(No Model.)

E. HAMMANN & L. M. HOOPER.

NEEDLE BATH.

No. 598,987. Patented Feb. 15, 1898.

Fig. 1.

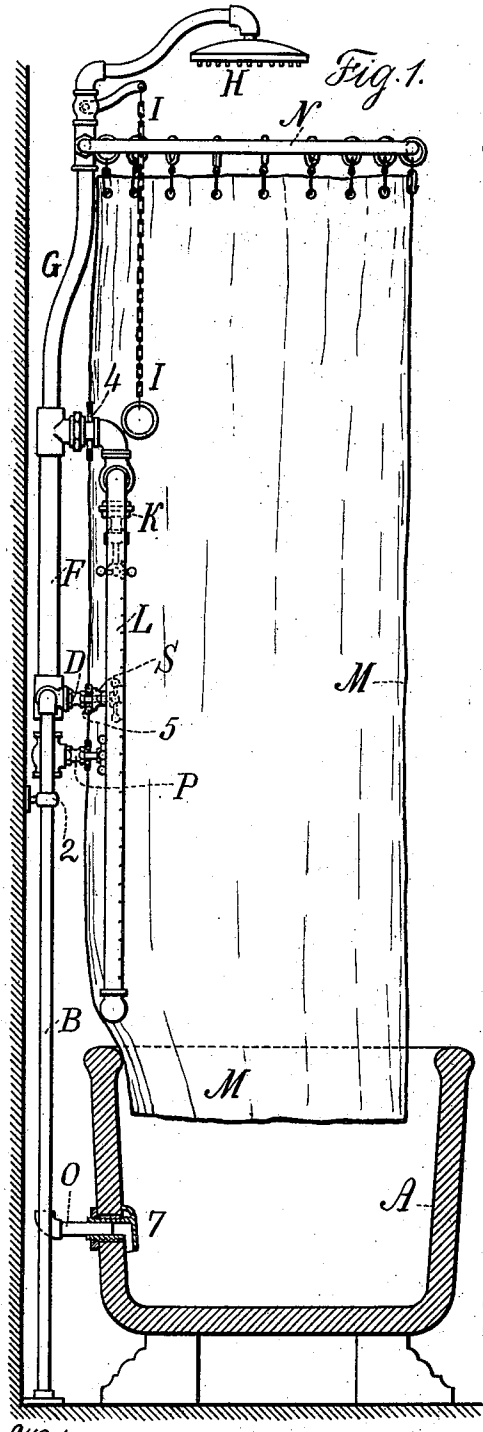
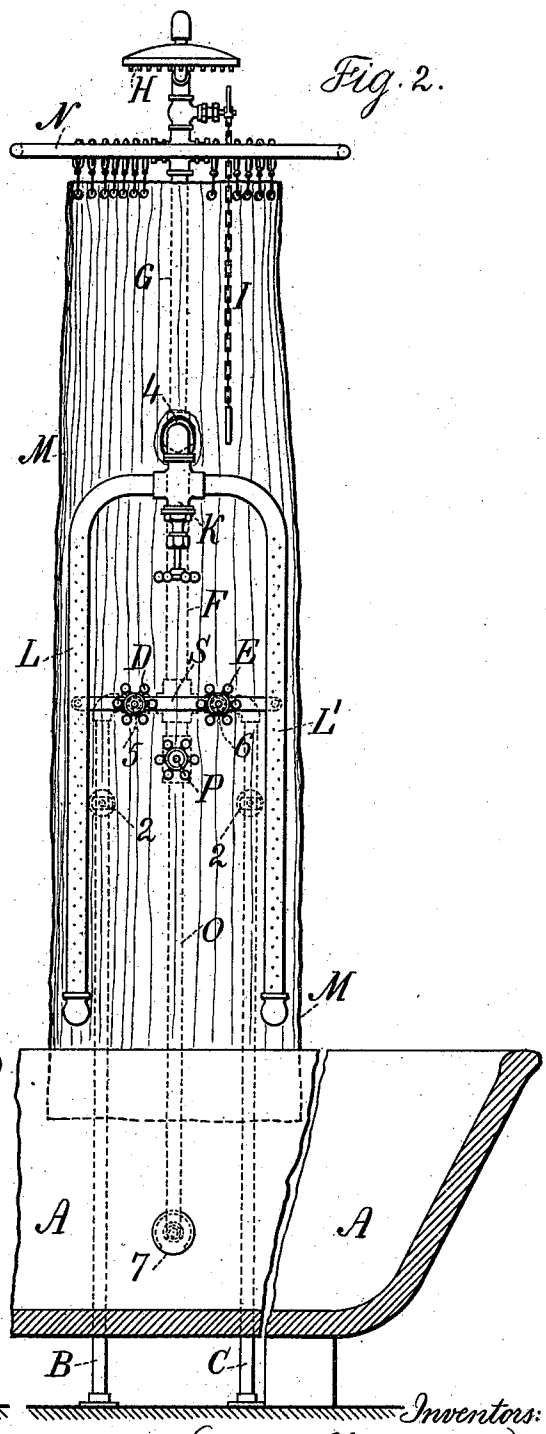


Fig. 2.



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UNITED STATES PATENT OFFICE.

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NEEDLE-BATH.

SPECIFICATION forming part of Letters Patent No. 598,987, dated February 15, 1898.

Application filed July 9, 1894. Serial No. 516,928. (No model.)

To all whom it may concern:

Be it known that we, EDWARD HAMMANN, residing at Brooklyn, in the county of Kings and State of New York, and LOUIS M. HOOPER, residing at Rutherford, in the county of Bergen and State of New Jersey, citizens of the United States, have invented an Improvement in Needle-Baths, of which the following is a specification.

Baths in which fine jets of water are directed upon the body, usually known as "needle-baths," have been constructed separately and also applied in connection with a bath-tub, the bath-tub receiving the water from the jets, and in some instances a movable curtain has been provided suspended from a ring at or near one end of the bath-tub, there being a shower above the upper end of the curtain in addition to the perforated tubes for the needle-jets directed laterally upon the body. In the baths of this character heretofore constructed difficulty has been experienced in preventing the curtain that is suspended from the ring interfering with the use of the ordinary bath-tub, and such curtain has been objectionable in appearance and complicated in its mode of application.

The object of the present invention is to simplify the construction of the parts and to adapt the needle-bath to use with an ordinary bath-tub, so that the movable curtain will not interfere with the use of such ordinary bath-tub, but can be brought into position when required so as to direct the water from the jets or needle-bath into the ordinary bath-tub.

In the drawings, Figure 1 is a cross-section of the bath-tub and an elevation of the needle-bath, and Fig. 2 is an elevation at right angles to Fig. 1 with the curtain pushed back behind the tub.

The bath-tub A is of any desired size and character, and behind it the hot-water pipe B and the cold-water pipe C rise up near the wall and are suitably supported by cleats or rings 2, and D represents the hot-water faucet, and E the cold-water faucet, the pipes from which unite in a vertical mixing-chamber F, from which a pipe G passes to the shower H, and I is the pull to open the cock to the shower. These parts are of ordinary construction.

From the top of the mixing-chamber F a branch passes outwardly and downwardly, terminating as a valve K, with lateral branches L L′, which extend outwardly and are bent down and hang vertical and form the needle-spray tubes, and the lower ends of these tubes are slightly above the top of the bath-tub at the back edge, and the curtain M, which is usually of india-rubber, hangs by rings from the hoop or support N, and there is a hole through this curtain at 4 for the passage of the branch leading to the cock or valve K and holes at 5 6 for the stems of the hot and cold water faucets D and E. These holes are advantageously reinforced with rings or pieces of rubber fastened upon the curtain and surrounding the respective holes, and the length of the curtain M is such that its lower end may hang down entirely behind the bath-tub, as illustrated in Fig. 2, or the lower end of the curtain may be brought between the top edge of the bath-tub and the lower ends of the needle-spray tubes L L′, as indicated in Fig. 1, when the spray or needle bath is to be made use of.

It will now be apparent that the temperature of the water can be regulated by the faucets D and E, that admit more or less hot and cold water into the mixing-column F, and these can be regulated without moving the curtain M, so that the proper temperature of water can be supplied to the shower H or by a pipe O down to the deflector 7 inside the bath-tub, the admission of water into the bath-tub being regulated by the cock P; but the present improvements may be made use of when the bath-tub is supplied in any other desired manner.

In admitting the water to the needle-spray tubes L L′ it is only necessary to open the valve K, and the person using the needle-bath can stand in the bath-tub A and draw the curtain M around the person, so as to prevent the water extending beyond the bath-tub, and in that position the lower edge of the curtain is to pass in between the top of the bath-tub and the bottom ends of the needle-spray tubes L L′, as seen in Fig. 1, and there

is little or no risk of any water running outside of the bath-tub, because the openings that are made in the curtain M for the branch pipe and for the stems of the respective cocks fit the parts closely, and should any water pass through at either opening it will follow the back of the curtain down and run into the bath-tub.

By this improvement great facility is obtained, because the needle-spray does not interfere with the use of the bath-tub in the ordinary manner, and the curtain being at the back and behind the needle-spray tubes is entirely out of the way, but can readily be drawn into position when the shower or needle bath is made use of.

The needle-spray tubes being hung from their upper ends are liable to become misplaced, unscrewed, or bent by anything in contact with their lower ends. To prevent this, we employ a brace S, extending across from one needle-spray tube to the other and perforated or notched for the spindles of the cocks, so that such spindles act to steady the brace and hold the spray-tubes in position against any pressure that might tend to displace their lower ends. One needle-spray tube may be dispensed with, if desired.

In consequence of the needle-spray tubes L L′ being suspended from the T and coupling at the upper part where the water passes from the tube F, such tubes L L′ can be easily disconnected if the curtain has to be taken down for cleansing, repairs, or replacement, and it is not necessary to turn off the water from the pipes to do this, because the cocks D and E simply require to be closed, and by unscrewing the handles or hand-wheels the curtain can be liberated and removed, because the cocks are behind the curtain and the holes therein simply pass the valve-stems. The easy removal of the needle-spray tubes L L′ also allows for cleaning the same and removing any obstructions from the holes. In cases where the curtain is outside the supply pipes and cocks they become wet and discolored, and the curtain cannot easily be removed without taking almost all the apparatus apart where some portions are inside and the other parts outside the curtain. By the present improvement these difficulties are avoided.

We claim as our invention—

1. The combination with the needle-spray tubes and the connections for the same at their upper ends, of a brace extending across from one spray-tube to the other and the supply-valves, there being openings in the brace for the valve-stems, substantially as set forth.

2. The combination with the bath and a hanging curtain, of a needle-spray tube above the bath and extending down in front of the curtain, a water-supply pipe and connection passing through the curtain to the needle-spray tube, a valve behind the curtain and a valve-stem extending through the curtain, and a brace between the valve-stem and needle-spray tube, substantially as specified.

Signed by us this 5th day of July, 1894.

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Witnesses:
MAX GOEBEL,
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