Feb. 9, 1932. B. R. HOOKER 1,844,038

BATH APPARATUS

Filed May 4, 1931 2 Sheets-Sheet 1

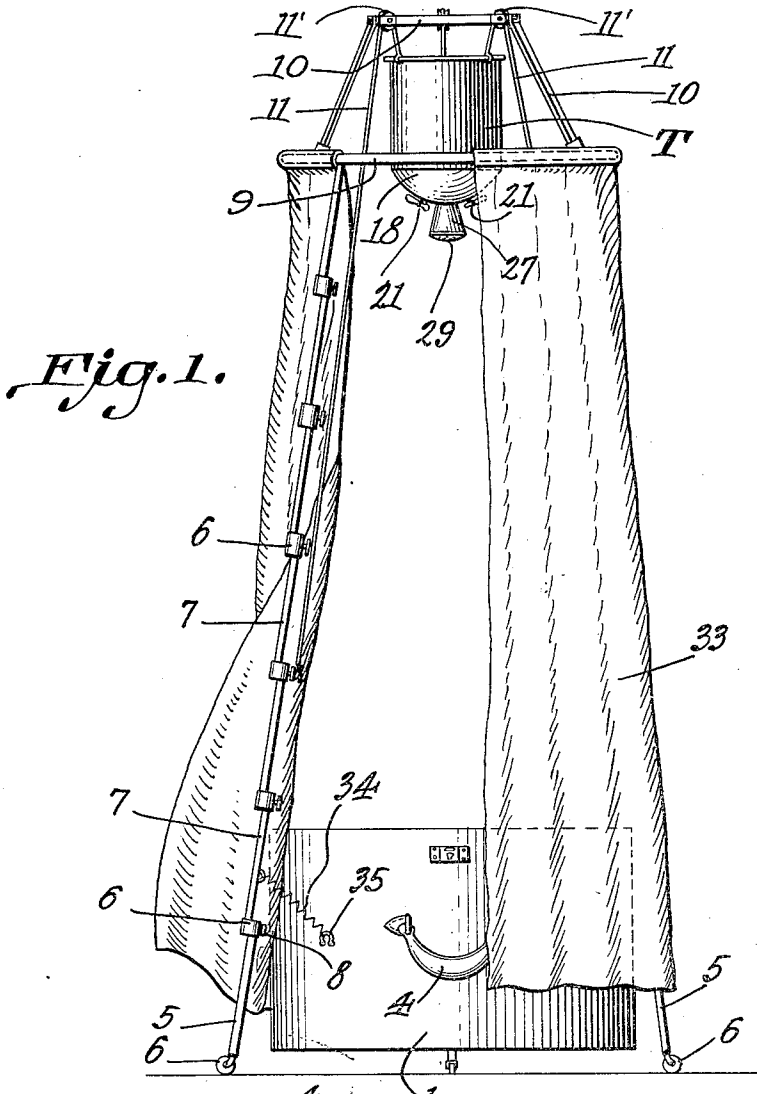


Fig. 1.

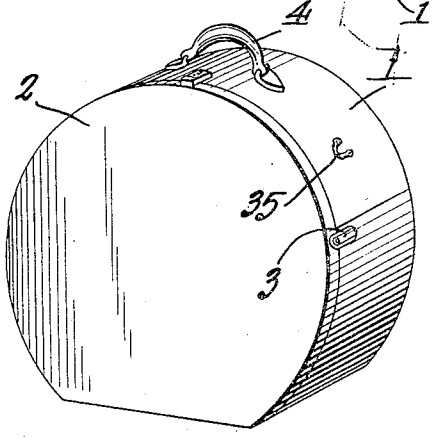


Fig. 2.

B. R. Hooker Inventor

By Chas. Howtes.

Attorneys

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Fig. 3.

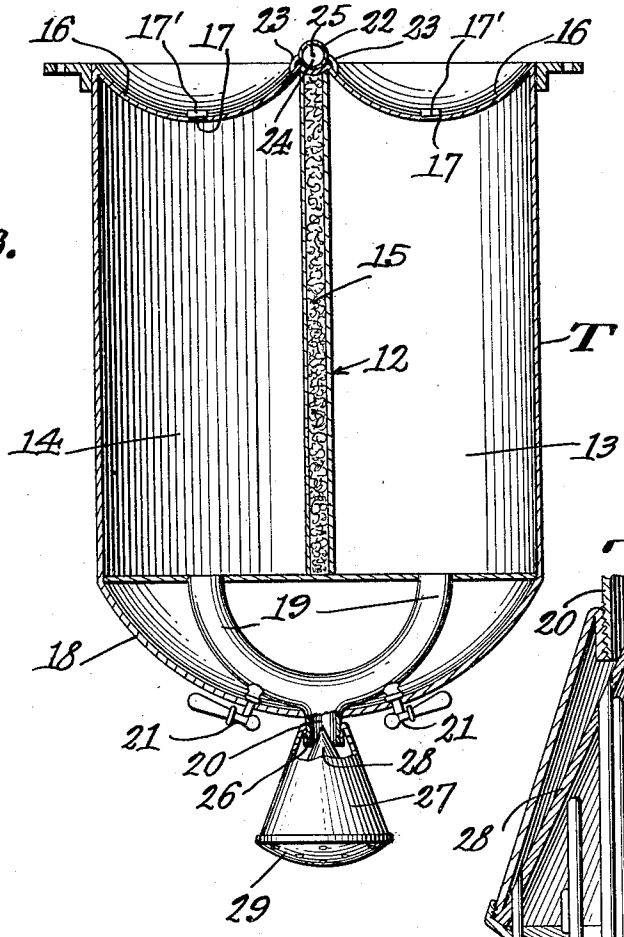


Fig. 5.

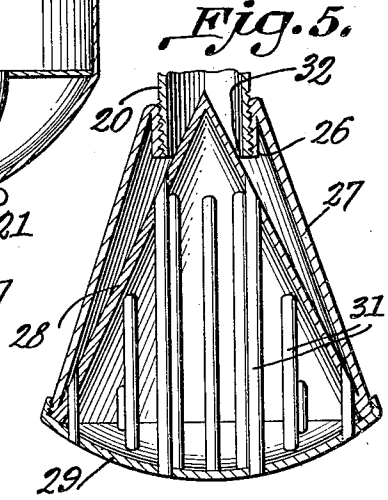


Fig. 4

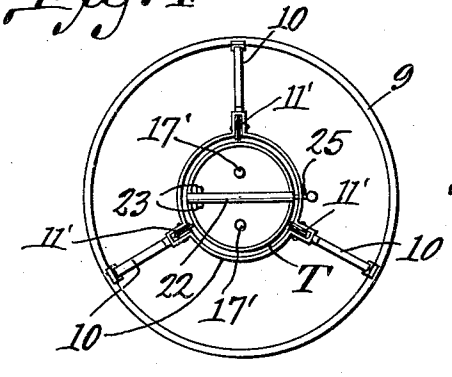
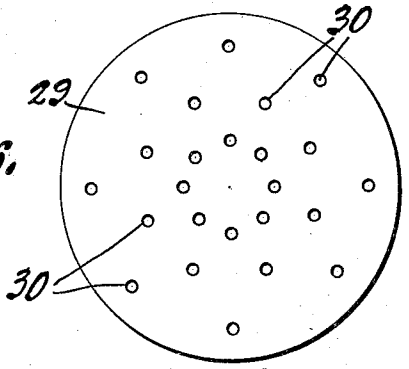


Fig. 6.



B. R. Hooker Inventor

By C. A. Snow & Co.

Attorneys

Patented Feb. 9, 1932 1,844,038

UNITED STATES PATENT OFFICE

BENJAMIN ROSS HOOKER, OF SAN AUGUSTINE, TEXAS

BATH APPARATUS

Application filed May 4, 1931. Serial No. 534,950.

This invention relates to portable bath apparatus, one of the objects being to provide apparatus of this character which, when not in use, can be carried in a case having the appearance of an ordinary article of luggage.

A further object is to provide apparatus which includes a flat portion, a tank for holding hot and cold water and a means for mixing water from the two compartments of the tank and directing it as a spray onto the occupant of the tub.

A further object is to provide a collapsible means for supporting the tank above the user and for holding a curtain in position where it can be used to conceal the occupant of the tub.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:

Figure 1 is a front elevation showing the apparatus set up for use.

Figure 2 is a perspective view showing the apparatus collapsed and having the appearance of an ordinary hat box.

Figure 3 is an enlarged section through the tank.

Figure 4 is a top plan view, on a reduced scale, of the tank and the circular frame in which it is mounted.

Figure 5 is an enlarged section through the spraying nozzle.

Figure 6 is a bottom plan view of the nozzle.

Referring to the figures by characters of reference, 1 designates the tub portion of the apparatus which, in the present instance, has the external appearance of the body portion of a hat box. This tub portion is of course watertight, it being lined with any suitable material. It has a removable cover 2 adapted to be held in place by the usual latches 3 and a handle 4 is connected to the tub portion 1 so that the entire apparatus can be conveniently carried. Collapsible legs are employed for supporting a tank above the tub when in use. Each of the legs includes a lower member 5 having a caster 6 at its lower end. This member 5 is engaged by a sleeve 6 located at the lower end of another leg member 7 and a set screw 8 is employed for fastening the member 5 in sleeve 6.

A plurality of members 7 each with a sleeve 6 is used, the upper end of each member 7 being detachably secured within the sleeve 6 of the next adjoining member. Obviously by loosening all of the set screws, the several members 7 of each leg can be caused to telescope so as to provide a compact bundle. The upper member of each leg is connected to a ring 9 and secured on the ring is a support 10. A water tank T is suspended by chains or other flexible connections 11 mounted on pulleys 11'. The tank is divided by a partition 12 into two compartments 13 and 14, said partition being preferably provided with suitable insulating material as indicated at 15 whereby hot water can be contained within one compartment and cold water within the other. The tops of the two compartments are concaved as shown at 16 and inlet openings 17 are provided in the lower portions of these concaved tops and are normally closed by plugs 17.

A concavo convex housing 18 is connected to the bottom of the tank T and serves to conceal pipes 19 leading from the bottoms of the respective compartments 13 and 14 to an outlet nipple 20 projecting through the center of the housing 18. Valves 21 are provided for the pipes 19 for the purpose of controlling the flow of water through said pipes to the nipple 20. An air pump 22 is mounted on the top of the tank, preferably directly above the partition, and the cylinder of this pump has outlet pipes 23 leading therefrom into the tops of the respective compartments 13 and 14.

A piston 24 is mounted to reciprocate within the cylinder and has a rod 25 extending from one end of said cylinder so that by reciprocating the rod and piston air will be

forced into the compartments 13 and 14 and maintain a pressure upon the water within the compartments.

The nipple 20 is detachably engaged by a sleeve 26 provided in the upper portion of a flared nozzle 27. In this nozzle is arranged a conical spreader 28 the apex portion of which projects into the nipple 20 but is spaced from the wall thereof, thereby allowing water to flow from the nipple around the spreader into different portions of the nozzle. A concavo convex cap 29 extends across the bottom portion of the nozzle and has apertures 30. Tubes 31 extend from these apertures and open through the upper surface of the spreader 28 so that water, when deflected by the spreader will flow into the various tubes and be ejected therefrom in the form of small jets. By rotating the sleeve 26 on the threaded nipple 20 the size of the annular orifice 32 between the open end of the nipple and the spreader can be increased or reduced so as to thereby regulate the maximum flow of water when the valves 21 are open.

A curtain 33 is suspended from the ring 9 and is of sufficient length to surround the tub 1. Any suitable means, not shown, may be provided for fastening together the longitudinal edge portions of the curtain. Springs 34 are connected to ears 35 on the tub 1 and to the legs and serve to yieldingly support the tub normally off of the floor so that the apparatus can be rolled from place to place.

When the apparatus is not in use the collapsible legs, the ring 9 and the tank T are placed in inverted positions within the tub portion 1 and the curtain, which can be detachably connected to the ring 9, is packed within the case. Cover 2 is then fastened in place and the apparatus can be carried as will be apparent.

In setting up the apparatus the tub portion is placed with its open face uppermost and the collapsible legs are extended so as to support the tank T above the center of the tub portion. Springs 34 are fastened to ears 35 and the curtain 33 is mounted on the ring 9. The two compartments 13 and 14 are filled with water and, as before stated, hot water can be placed in one of the compartments and cold water in the other. Air under pressure is forced into the two compartments. The tank is raised by means of connections 10 which are then fastened in any manner desired. When the user steps into the tub 1 the added weight will cause the springs 34 to elongate so that the tub portion will rest upon the floor. When one or both of the valves 21 is opened water will be discharged from the nozzle under pressure, this pressure resulting in the discharged jets of water coming into violent impact with the body of the occupant of the tub so as to give the same effect as that produced by the use of water under pressure from the ordinary service pipes of domestic water systems.

What is claimed is:

1. Portable bath apparatus including a combined case and tub, a tank adapted to be housed within the tub, collapsible legs for supporting the tank above the tub, and yielding means for supporting the tub from the legs.

2. A portable bath apparatus including a combined tub and case, a tank, a spraying nozzle depending therefrom, curtain supporting means connected to the tank, collapsible legs for supporting said means and the tank above the tub, supporting wheels for the legs and yielding means for supporting the tub from the legs when occupied.

3. A portable bath apparatus including a combined tub and case, wheel supported collapsible legs, curtain supporting means carried by the legs, a tank connected to said supporting means, a nozzle depending from the tank, and yielding means for supporting the tub from the legs when unoccupied.

4. A portable bath apparatus having a combined tub and case, collapsible wheel supported legs, a tank supported by the legs, said tank having separate noncommunicating compartments, means for placing air under pressure within said compartment, a nozzle depending from the tank, and valved pipe connections between the compartments and the nozzle.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

BENJAMIN ROSS HOOKER.