W. E. HOLMES. NEEDLE SHOWER.

APPLICATION FILED DEC. 14, 1908.

Patented Mar. 9, 1909. 914,573. 3/ Fig.5 Inventor William E. Holmes Witnesses

## TEN STATES PATENT OFFICE.

WILLIAM E. HOLMES, OF SEATTLE, WASHINGTON.

## NEEDLE-SHOWER.

No. 914,573.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed December 14, 1908. Serial No. 467,569.

To all whom it may concern:

Be it known that I, WILLIAM E. HOLMES, a citizen of the United States, and a resident of the city of Seattle, in the county of King and 5 State of Washington, have invented certain new and useful Improvements in Needle-Showers, of which the following is a specification.

My invention relates to an improvement in 10 needle baths and in the means for attaching and supporting the same from an ordinary bath tub.

The object of my invention is to make a needle bath device which may be used as an 15 attachment capable of being attached to or detached from the usual bath tub fixtures.

My invention comprises the novel parts and combinations of parts which will be par-

ticularly defined in the claims.

In the drawings I have shown my invention embodied in the form now preferred by  $\mathrm{me}.$ 

Figure 1 is a front elevation of my device in place, a part being in section. Fig. 2 is a 25 side elevation in partial section. Fig. 3 is a section through the overflow. Fig. 4 is a longitudinal section of the central pipe of the needle shower and the mixing chamber of the combination fixture. Fig. 5 is a plan view 30 of the screen covering the overflow.

One important consideration in view when designing my device was to make it readily attachable to and detachable from the usual bath tub, making as little change in their fix-

35 tures as possible.

The part chosen by me from which to support the needle bath device is the overflow pipe. Such overflow pipe 3 is usually provided with a screen as 30 which is secured as 40 by a bolt or screw 31. In attaching my device I detach the usual screen and replace this with a special screen 30 having a socket 32 which receives a rod or pipe 4 which acts as the support for the perforated pipes 1, 10, 45 10 which form the spray members. These perforated pipes are herein shown as lying

and bottom. These features are however immaterial. These pipes are provided with a 50 supply connection 12 with the combination fixture, preferably with the mixing chamber 5. This can best be done by tapping the same and inserting the pipe 12, as has been indicated.

The mixing chamber is preferably provided with a valve 6 which is mounted upon

a rod 60 by which it is controlled, said valve being double ended and adapted when moved in one direction to close the usual discharge into the tub and open the passage 60 into the needle bath device, and when moved in the opposite direction to close the passage into the needle bath fixture and open the usual discharge into the tub. I prefer to extend the rod 60 upward within the central 65 pipe 1 to or near its upper end and to connect it with an eccentric or crank end 70 of a turnable shaft or stem 7 having an outer handle 71, as by this location the controlling valve is accessible without the user being splashed 70 by the discharge from the needle bath.

The needle spray, consisting of the pipes 1, 10, 10, is directly supported from the combination fixture 5 and stiffened by the rod or pipe 4 which at its upper end is connected 75 with the part 2 to which the pipes 1, 10, 10, are connected. This supports the needle spray firmly, and enables it to be attached or

detached readily.

What I claim as my invention is:

1. The combination with the hot and cold water combination fixture of a bath-tub, and an overflow fixture, of a needle shower having supply connection with the combination fixture, and a supporting arm connected with 85 the needle shower and the overflow fixture.

2. The combination with the hot and cold water combination fixture of a bath tub, and an overflow fixture, of a needle shower having supply connection with the combination 90 fixture, a valve controlling the discharge to the needle shower and to the tub, and a supporting arm connecting the needle shower with the overflow fixture.

3. The combination with the hot and cold 95 water combination fixture of a bath tub, and the overflow fixture, of a needle shower mounted upon and having supply connection with the mixing chamber of the combination fixture, and a supporting arm connecting the 100 needle shower with the overflow fixture.

4. The combination with the hot and cold substantially parallel and connecting at top | water combination fixture of a bath tub, and an overflow fixture, of a needle shower having supporting and supply connection with 105 the combination fixture and a brace rod connecting the needle shower and the overflow fixture.

5. The combination with the hot and cold water combination fixture of a bath tub, and 110 an overflow fixture, of a needle shower and a supply connection therefrom with the combination fixture, a screen for the overflow having a socket, and a brace rod in said socket and connected with the needle shower.

6. The combination with the hot and cold water combination fixture of a bath tub, and an overflow fixture, of a needle shower having a vertical pipe connected with the mixing chamber of the combination fixture, a valve in the mixing chamber controlling the flow between the needle shower and the tub, an operating rod connected with said valve and extending to the upper portion or said vertical pipe, a manually operated device con-

nected with the upper end of said rod to operate the valve, and supporting connection 15 from the needle shower to the overflow fixture.

In testimony whereof I have hereunto affixed my signature at Seattle, Washington, this 12th day of November, 1908, in the pres-20 ence of the subscribing witnesses.

WM. E. HOLMES.

Witnesses:

HENRY L. REYNOLDS, ALEX. CURRIE.