

L. R. BLACKMAN.
Molds for Making Suppositories.

No. 139,858.

Patented June 17, 1873.

Fig. 1.

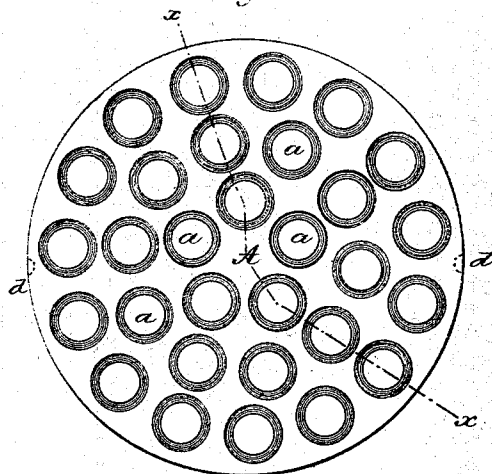


Fig. 2.

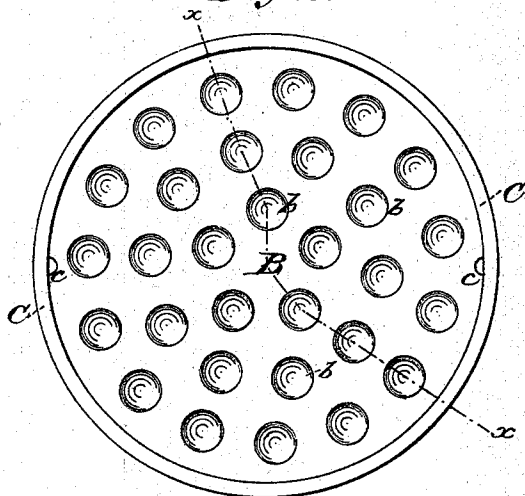
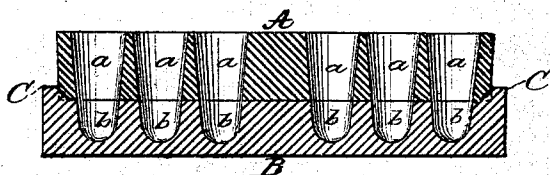


Fig. 3.



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UNITED STATES PATENT OFFICE.

LYMAN R. BLACKMAN, OF NEWPORT, RHODE ISLAND.

IMPROVEMENT IN MOLDS FOR MAKING SUPPOSITORIES.

Specification forming part of Letters Patent No. **139,858**, dated June 17, 1873; application filed June 4, 1873.

To all whom it may concern:

Be it known that I, LYMAN R. BLACKMAN, of Newport, in the county of Newport and State of Rhode Island, have invented certain Improvements in Suppository-Molds, of which the following is a specification:

This invention relates to that class of articles known as pharmaceutical apparatus; and it consists of two plates of about equal thickness, the upper one perforated and the lower containing depressions equal in number to the perforations in the upper plate; the two plates separable, and adjustable by means of set-pins and grooves, so that the openings in the upper plate register with the depressions in the lower plate, forming, when taken together, a conical mold.

Heretofore, numerous expedients have been resorted to by druggists, country practitioners, and others, who have found it necessary to manufacture suppositories. For instance, the medicine is added to the cacao-butter or other vehicle, and the whole worked into a mass or salve by using the pestle and mortar or tablet and spatula, then rolled into sticks, and finally cut and formed as desired; or, as suggested and often practiced, molds are formed by rolling papers into conical shape, and into such mold the melted mass is poured, the paper being removed when the suppository becomes cold. Either of these modes will accomplish the purpose, but neither of them is neat or expeditious, nor can suppositories of uniform size and shape be thus produced.

The object of this invention is, therefore, the production of a divisible mold, simple in construction, and which will permit of the ready removal of the suppositories without danger of breaking them.

Having broadly indicated the scope of the invention, I will now proceed to describe particularly the apparatus, as illustrated in the accompanying drawing, which forms part of this specification, and which is the form I prefer, though configuration, size, and materials are not essentials.

In the drawing, Figure 1 is a plan view of the perforated upper plate. Fig. 2 is a similar view of the lower plate. Fig. 3 is a vertical section of 1 and 2 combined, and is taken on the line *x x*.

Like letters refer to like parts in the several figures.

A represents the upper plate, which may be about half an inch in thickness, and in diameter a trifle less than its fellow the lower plate. It is perforated with a series of holes, *a*, slightly conical in form, and is notched or grooved upon its under side, as shown in dotted lines at *d*, for the reception of pins or projections *c* upon under plate B. B represents the lower or base plate, greater in diameter than the upper plate by the thickness of a flange, C. This plate B is filled with depressions *b*, and is provided with a flange, C, and two or more pins or projections *c*. The upper plate A is of such diameter as to fit snugly within the flange C, and, when placed in position, the pins *c* of the lower plate enter the holes or notches *d*, causing the depressions *b* in plate B to register with the holes *a* in plate A. Both the pins *c* and notches *d* are set a little off the line of diameter, so as to render it impossible to get the plates into any but one position. The conical chambers of the mold are each three-fourths ($\frac{3}{4}$) of an inch, more or less, deep, and about seven-sixteenths ($\frac{7}{16}$) of an inch in diameter at their openings.

The plates are preferably made of metal, and of circular form. The lower disk is turned out with the flange C, and furnished with the pins or projections *c*, as shown. The upper disk is then turned of such a diameter as to fit snugly within the flange C of the lower disk, and is provided with the notches or holes *d* at points corresponding to the pins *c* of plate B. The two plates are placed and held in juxtaposition while the chambers are being bored out and finished.

In using this device the two plates A and B are placed together so that the openings and depressions register, forming the conical chambers; the suppository mass is melted and poured into the mold and allowed to cool therein; or the process may be facilitated by placing the mold in water or on ice. When the suppositories have hardened, the mold is turned upon its face and the plate B lifted off, which releases the tips of the suppositories without injury to their shape. A gentle tap upon the plate A will disengage the body of the suppository, the tip being already free.

I have described the apparatus as of circular form, the plates being disks, and the material used as metal, for the reason that it is most easily constructed of such material and form; but it is evident that the plates may be rectangular, octagonal, &c., and hard woods may be employed; or each disk may be formed of glass, pressed separately, and ground to fit, register, &c., by means well known in the arts, and involving no further invention.

Having thus described my invention, I claim—

1. A suppository-mold, consisting of an upper perforated plate, and a detachable base-plate having depressions to form the tips of the suppositories, substantially as set forth.

2. The combination of the plates A and B, provided with devices whereby the openings *a b* are caused to register, substantially as and for the purpose specified.

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