March 16, 1937. L. N. BATES 2,074,140

UPKEEP OF NONPOROUS GLOVES

Filed July 17, 1936

FIG. 1

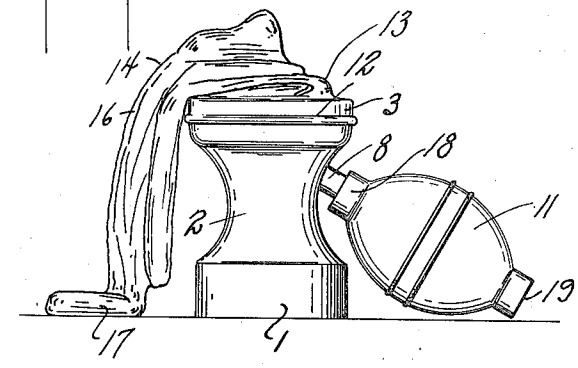


FIG. 2

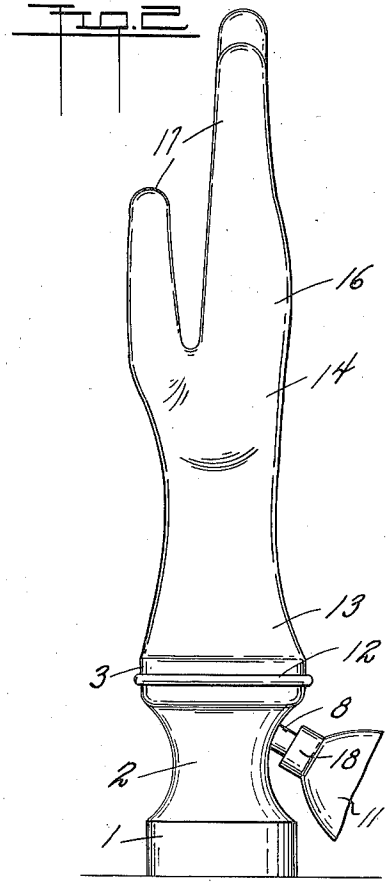


FIG. 3

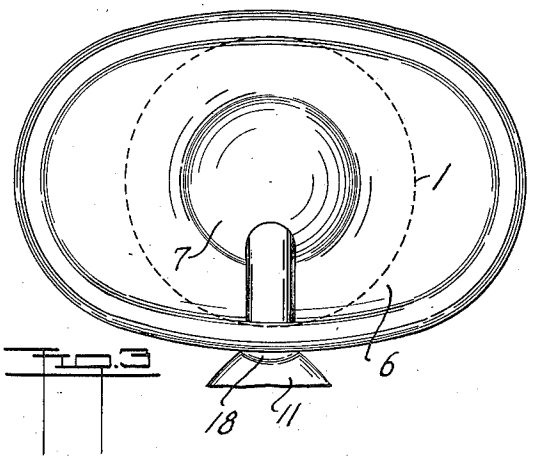


FIG. 4

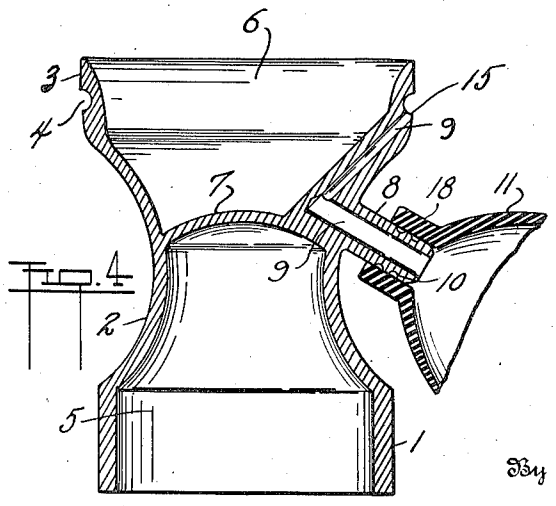
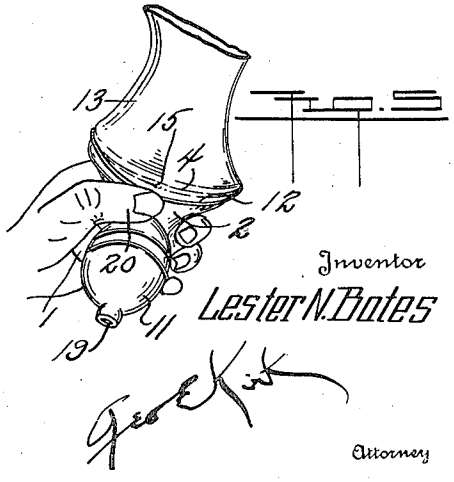


FIG. 5



Inventor

Lester N. Bates

By

Attorney

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UPKEEP OF NONPOROUS GLOVES

Lester N. Bates, Fremont, Ohio

Application July 17, 1936, Serial No. 91,175

1 Claim. (Cl. 223—61)

This invention relates to drying of hand coverings, especially surgical gloves.

This invention has utility in distending liquid-coated, liquid-tight rubber or infection-proof gloves for drying and conditioning for re-use.

Referring to the drawing:

Fig. 1 is a side elevation of an embodiment of the invention, showing a collapsed glove having its rubber wristband distended in assembly with the support;

Fig. 2 is a side elevation of the support with the surgical rubber glove distended thereon;

Fig. 3 is a plan view of the support of Fig. 1;

Fig. 4 is a vertical section through the device; and

Fig. 5 is a fragmentary view in which the hand of the operator maintains the bead of the glove over the port to receive the air into the glove.

In carrying out the invention herein, there is shown pedestal or base 1. From this base, there rises pedestal portion 2 to annular portion 3 having spaced therefrom groove 4. There is thus provided a mounting. This article, especially for use of surgeons, may be die cast of white metal and of sanitary construction and material. In practice the metal may be an alloy of aluminum or magnesium, and highly finished or even plated. Base chamber 5 and top chamber 6, spaced apart by partition 7, are features contributing to the lightness in weight even though a light metal be used. Furthermore, the device may be produced from phenol condensation product or analogous material, or even glass.

In carrying out the invention, lug projection 8 has therein passage 9 into the groove 4. This extension 8 may have ribs or threading 10 thereon for ready attachment of air supply. Instead of directly blowing on the lug 8, an air pump 11 of the compressible bulb type is shown to effect the glove inflation.

The one desiring to use the device, say a physician after an operation, has washed or rinsed the gloves while still on the hands, and then removes the gloves in this wet, coated condition. Instead of throwing such aside to be wrinkled and have coherence between the portions and thus render the gloves unfit for future use, the surgeon, or a nurse or attendant upon a surgeon, upon removing the glove, may at once take this article, distend it over the annular portion or rim 3 to have terminal bead or reinforcement 12 of the wristband 13 enter the groove 4. This slight distention from the wristband portion 13 with the reinforcement 12 in the groove 4 is such anchoring that, upon distending the glove 14, there is effective holding against the glove shooting off from the support. As thus held, the one mounting the glove may pull the bead 12 over terminal opening 15 of the passage 9 and then operate the bulb 11 to pass air through the passage 9 and opening 15 into the glove 14, with inflation of the glove so that from the wristband portion 13, hand portion 16 and digit portions 17 project in spaced relation away therefrom. The pump or compressible self-distending bulb 11 has tubular stem 18 tightly fitting upon the lug 8. The opposite end of this bulb 11 has air intake, not air outgoing passage, check valve 19. This distention is such that ready drying occurs. With shifting of thumb 20 clear of the bead 12, there is at once rolling or snapping of the bead 12 into the groove 4 as the mounting terminus-side of the rim thereby effecting closing of this check valve device to effect holding of the glove distended. The operator may set the mounting down in a place out of the way for a minute or so required for the drying operation while the instruments or other matters of clearing up be given attention.

As the glove is quickly dried, it may be dusted with a lubricant medium, such as talcum. This may be for both inside or outside the glove. The glove may then be collapsed to be placed in a surgeon's kit or otherwise placed aside ready for attention in the succeeding operation when sterilization may be had before the glove be re-used.

In this handling the life of the glove is increased many fold and its condition is at all times acceptable for the exacting conditions of surgical use, with no wrinkles, folds or other set, adhering or harsh portions to defeat proper condition for the hand protection.

The device is also extremely useful in the testing of rubber gloves, an important function especially for those used in surgical work wherein infection might result from contact through even minute punctures in the glove. The glove before use may be readily tested and the slightest opening or rupture allows the expanded glove quickly to deflate. In fact, users have found the location of leak convenient for locating a patch and even in patch fitting so that the patch will apply smoothly throughout.

What is claimed and it is desired to secure by United States Letters Patent is:

Drying apparatus for rubber gloves comprising a mounting adapted to support a distended rubber glove and having a wristband-distention-and-sealing portion providing a seat for the glove terminating in an endless rim to engage and

hold the glove wristband against slipping free thereof due to pull of distention pressure, said mounting outside having a port spaced back from the mounting terminus-side of the rim adapted to deliver inflation fluid into the glove wristband pulled back thereover from the rim, whereby the release of such pulled over portion closes the distended glove from said port, said inflation being thereafter retained by clinging of the glove to the seat, deflation of which glove is effected by the release of the glove wristband from said mounting.

LESTER N. BATES.