No. 643,094. Patented Feb. 6, 1900.

O. A. HENSEL.

ROCKING OR OSCILLATING BATH TUB.

(Application filed Jan. 6, 1899.)

(No Model.) 2 Sheets—Sheet 1.

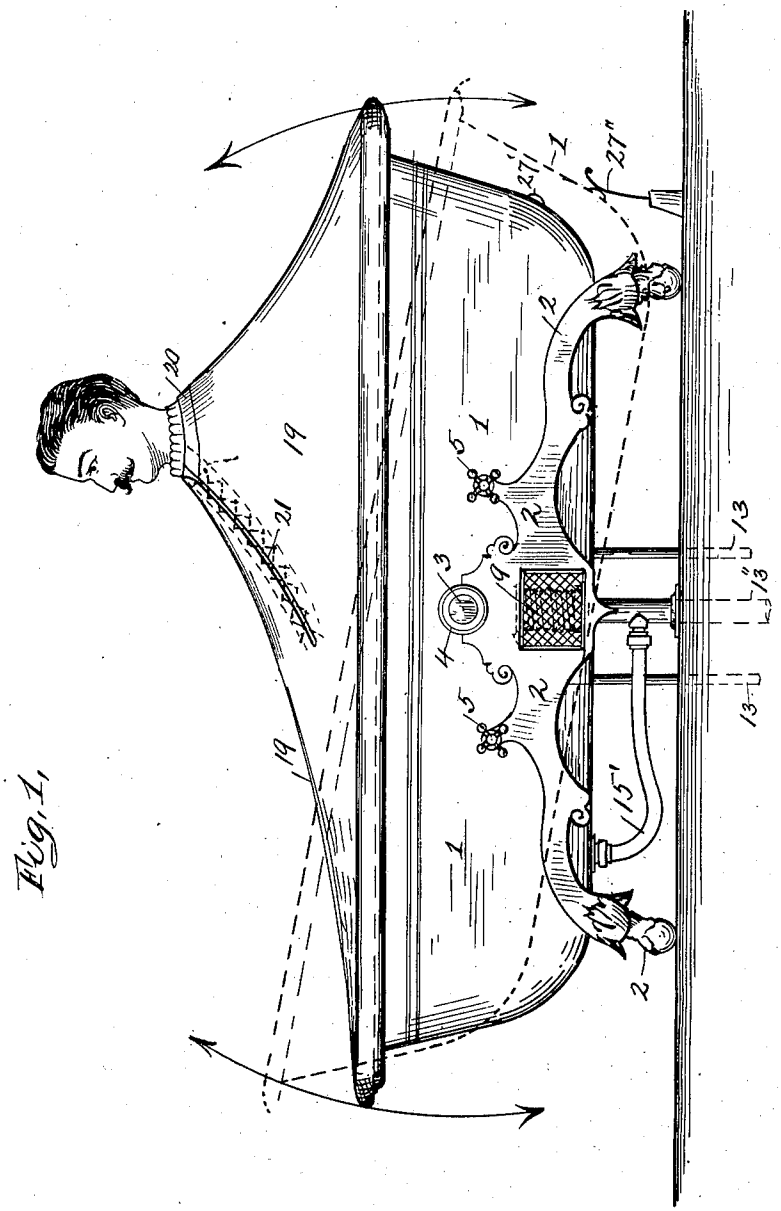

Fig. 1.

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Inventor:
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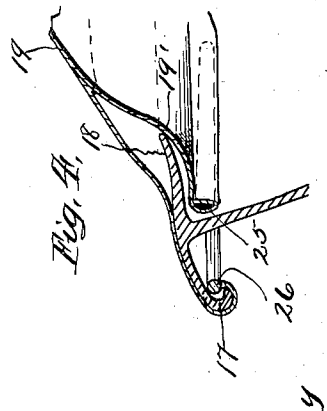

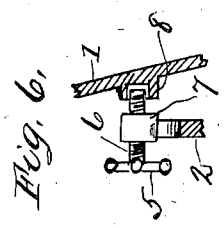

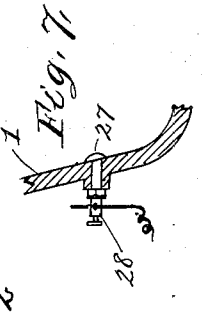

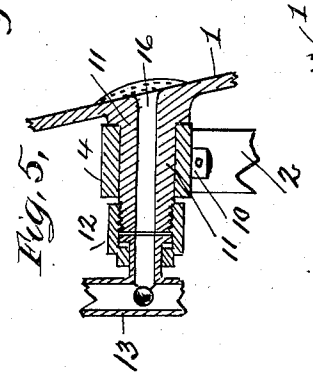

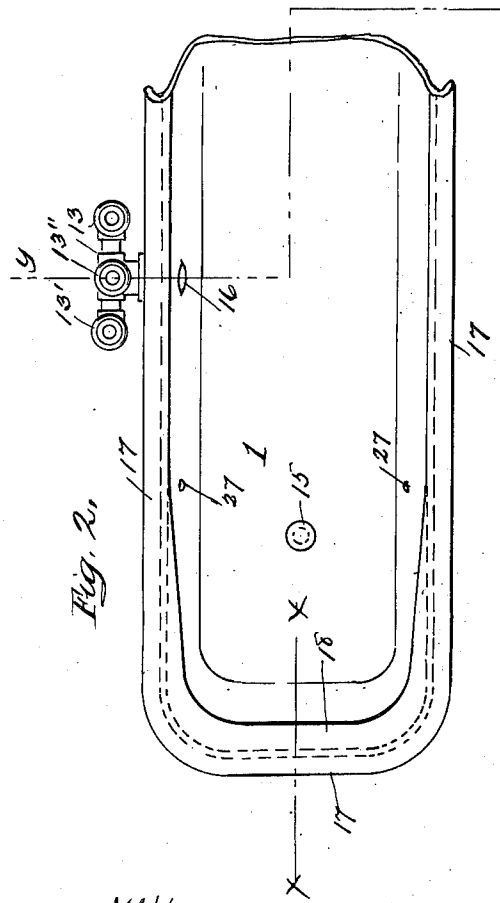

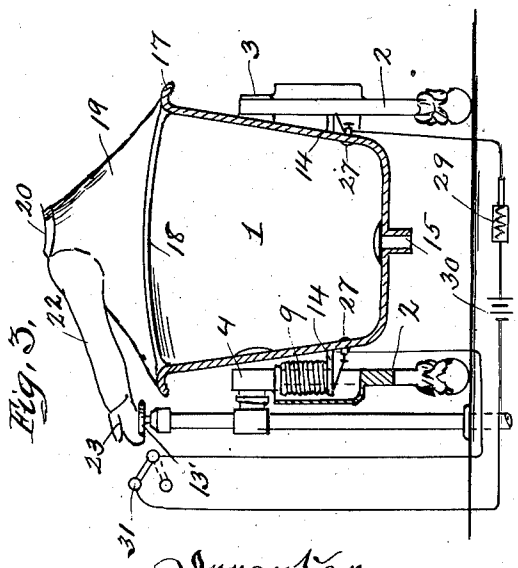

Witnesses:
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UNITED STATES PATENT OFFICE.

OTTO A. HENSEL, OF PITTSBURG, PENNSYLVANIA.

ROCKING OR OSCILLATING BATH-TUB.

SPECIFICATION forming part of Letters Patent No. 643,094, dated February 6, 1900.

Application filed January 6, 1899. Serial No. 701,377. (No model.)

To all whom it may concern:

Be it known that I, OTTO A. HENSEL, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rocking or Oscillating Bath-Tubs; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved rocking or oscillating bath-tub; and it consists of a tub mounted in journals formed in a suitable supporting-frame, a means for maintaining the equilibrium of the said tub, a means for locking the same in a horizontal position, a detachable covering fitted about the periphery of the tub, whereby the water contained therein is prevented from escaping, a means for confining the said covering in position, a means for connecting the two poles of an electromagnetic device to electrify the water in the tub, and a means formed in connection with the said covering whereby the occupant of the tub may reach the valves regulating and controlling the water-supply, the locking device before mentioned, and other devices necessary to the successful operation of the tub; and my invention further consists in the certain details of construction and combination of parts, as will be fully described hereinafter.

The essential object of this invention is to provide a tub that will fill a long-felt want in hospitals, sanitariums, and other institutions, as well as in private residences, which will by a simple rocking motion agitate and throw the water with more or less violence against the body of the person in the tub for a purpose well known in the art of medicine.

In the accompanying drawings, Figure 1 is a side elevation of my improved rocking or oscillating bath-tub, which is constructed and arranged in accordance with my invention. Fig. 2 is a plan view of the same. Fig. 3 is a sectional end elevation of the same, said section being taken on the line *y y* of Fig. 2. Fig. 4 is an enlarged sectional side elevation of a portion of either of the front or rear flange of the tub, the section being taken on the line *x x* of Fig. 2. Fig. 5 is a cross-sectional elevation, enlarged, through one of the trunnions, showing the manner in which the water is introduced into the tub. Fig. 6 is an enlarged cross-section through one of the locking devices used for holding the tub rigid in a horizontal position. Fig. 7 is an enlarged sectional elevation taken through one of the electrical connections of the tub.

To construct a bath-tub in accordance with my invention, I form from cast-iron a tub 1 of a suitable size and shape, having at either side and integral therewith trunnions 3, one of which is provided with a central bore 16 to form a water-inlet to the interior of the tub, and the said tub provided about the upper periphery with an outside flange 17 and at each end thereof an inwardly-extending flange 18 to form a water-break. This tub 1 is mounted in a suitable frame 2 by means of the trunnions 3 in a manner that the same may oscillate or rock in the bearings and in order that when the tub is at rest suitable strong spiral springs 9 are used to keep the said tub in a horizontal position. These springs are arranged at either side of the tub and are attached both to the frame 2 and to small brackets 14, formed integral with the tub. These springs will also prevent any abrupt movement of the tub and give a gentle easy motion to the occupant. To lock the tub in a horizontal position, one or more threaded bosses 7 are formed at the top of the frame 2, in which are operated small shafts or pins 6, having hand-wheels 5, and the said pins 6 adapted to enter and engage with slots 8, formed at suitable positions in the side of the tub.

The hot and cold water connections 13 and 13′ are of any well-known construction and are in communication with the interior of the tub by means of the central bore 16 through the trunnion at the rear and the sewer connection 15, joined by a flexible tube or pipe 15′ to the drain 13″.

To cover the top of the tub, and thereby prevent the escape of the water contained therein while the said tub is in motion, I provide a waterproof apron 19, having an opening 20 to neatly fit about the neck of a person while sitting in the tub and a vent leading from the said opening of a sufficient length to permit the body of a person to pass through.

This vent is provided with a folding tongue and may be closed from the inside by means of lacing 21, passing through suitably-arranged eyelets. Attached about the outer edge of this apron 19 is a strong rubber band 26, which engages with the under side of the peripheral flange 17 of the tub, as best seen at Fig. 4 of the drawings. This apron is constructed to conform with the flange 17 of the tub and is provided at each end with flaps 19′, each of which is attached to the said apron and is fitted with semicircular steel springs, which fit snugly beneath the inner flanges 18 and serve to prevent leakage of the water at those points.

Formed in connection with the apron 19 is a waterproof sleeve 22, having a mit 23 at the outer extremity, by means of which the occupant of the tub may operate any of the valves controlling the water or any of the devices arranged in connection with the tub by simply inserting his arm into the said sleeve and mit, as is obvious.

Connected at either side of the tub 1 and at points below the water-level are two copper conductors 27, (see Figs. 3 and 6,) which project through the walls of the tub and are in contact with the water contained therein. These conductors are each fitted with a binding-post 28 for the reception of wires leading to a source of electrical supply, such as a battery 30 or other generator. In circuit with these wires are suitable well-known devices 29 31 to regulate the force of the shock or to cut the electrical current off entirely.

In operation the vent in the apron 19 is opened and the said apron adjusted to the tub 1 in the position shown at Fig. 1 of the drawings. The bather enters the tub through the vent and closes the same by drawing upon the lacing 21. By entering his arm into the sleeve 22 the catches or clips 6 may be released and the tub given a rocking motion. The water may also be regulated from the valves in the same manner and also the electric bath.

The rocking or oscillating motion given the tub will cause the water contained therein to whip or come in more or less violent contact with the body of the bather, and as the inner end flanges 18 have a slight upward curve the water rushing upward at the ends of the tub will be projected to the extreme height of the apron.

The tub may be used as the ordinary stationary bath by simply locking the tub to the frame 2 by means of the clips.

It is obvious that various modifications may be made in the construction of the tub and its detailed connections without departing from the spirit of my invention. Therefore I do not limit myself to those shown and described, but claim the principle broadly.

Having thus described my invention, I claim—

1. A rocking or oscillating bath, consisting of a tub provided with trunnions cast integral therewith, one of which is formed with a central bore whereby connection may be formed with a water-supply pipe, a frame for supporting the said tub, a flexible drain-pipe leading from the bottom of the tub, a lock or catch arranged in the frame for the purpose of engaging with the tub to hold the same stationary in its bearings, and a detachable cover arranged about the periphery of the tub to confine the water therein, and a means for holding the said cover in position, substantially as described.

2. A cover or apron for a rocking or oscillating bath-tub such as described, consisting of the flexible waterproof fabric 19 having an elastic band about its periphery, the opening 20 formed therein, the vent leading from the said opening 20, a folding tongue fitted to the said vent, suitable lacing 21, for closing the vent, the elastic band 26 about the periphery of the cover, and the inner webs 19′ attached to the inside of the apron and provided with springs 25 to press the said webs against the inner walls of the tub, all arranged and combined for service substantially as and for the purpose described.

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

OTTO A. HENSEL.

Witnesses:
WM. H. EVERSON, Jr.,
WM. G. WALTER.