

July 28, 1925.

1,547,310

C. R. ELLIOTT

MOLD

Filed Jan. 16, 1924

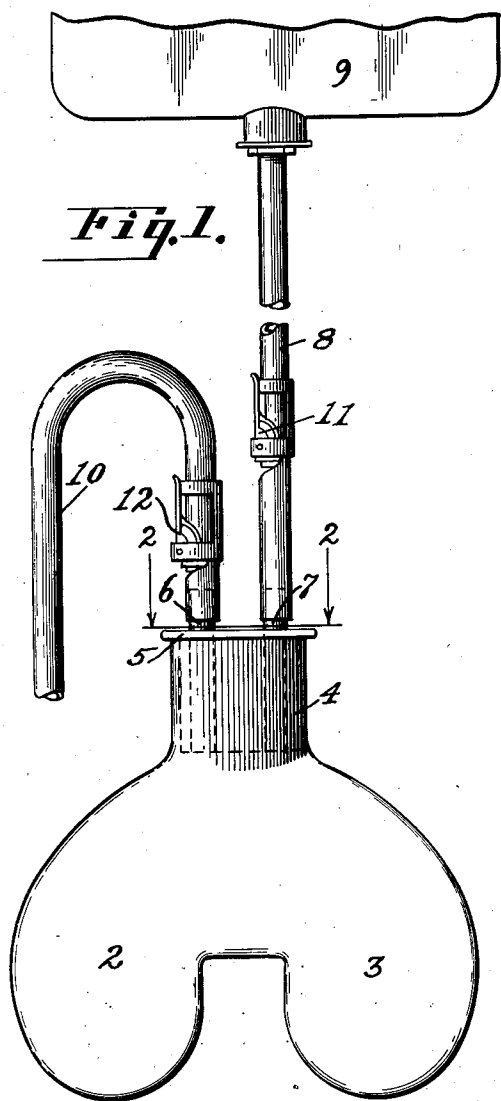


Fig. 1.

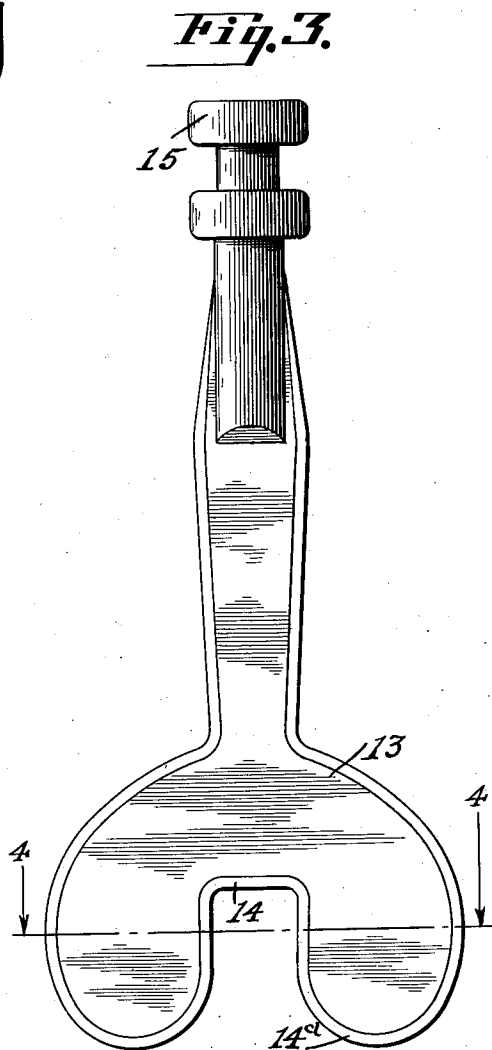


Fig. 3.

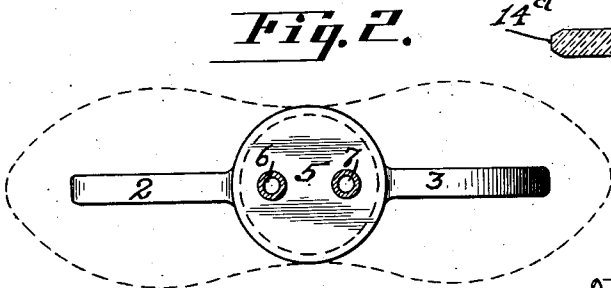


Fig. 2.

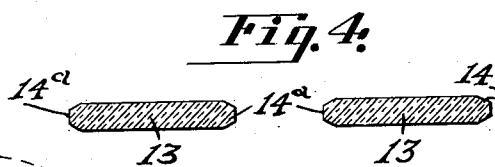


Fig. 4.

Inventor
CHARLES R. ELLIOTT.

By Dewey, Clark, Townsend & Lytle
Attys.

UNITED STATES PATENT OFFICE.

CHARLES R. ELLIOTT, OF SAN FRANCISCO, CALIFORNIA.

MOLD.

Application filed January 16, 1924. Serial No. 686,533.

To all whom it may concern:

Be it known that I, CHARLES R. ELLIOTT, citizen of the Dominion of Canada, residing at the city and county of San Francisco, and State of California, have invented new and useful Improvements in Molds, of which the following is a specification.

This invention relates to water bags for internal use.

In the treatment of various disorders of the organs of the pelvis, hot or cold applications have been found to be of great benefit. The present invention has for its object to provide a water-bag of such form and construction as to permit of introduction of the same in collapsed condition into the vagina, said water bag having connections for admitting hot or cold water thereto from an extraneous source to cause the bag to be distended and assume the proper position within the vagina whereby to apply any desired temperature to the organs without allowing the water to come in direct contact therewith. A further object is to simplify the manufacture of a bag of the type referred to.

In the accompanying drawings,

Fig. 1 shows a side elevation of a water-bag embodying my invention.

Fig. 2 shows a plan view of the same, taken on the line 2—2 of Fig. 1, and illustrating in full lines the collapsed position of the parts and in dotted lines the expanded position thereof.

Fig. 3 shows a side elevation of a mold for forming the water-bag.

Fig. 4 shows a sectional view of the mold, taken on line 4—4 of Fig. 3.

I will first describe the bag and its uses.

Said bag includes a casing 1, preferably of rubber, formed with a left collapsible wing or extension 2, a right collapsible wing or extension 3, both integrally connected and terminating in an intermediate connecting band 4, which connects the wings in a neck 4. A cork 5 is fitted tightly in the neck 4, through which cork extend two tubes 6 and 7, which tubes are tightly fitted in the cork. The outer end of tube 7 is fitted in one end of a rubber tube 8, the other end of which is connected to a douche-bag 9. The outer end of tube 6 is fitted in a rubber tube 10. A clamp valve 11 is fitted on the tube 8 for controlling the admission of water into the casing 1 from the douche-bag 9, and a similar valve 12 is fitted on the tube 10 for con-

trolling the outlet of water from the casing 1.

The casing 1 is placed in the vagina, contracted as shown in full lines in Fig. 2. The valve 11 is then opened, and hot water or cold water passes from the douche bag 9 through tube 8 into the casing 1, which expands the wings 2 and 3, as shown in dotted lines in Fig. 2, against the wall of the vagina.

The wings, when distended by the admission of water thereto, conform to the shape of the pelvic cavities and cause the bag to remain in place without further attention. The bag is inserted when collapsed, and, no matter what the position of the wings may be at this time, the introduction of water thereto will expand them and cause them to assume the proper position within the pelvic cavities. By using a cork at the neck of the bag the heat from the water in the bag will not be transmitted to the sensitive skin and mucous membrane. The amount of distension can be regulated by the person using the bag, through the control valves on the inlet and outlet tubes.

By the employment of a bag of this form, whereby the water does not come in direct contact with the organs, it becomes possible to apply extremely high temperatures, or, conversely, extremely low temperature, without any discomfort to the patient.

One great difficulty in the manufacture of a bag of this type is to prevent it from "ballooning" or swelling out of shape when inflated. Being formed of exceptionally thin rubber it tends to take on a generally rounded or circular form, whereas it should retain its original contour at all times in order to be effective. Also, if the bag should expand too much at what may be termed the "crotch" (that is, where the two wings or extensions come together at the lower portion of the bag) undue pressure will be exerted upon the uterus. Efforts have been made in the past to prevent deforming of the bag, by the use of reinforcing bands, one surrounding the bag at the crotch and another passing entirely around the perimeter of the wings. These reinforcing bands had to be applied by hand after the bag had been molded, and consequently the cost of manufacture was considerably increased.

In the present invention I provide a novel form of mold, by the use of which the bag can be molded complete in one operation, so

as to have the necessary strength and thickness at the crotch and perimeter of the wings, and thus dispense with separately reinforcing bands or strips. Said mold as shown in Figs. 3 and 4 comprises a flat bar 13 following in outline the contour of the bag to be formed. This bar is preferably of glass but may be made of other materials. Its edges at both sides are beveled, as indicated at 14, leaving a narrow flat rim 14^a, such beveling continuing throughout the perimeter of the mold. The bar has a handle 15, and in using it is simply dipped in rubber solution, sufficient rubber adhering thereto to form the bag. Due to the beveled edges and flat rim, the rubber solution will collect in greater thickness at these points, thus forming a bag whose perimeter is sufficiently strong and thick to retain the bag in proper shape when inflated.

The necessity for thus strengthening the perimeter of the bag is especially accentuated because of the crotched formation of the bag. Being of thin rubber and adapted to be filled with water, there is a tendency

for the bag to swell and enlarge at the crotch, which of course must be avoided, out of consideration for the comfort of the user.

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

1. A mold for forming a dipped rubber bag having bilateral extensions, comprising a flat bar conforming to the outline of the bag and having beveled edges and a flat rim, whereby to cause the molded rubber to collect in greater thickness at the perimeter of the mold, and thus strengthen the bag, especially between the extensions.

2. A mold for forming a dipped rubber bag having bilateral extensions, comprising a flat bar having a neck portion and two bilateral extensions conforming to the outline of the bag, the edges of the said extensions being beveled on both sides and leaving a narrow, flat rim, whereby to cause the rubber to collect in greater thickness at the perimeter of said extensions, and thus strengthen the bag, especially in the vicinity of the crotch portion.

CHARLES R. ELLIOTT.