## M. S. WILLIAMS. HOT WATER BAG.

(Application filed Feb. 23, 1901.)

(No Model.)

Fig. 1.  $\langle \dot{\gamma}^{\prime}\dot{$ Fig. 3. COLOGODDD GL Fig. 2. Mortimer Sinclair Williams. Witnesses:

## United States Patent Office.

MORTIMER SINCLAIR WILLIAMS, OF NEWTON, MASSACHUSETTS.

## HOT-WATER BAG.

SPECIFICATION forming part of Letters Patent No. 685,894, dated November 5, 1901.

Application filed February 23, 1901. Serial No. 48,484. (No model.)

To all whom it may concern:

Be it known that I, MORTIMER SINCLAIR WILLIAMS, of Newton, in the county of Middlesex and State of Massachusetts, have in-5 vented certain new and useful Improvements in Hot-Water Bags, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to hot-water bags, is 10 designed to obviate certain objections to the hot-water bags now in general use, and consists in certain novel features of construction, arrangement, and combination of parts, which will be readily understood by refer-15 ence to the description of the accompanying drawings and to the claim hereto appended, and in which my invention is clearly pointed out.

In hot-water bags as generally manufac-20 tured and in common use the metal inlet and discharge nozzle and its stopper project from one end or edge of the rubber bag, which limits or circumscribes the uses to which the bag may be conveniently put, on account of 25 the objection to having the hard lump of the nozzle and the hot metal come in contact with the person, and also that there is no convenient means provided whereby the bag can be secured to the person in a fixed position and 30 in firm contact therewith. To obviate these objections, I construct my improved bag as illustrated in the accompanying drawings, in which—

Figure 1 is a plan of a hot-water bag, illus-35 trating my invention. Fig. 2 is an edge view of the same, and Fig. 3 is a vertical section

on line A A on Fig. 1.

In the drawings, 1 and 2 represent, respectively, the upper and lower walls of the body 40 of the bag, composed of sheets of rubber cut to a rectangular shape, except that the corners are rounded, said sheets being united at their edges by the binding-strip 3, folded over said edges and firmly cemented to the outer surfaces of said sheets in a well-known manner. The upper sheet 1 has firmly cemented to its upper surface, along the middle of its width from 4 to 5, the reinforcing-sheet 6, having a portion 7 of its length at each end de-50 tached from or uncemented to said sheet 1, but cemented to the upper portion of the folded sheet 8, the lower portion of which is | part of the body or limbs.

cemented to the sheet 1, as shown in Fig. 3. The edges of the upper or folded-over portions of the sheets 8 and portions 7 of the 55 sheet 6 are additionally united by the binding-strips 9 to form firm and strong ears 10, each of which has cut therethrough an oblong opening 11, the cut edges of the parts 7 and 8, which form the borders of said open- 60 ings, being bound by the strips 12, folded over the same, and firmly cemented thereto,

as shown in Figs. 1 and 3.

The upper wall 1 of the body of the bag has cut through its center and through the rein- 65 forcing-sheet 6 an inlet and discharge orifice 13, above and surrounding which is placed the inlet and discharge nozzle 14, comprising the internally-threaded metal thimble 15 and rubber tube 16, having the base-flange 17, 70 which is firmly cemented to the reinforcingsheet 6 and provided at its upper end with the broad upwardly-curved flange 18, having its outer edge reinforced by the binding-strip 19, as shown. An externally-threaded plug 75 or stopper 20 is fitted to said thimble 15 and is provided at its upper end with the flat milled head 21 and at its lower end with the elastic disk 22, which engages the inwardly-projecting annular seat 23, formed on the lower end 80 of said thimble 15, as shown in Fig. 3.

The flange 17 of the nozzle-tube 16 in addition to being cemented to the reinforcingsheet 6 is further strengthened by having the ring of rubber 24 firmly cemented to its up- 85 per surface at its outer edge, the outer portion of said rubber ring 24 being also firmly cemented to the upper surface of the reinforcing-sheet 6, as shown in Figs. 2 and 3. By this construction the hot-water bag is ren- 90 dered much more conveniently applicable to all the uses for which it may be desired—as, for instance, if it is desired to place the bag beneath any portion of the person by turning the bag bottom up or with the nozzle 95 downward in the bed the patient may lie directly upon the bag without experiencing any inconvenience from contact with the metal of the stopple or the hard lump formed by the nozzle. Again, by running a belt through 100 the looped ears 10 and over the nozzle 16 the bag may be secured firmly to the person, with its smooth side in contact with any desired

What I claim as new, and desire to secure by Letters Patent of the United States, is—

A hot-water bag the two side walls of which are rectangular in outline, except that their corners are rounded, in combination with an inlet and discharge nozzle located near the center of one of said side walls; a pair of perforated ears secured to the upper surface of the same side wall, upon the opposite sides of said nozzle, and between it and the edge of said side wall; and a reinforcing-sheet of

rubber cemented to said wall and the baseflange of said nozzle, and extending to and forming a part of each of said ears.

In testimony whereof I have signed my 15 name to this specification, in the presence of two subscribing witnesses, on this 21st day of February, 1901.

MORTIMER SINCLAIR WILLIAMS.

Witnesses:

N. C. Lombard,

J. Houston Stevenson.