

## Section on Commercial Interests

Papers Presented at the Sixty-First Annual Convention

### SHAPE OF TABLETS FOR EXTERNAL USE.

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The manufacture of tablets and, quite especially, their evolution, is unquestionably an American innovation. From the compression of a pill, the *flat, round* shape of the tablet has resulted, and it has become the custom to manufacture tablets of this particular shape throughout the civilized world. In the course of time, larger tablets have been manufactured, such as lithia tablets, which were very convenient for the extemporaneous preparation of lithia water. Next came tablets, which were intended for the preparation of solutions for external use, some of which were even of a poisonous nature. It has undoubtedly been a very serious mistake to manufacture tablets for external use, of identically the same shape of those for internal use, as they can easily be mistaken for one another, even by physicians themselves. On account of the many, the very many, accidents, some of which have even proven fatal, from the internal use of "Bichloride Tablets," which have usually been mistaken for headache tablets, numerous suggestions as to color and shape have been made. The craniums of pharmacists, chemists and even those of the public have been quite busy in making suggestions.

*Color:* There is no question but that the color of the poisonous tablet exerts some psychological action upon the patient or the public. The German Pharmacopœia in the case of "Bichloride Tablets" orders a red color by means of eosine. The supplement of 1891 of the Netherlands Pharmacopœia, 3rd edition, specifies a blue color, which is also used in Russia. In the United States "Bichloride Tablets" have been manufactured of a white, blue, green and red color.

*Shape of Bichloride Tablets:* Ever since "Bichloride Tablets" have become official in the 3rd edition of the German Pharmacopœia (1890) they have been made of cylindrical shape, about twice as long as thick. At least three manufacturers in the United States have realized the necessity of a special shape of these poisonous tablets, one making them diamond shape, another clover-leaf shape, and the third in the shape of a triangle. There is no question that these distinctive shapes have contributed to prevent accidental poisonings. As a further precaution "Bichloride Tablets" in the United States are also put up in distinctively-shaped bottles, of rough corrugated exterior, these bearing a poison-label, and in addition, each tablet is stamped "Poison."

A great many suggestions have been made regarding the proper shape of the

deadly "Bichloride Tablet." A former chairman of the Section of Pharmacy and Dispensing of the A. Ph. A. is of the opinion that the shape of a coffin, adorned with skull and cross-bones, should be adopted as the proper shape and that this will prove an efficient safeguard. Another active A. Ph. A. member suggests the grotesque shape of a skull, or the peculiar form of a kidney. There is no question but that all these suggestions have been made in good faith, with the sole object of safe-guarding the patient and the community.

*Shape of Tablets for External Use:* The Bichloride "accidents" have plainly demonstrated the desirability and also the necessity of a *distinctive and uniform shape of tablets for external use*. The tablets for internal administration are round, and this shape, which has been adopted throughout the civilized world, cannot be very well changed. What is needed, and needed very badly, is a distinctive shape, *but not a fancy shape*, of tablets for external use. The writer has given this subject much consideration. He has reached the very simple conclusion that all tablets for external use should be made *Flat and Square*, with four corners and that these corners should not be rounded.

*Advantages of Square Tablets for External Use:* 1. A distinctive square shaped tablet cannot be *mistaken* for a round tablet at any time.

2. The tablet has four corners and thus it will mark plainly its use for solutions intended for external application.
3. Such a tablet cannot be easily swallowed as, owing to its four corners, it is liable to stick in the throat.
4. By being *Flat* and *not Cubical* the tablet can readily be broken into several pieces, to increase its solubility.

*Poisonous External Use Tablets:* If the external-use tablet is poisonous, then, in the opinion of the author, the following precautions should be taken:—

1. The tablet should be square and flat.
2. The tablet should be colored.
3. Each tablet should be wrapped *individually*, and the wrapper should be marked "Poison."

As to the proper color for a poison tablet, I would recommend eosine. Red has always been the danger-signal and for that reason, the psychological action of a red tablet might be stronger to prevent mistake than that of any other color. As to the individual wrapping, the author is in favor of the German method in the case of "Bichloride Tablets," namely the wrapping of each tablet with black paper, which in white letters bears the name "Poison," as well as the skull and cross-bones.

*Conclusion.* In view of the enormous use of tablets in the United States, I would make the following three additional recommendations:—

1. The adoption of a monograph or general chapter on tablets, in one of our legal standards, the U. S. P. or the N. F. It might be news to some pharmacists in the United States, to learn that a Chapter on Tablet Triturates is official in the National Formulary under "Pulveres" as "Pulveres in Tablettis."
2. That the U. S. P. or N. F. should make an explicit statement that *all tablets for external use* should be made of a *square and flat shape*.
3. That *poisonous tablets intended for external use* should have the *same*

*square shape*, should be *colored*, and should be wrapped *individually with black paper* which in *white ink bears the word "Poison."*

By the adoption of these simple recommendations, the dispensing and the use of external tablets and poison tablets would be thoroughly safe-guarded. The adoption of these simple recommendations would result in uniformity in the shape of these tablets all over the United States and this arrangement would be far more desirable than the enactment of heterogeneous laws by different states, which would result in a multiplicity of shapes and colors for such tablets, and be a hardship for manufacturers and pharmacists. Remember, *round* tablets for *internal* administration and *square* tablets for *external* use only. Let us be "on the square!"

#### DISCUSSION.

Mr. Mayo said there was one objection he could see to the use of eosin, and that was, that a color for poison should be selected which was characteristic. A pink, or any shade of red, was not sufficiently characteristic, as there were already so many tablets colored in that way that it would be no indication of any peculiarity. There were no tablets, so far as he was aware, that were colored blue, except methylene-blue tablets, and blue was a color which had been adopted for corrosive sublimate in hospitals. The suggestion offered by the author did not include the specific name of a color. He wished to move, therefore, that the Section on Practical Pharmacy and Dispensing recommend to the House of Delegates the passage of a resolution suggesting the introduction into the Pharmacopoeia of a monograph on tablets in accordance with the suggestions contained in Mr. Raubenheimer's paper. He expressed his satisfaction that the author had not specified any color, because he did not think any shade of pink was desirable, either in U. S. P. or N. F.

Mr. Nitardy moved to amend, that Mr. Raubenheimer and Mr. Mayo be appointed as a committee to draw up suitable resolutions to be introduced in the House of Delegates.

This motion was seconded by Doctor Schneider; but the Chair suggested that this matter be presented a little later, when there were more members present, and so the matter was passed.

Mr. Raubenheimer made the suggestion in regard to blue, that it was very difficult to get a blue color which was permanent, because all blues, except one, as he recalled, were reduced by bichloride. There was only one blue color that could be used.

Mr. Mayo replied that "One was a-plenty."

Mr. Windloph said he did not know whether Mr. Mayo was referring to tablets for internal use, and suggested that his establishment manufactured bichloride tablets colored blue.

Mr. Mittlebach thought that conscientious druggists throughout the country were anxiously awaiting a solution of this problem of throwing around the use of these dangerous tablets some adequate safeguard. Mr. Raubenheimer, he said, had been working faithfully to this end; he had read some of his papers on this subject. It occurred to him that some other word than "tablet" might be coined to meet this situation. A tablet meant something taken internally, and he thought it would be a decided advantage if some other word could be used to express the idea in mind. He also thought it would be well to put these dangerous tablets on the market in small packages, with permission to dispensers to sell them in original package only. The trouble was the result, usually of the breaking of the package, as was the habit with many druggists throughout the country. They often sell these strong poisonous tablets in pill-boxes, or in some other way, not distinctive, and they were taken home by the purchaser and put in the medicine-closet, alongside of aspirin tablets, in a box of perhaps the same shape, with the result that mistakes often occurred. If druggists could be compelled to sell these poisonous tablets in original packages only, in some proper and distinctive shape, he was satisfied it would "help the cause."

Chairman Lascoff commended this as a good suggestion.