## EXTEMPORANEOUS SUPPOSITORIES.\*1

BY JOHN URI LLOYD.

In the year 1852, Dr. Wm. B. Chapman, a talented pharmacist of Philadelphia, joined the American Pharmaceutical Association, and in 1854 was elected President of the organization. In consequence of the fact that he had in the interim moved to Cincinnati, and could not make the journey to New York City, where the convention was held, he did not preside at the 1855 meeting, Mr. H. T. Cummings, first Vice-president, serving in his stead.

In Cincinnati Dr. Chapman quickly took a leading position. He was an educated and systematic pharmacist, ranking with Prof. Edw. S. Wayne, of Cincinnati, whose contributions at the early meetings of our association are so well known.

Preceding the year 1865 it was customary for Cincinnati apothecaries to make suppositories by pouring the medicated melted cacao butter into paper cones that rested in the mouths of wide-mouth bottles of appropriate size. This empirical and defective method led Dr. Chapman to devise and construct a metal mold which had the advantage of not absorbing either the cacoa butter or the medicine. This mold, however, under experimentation, possessed the disadvantage of sticking to the hardened suppositories, rendering it difficult to remove them.

Finally, Dr. Chapman struck upon a method that proved to be a perfect success, namely, that of putting the mold, before filling, on a cake of ice until it was thoroughly chilled, then breathing into the mold, which would deposit on its inner surface drops of water similar to moisture produced when the breath is blown upon a chilled window pane. Be it said that dipping the mold into water did not answer the purpose, mainly because of the fact that it was so difficult to remove the last traces of oil from previous manipulations. To this film of oil the water would not adhere, the fault being overcome by the deposit, in minute drops, of the vapor of the breath, which made an adhesion and perfect coat of water over the metal, preventing the mold from touching the suppository.

Dr. Chapman devised molds for two size suppositories, namely, the vaginal and the rectal suppositories, which, so far as this writer is informed, are yet standards, in practically the same shape and size.

At the semi-centennial meeting of the American Pharmaceutical Association, held in Philadelphia, the writer of this paper exhibited these molds, which he purchased from Dr. Chapman at the price at which they were furnished to Cincinnati pharmacists, viz., \$5.00 each. To this it may be added that Dr. Chapman made these molds personally, at spare intervals, and the wonder is, how, without a lathe, he could form them so perfect in size and shape.

It was the good fortune of the writer to have been engaged as a clerk, for two years, with Dr. Chapman, where, under the special direction of this enthusiastic

<sup>\*</sup> Read before Section on Practical Pharmacy and Dispensing, A. Ph. A., City of Washington meeting, 1920.

<sup>&</sup>lt;sup>1</sup> This contribution is not designed as a historical study of Suppositories, which in itself would comprise a small volume. Nor is it intended to intrude on processes that, more modern, may possess advantages over the sixty-year-back mold and process, then considered all that could be desired.

apothecary, he was ever being taught the many phases of prescription pharmacy, the knowledge of which has since been to him a constant source of invaluable opportunities, the suppository problem as offered in this paper being a fragment thereof.

From the semi-centennial article presented our Society (above alluded to), the following extract cannot be bettered by the writer, and he consequently reproduces it intact, as follows:

"And now a word concerning the suppository business at that date. Dr. Chapman's method was first to make unmedicated suppositories and use these for subsequent medication, thus getting the remedy evenly divided into an exact number of suppositories. The method of manipulation was as follows:

"The suppository mold was placed on a cake of ice and allowed to become perfectly cold, which required a few minutes only. In the meantime cacao butter with ten percent of Japan wax was placed in an evaporating basin. When melted, the molds were breathed into so as to coat the inside with moisture, after which the mold was filled with the grease melted and cooled just to point of milkiness. When cold, the finger was pressed gently upon the top of each suppository which would loosen with a little snap and then upon turning the mold upside down and gently striking a piece of wood, the suppositories would fall out. This made the unmedicated suppository.

"A favorite prescription in those days was opium and extract of belladonna suppositories. With a powder such as opium all that was necessary would be the melting of the required number of plain suppositories, the addition of the powder, stirring the contents until the mixture cooled to a creamy consistence, when it was to be poured into the molds after the manner heretofore described.

"With an extract it was necessary first to soften the extract by means of a proper menstruum, then having melted **the** plain suppository and the softened extract, stir until reduced to a creamy consistence; then adroitly with constant stirring pour the suppository mixture into the mold. One experienced in manipulation could make suppositories of any combination whatever very quickly by means of this method and these molds."

To the foregoing, the writer of this paper presumes to add a suggestion to the effect, that in his opinion, one of the features of extemporaneous pharmacy to-day, that should ever be at the command of adjacent physicians, is that of suppositories freshly made, and to the physician's order. He takes exceptional pleasure, therefore, in asking the privilege of again placing before his audience the Chapman Suppository Mold, (with specimen suppositories recently made), that for several years he employed, while a prescription clerk. Although many devices for suppositories have been suggested during the intervening half-century since these molds were made, no better process, than to incorporate thoroughly the remedial agent, could be devised, and possibly, no better or cheaper mold produced.

Let us close by making an extract from the article by Dr. Richard V. Mattison, *Proc. Am. Pharm. Assoc'n*, 1875, p. 625, "On Suppository Molds," which, presenting the claims of nineteen devices, states: "The 'melting process' is esteemed by many as the only proper and perfect method of preparing Suppositories."