said board. As shown in Fig. 1, these bolts 13 may also connect with a sliding board, 14, on the back of the upright. To the front sliding board, 12, is attached a horizontal frame, 15, in which is journaled the horizontal shaft 16 of a rotary brush, 17, which is concaved or formed approximately as a double cone to better adapt it for coming in close contact with the body of the bather.

To the upper end of the sliding board 12 is attached a cord, 18, which passes upward over a pulley, 19, on the brace 6, thence forward over a pulley, 20, on the cross-bar 7, and then

downward within reach of the bather. To the lower end of this cord are attached counter-weights 21, whereby the sliding board 12 is held at any desired height, so that by manipulating said cord the bather can adjust the board 12 and attached frame 15 to bring the rotary brush 17 in contact with the body at any height required.

In order to actuate the rotary brush 17, a driving-shaft, 22, may be located beneath the platform. This shaft 22 has a pulley, 23, connected by crossed belting 24 to the pulley 8 and to a pulley, 25, on the shaft of the rotary brush, as shown in Fig. 1, the belting 24 being crossed both above and below the brush-pulley, whereby the brush can be adjusted vertically without changing the tension of the driving-belt. The shaft 22 can be driven by any suitable power.

Instead of employing the driving-shaft 22, pulleys 8 and 23, and belting 24 to actuate the rotary brush 17, said brush may be driven through an electric motor, 26, clamped to one corner of the adjustable frame 15, as shown in Fig. 2, and energized through conductors 27 from a battery, (not shown,) which may be located beneath the platform of the bathing-machine. The electric motor 26 can be connected with the brush-shaft 16 by pulleys 25 and 28, connected by a belt, 29, or by any other suitable gearing.

If desired, electricity may be applied to the body through the rotary brush 17 from a battery, 30, having conductors 31 that connect with metallic hubs 32 on the brush-shaft, these hubs in turn being connected in any suitable way with electrodes 33 on the brush.

The battery 30 may be supported by the rear vertically-sliding board, 14, as shown in Fig. 1, or in any other manner, so as to be vertically adjustable with the rotary brush.

Besides the electrodes 33, the brush 17 is provided with rows of bristles 34, located at suitable intervals and running diagonally or spirally around the brush. If desired, the brush may be made with alternate rows of bristles 34, and sponge or cotton-fiber 35, the sponge or fiber when wet serving as electrodes.

If metal electrodes 33 are used, they will be made in semicircular form, as shown in Fig. 3, and be made yielding by means of

5 springs 36, placed between them and the brush. By making the brush concave it will more readily conform to the person, and by
10 arranging the bristles at considerable intervals in diagonal rows alternating with the electrodes the points of contact will be smaller, and more agreeable sensations and better therapeutic effects will be produced with a slight expenditure of power.

15 A slot, 37, in the center of the brush is adapted to receive a wet towel, by which a succession of light blows will be delivered on the body under the rotation of the brush, and thus, when applied to the spinal region,
20 afford a suitable remedy in nervous affections.

From the arm 5 is suspended a water-can, 38, having a bottom that is provided with a large number of fine perforations. In the top
25 of the can is an air-opening, over which is fitted a self-closing spring-valve, 39, to which is connected a cord, 40, that hangs within reach of the bather. By pulling this cord the valve 39 will be opened, and the air thus admitted
30 to the can will cause a brisk shower of water to be discharged upon the bather.

A light folding frame, 41, Fig. 2, may be hinged to the frame 2, and be covered with oil-cloth, 42, so as to form folding sides for
35 the platform, to which the lower edge of the oil-cloth is attached. The oil-cloth sides 42 will prevent the spattering of water, and from the platform 1 it may be discharged through a tube or spout, 43, into a tub or pan, 44, placed in front of the machine.

The operation and advantages of the machine will fully appear from the foregoing description. The machine affords a convenient means for the application of electricity and
40 friction in connection with a bath. It is light, compact, and portable, and when not in use can be pushed to one side and be concealed by drawing down the curtain.

If desired, the rotary brush 17 may be surrounded by a rubber pad or sheet of rubber, 45, provided on its outer side with numerous soft-rubber teeth 46, and having hooks 47 at one end and eyes 48 at the other end, by which
50 said pad can be detachably secured around the brush to afford an agreeable mode of imparting friction to the body.

What I claim is—

1. In a bathing-machine, the combination of a vertically-adjustable rotary brush provided with electrodes, an electric battery
55 vertically adjustable with said brush and connected with the brush-electrodes by suitable conductors, and means for rotating said brush, substantially as described.

2. In a bathing-machine, the combination 60 of a rotary brush, yielding electrodes carried by said brush, an electric battery, and conductors connecting said battery with the yielding electrodes on the brush, substantially as described. 65

3. In a bathing-machine, the combination of an upright having a vertical guideway, a counterbalanced frame supported in said guideway, and a rotary brush journaled in said frame, substantially as described. 70

4. In a bathing-machine, the combination of a vertically-adjustable frame, a rotary brush journaled in said frame and provided with electrodes, an electric battery supported by said frame, and conductors connecting said
75 battery and electrodes, substantially as described.

5. In a bathing-machine, the combination of a platform having folding sides, a perforated water-can or shower device suspended
80 above said platform, a vertically-adjustable rotary brush provided with electrodes, an electric battery, and conductors between said battery and electrodes, substantially as described.

6. In a bathing-machine, a rotary brush provided with diagonal rows of bristles alternating with sponge or fiber, substantially as described. 85

7. In a bathing-machine, a rotary brush having a slot for the insertion of a towel, substantially as described. 90

8. In a bathing-machine, the combination, with a rotary brush, of a detachable rubber pad, 45, having teeth 46, substantially as described. 95

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

JACK W. JAMES.

Witnesses:

THOS. WELLFORD,
C. A. MAURY.