J. LEVY.

PORTABLE WATER HEATER FOR BATH TUBS.

APPLICATION FILED APR. 10, 1912.

1,045,416. Patented Nov. 26, 1912.

FIG. 1.

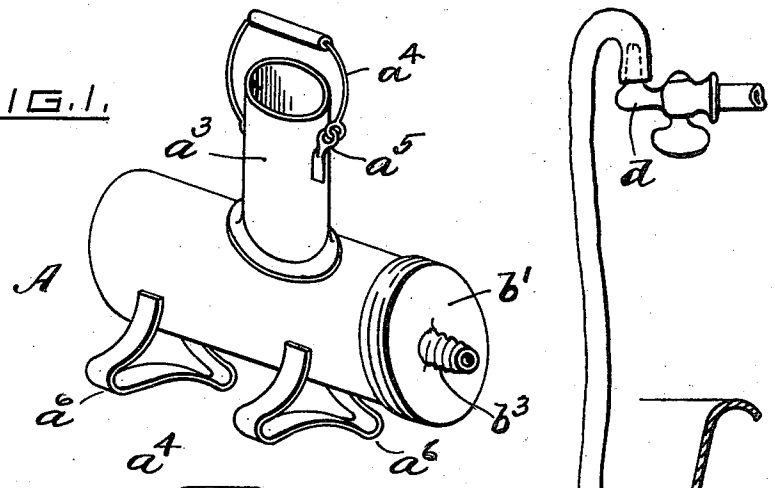


FIG. 2.

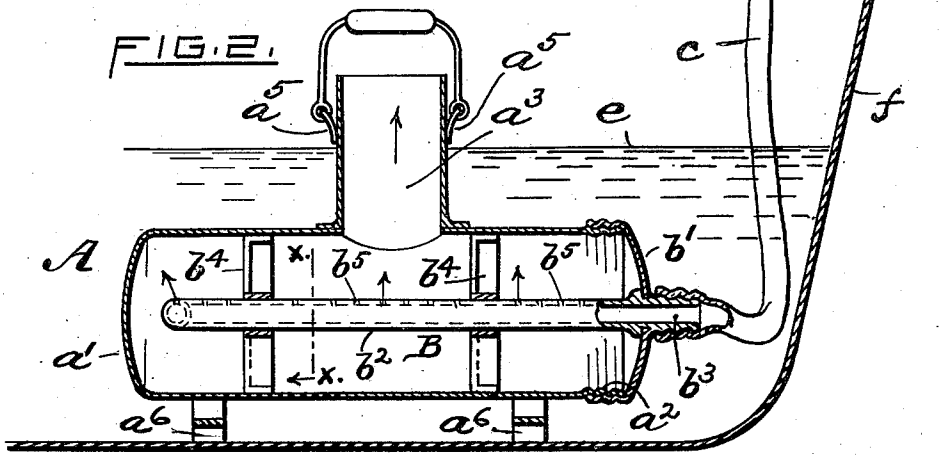


FIG. 3.

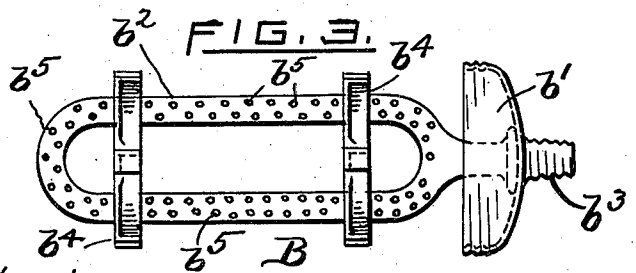
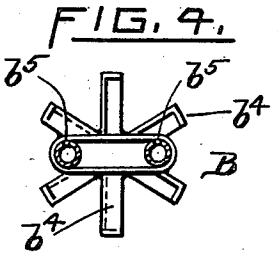


FIG. 4.



WITNESSES:

Peter L. Dawson

William Brown

INVENTOR:

John Levy.

By Charles P. Hannigan.

Attorney.

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN LEVY, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF ONE-HALF TO SAMUEL G. MOVSOVITZ, OF PROVIDENCE, RHODE ISLAND.

PORTABLE WATER-HEATER FOR BATH-TUBS.

1,045,416. Specification of Letters Patent. Patented Nov. 26, 1912.

Application filed April 10, 1912. Serial No. 689,711.

To all whom it may concern:

Be it known that I, JOHN LEVY, a subject of the Emperor of Russia, residing at the city of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Portable Water-Heaters for Bath-Tubs, of which the following is a specification.

My invention relates to an improved means for heating water for use in bath-tubs; and the object in view is to provide a portable gas-heating cylinder adapted to be submerged in the water of the tub and disposing a large area of radiating surface to cause the body of water to be quickly brought to the degree of temperature to suit convenience of the bather.

A further object is to provide a simple, convenient and inexpensive device for the purpose intended.

The invention consists of the novel construction and combination of parts, as hereinafter described and claimed.

In the accompanying sheet of drawings, Figure 1 is a perspective view of my improved water heating device. Fig. 2 is a central longitudinal sectional view of the device, as in operation within a bath-tub. Fig. 3 is a plan view of the gas-burner, removed from the cylinder of the device, and, Fig. 4 is a detail section on line *x*—*x*, of Fig. 2, showing means to center the burner within the cylinder.

Like reference characters indicate like parts.

My invention comprises two principal members, namely, a cylinder and a removable gas-burner for the latter, as respectively designated by reference letters —A— and —B— as a whole in Figs. 1 and 3.

The cylinder —A— which is designed to extend horizontally, has one end closed, as —a^1—, and its other end provided with a screw-threaded portion, as at —a^2—, to engage thereby with an annular threaded part of a head which forms a cover, as —b^1—, to close this open end of said cylinder. An open-ended pipe —a^3— is integral with and projects from the top of the cylinder —A—, to act as a hot air vent. To easily carry the device a handle or bail —a^4— has its ends connected to eye pieces secured at the opposed sides of the vent-pipe —a^3—, as at points —a^5, a^5—. The cylinder —A— and its cover —b^1— is preferably made of copper. The bottom portion of the cylinder has legs secured thereto, as at —a^6, a^6—. The gas-burner —B— is a casting, in the form of an oblong tubular pipe —b^2—, having one end in open communication with a centrally projecting portion which forms a gas inlet, as —b^3—. The cover —b^1— is centrally secured upon the inlet-projection —b^3—, and in order that the casting —B— may be held in a proper position within the cylinder, two spider-supports —b^4, b^4— are centrally secured upon the end portions of said casting to rest upon the interior surface of said cylinder, in the manner shown in Fig. 2. The casting —B— is provided with a series of fine perforations throughout its oblong portion to form gas-jets, as at points —b^5, b^5. A flexible tube —*c*— is provided for connection with the inlet —b^3— of the burner and gas-cock point of supply —*d*—.

In operation, after the tube connection —*c*— is had with the device, the latter is submerged below the level —*e*— of the water contents in the tub —*f*—, a lighted match is then thrown into the vent-pipe —a^3— to ignite the numerous gas-jets —b^5— whereby a large flame is had to create an intense heat within the cylinder, and the radiation afforded by the large area of surface surrounding the latter soon causes the body of water to become sufficiently heated, after which the device is removed from the tub and the water then in condition for use by the bather. By this description it is seen I provide an effective device to readily permit of heating the water of bath tubs, whenever the range or furnace is not in use to furnish the hot water supply, and at the same time a device that is simple in its construction, convenient and inexpensive to manufacture.

What I claim and desire to secure by Letters-Patent, is:—

In a portable water-heating device for bath-tubs, the combination with a horizontally-arranged cylinder having one end closed and its opposite end screw-threaded and said cylinder having a hot air vent-pipe to project above the water contents of the tub, a burner in the form of an oblong tubular pipe provided with gas-jets and said pipe communicating at one end with an integral centrally-projecting portion to form a gas inlet; a flexible tube connection from the inlet to a point of gas supply; a

cover centrally secured upon the inlet part of the burner and having an annular screw-threaded flange to engage the threaded part of said cylinder; spider-supports secured to the burner to hold the latter in position within the cylinder, and a bail attached to the vent-pipe, substantially as set forth.

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

JOHN LEVY.

Witnesses:
PETER C. CANNON,
C. T. HANNIGAN.