

Section on Practical Pharmacy and Dispensing

Papers Presented at the Sixty-Second Annual Convention

SHOULD THE RETAIL DRUGGIST MANUFACTURE HIS OWN PREPARATIONS, OR BUY THEM?

CHARLES J. CLAYTON.

This is a problem that can be solved in almost as many ways as there are retail druggists, for the answer depends upon the conditions surrounding each one, who must decide for himself, according to those conditions.

To the true pharmacist, the making (the creating) of his own preparations is the breath of life, and he will, if necessary, sacrifice both time and profit to the gratification of his desire in this direction.

However, in this day and age, true pharmacy, unmixed with commercialism, is hard to find, and commercialism decrees that our preparations shall be produced at the lowest cost commensurate with first quality, and it may, and often does happen, that some one else can be employed to do many things for us more cheaply than we can do them ourselves. If then, we are justified in employing some one to do these things for us in our stores, where the facilities for good work are often lacking, may we not be equally justified in going a step farther by the employment of coöperative manufacturing enterprises, or the purchase of our preparations from some reliable manufacturing house? Surely, there would be nothing unethical in this, and it may well be that in many instances, by reason of the facilities that these houses have for securing the best qualities of crude drugs and for assaying the finished preparations, the latter would more nearly conform to the standards set by the authorities. Then, too, it has been my experience that a large proportion of drug clerks,—even though they may be registered and graduates in pharmacy,—to whom the manufacturing work in the store falls, are either incompetent or careless of results

So, in order to be sure of good results, the employer must, in many instances, either do the work himself or exercise a close supervision over those who do.

Even in the case of such preparations as are almost universally made in the stores where they are sold, we are reminded occasionally of the need of supervision, the following instance occurring to me recently:—During the temporary absence of my clerk, a relief man was employed, one who was registered, and who had conducted a store of his own for a number of years. He called my attention one morning to the fact that he had started to make some solution of Magnesium Citrate, saying that he did not know whether he was making it according to my way or not. On being asked if he had followed the U. S. P. formula, he said he didn't know; he had put in two ounces of magnesium carbonate and four ounces

of citric acid for six bottles. His attention was called to the fact that considerable more of these articles were needed to make it right, and he was asked if he had added the syrup and flavor, to which he replied, "No, what flavor do you use, Vanilla"?

He stated that he had found his formula in the last store that he had owned, and had been using it ever since, without a thought as to whether it conformed to the standards or not.

I have seen a percolation-process performed by pouring a menstruum repeatedly through a loosely-packed or entirely unpacked drug, and I have seen a finely-ground drug packed so firmly that percolation would involve a matter of weeks, while the percolator was left uncovered for the admission of dirt and to allow the loss of alcohol by evaporation.

Of course, these are extreme instances, and I do not, because of them, advocate buying everything. On the contrary, I advocate making everything that we can ourselves, and for my own part, I buy very few preparations. Neither do I mean to reflect too severely upon the ability of the clerks, who, in the average store, are chosen more for their ability as salesmen than for any other reason, and it is unfair to expect that they shall have all the desirable attributes in addition thereto. Moreover, the employers are not materially their superiors in these matters.

Then, too, no matter how competent we or our assistants may be, there are some things that it seems to me, we cannot afford to make ourselves, because of the time involved in their preparation. I would cite Seidlitz Powders as an example. The cost of the materials for a gross of these is something over \$1.20 while they can be bought, guaranteed U. S. P., for \$1.40.

I believe that a pharmacist's time is worth too much to spend it in weighing, mixing, dividing and folding 288 powders for a saving of less than twenty cents, even though he may have nothing better to occupy his attention than the perusal of the pharmaceutical journals. However, having bought your seidlitz powders, a very decided saving can be made by packing them yourself, a small investment in envelopes, cartons, boxes and labels, sufficing to take the place of a large stock of finished packages. Another item upon which no material saving is made, is in the filling of capsules of quinine, the difference on the two-grain size amounting to only about fifteen cents per thousand. Of course, if one has a boy who must be kept busy in order to keep him out of mischief, it may pay to do even such things as these, rather than to depend upon the manufacturer.

To sum up, there are the following arguments in favor of purchasing many preparations:—First, a saving of time, which if considered at its true value, would frequently mean a saving in cost as well; second, an assurance of a preparation skilfully prepared, and conforming to the required standard.

At this point, however, I would call attention to the necessity of specifying exactly the preparations desired and a careful inspection of the labels; for the most dependable manufacturers have their favorite formulæ for many preparations, claimed by them to be superior to their official counterparts, and these special preparations are likely to be sent unless careful specification be made. These may be, as claimed, superior to the U. S. P. and N. F. products, but where there are two or more formulas for an article bearing but one name, and when these

differ materially in their content of a potent drug, there arises the danger of over-dosage, due to the patient becoming accustomed to a weak preparation, and later being furnished with a stronger one, and not knowing of the change, continuing the same dosage. Even if no actual danger were the result of this, the different strengths of the various preparations dispensed under the same name, results in uncertainty of effects, and a consequent loss of faith by the prescriber in the efficacy of drugs, and may be a leading reason for the abandonment of their use.

In favor of making our own preparations it may be said:—first, in most instances there is a material saving in the cost; second, preparations can be made in such quantities as are justified by the demand, so that they are less likely to become deteriorated by reason of age; third, if U. S. P. and N. F. formulæ are followed, the lack of uniformity due to varying private formulæ, however good the latter may be, is obviated, and identical preparations will be dispensed everywhere; fourth, this is a part of true pharmacy, which no man who loves his profession would willingly abandon.

No doubt other reasons, both *pro* and *con*, will occur to the minds of my auditors, but I have said enough to show that there are two sides to this, as there are to most questions.

SOME PHARMACEUTICAL NOTES.

WILLIAM R. WHITE, PH. C.

Oleate of Mercury, U. S. P.:—This when kept in glass ointment jars for a month or more, will discolor on the top. By covering the surface of the oleate with distilled water and adding hot paraffine until a thin layer is formed when cold, the oleate can be kept for a long time without change.

Spirit Etheris Nitrosi:—Practically, all of the Spirit of Nitre dispensed by pharmacists, is made by diluting one pound of the concentrated spirit with twenty-one pounds of cooled alcohol. This concentrated spirit is very volatile and boils at about 63° F., and unless manipulated very carefully some of it will be lost by evaporation. This loss can easily be avoided by cooling both alcohol and concentrated spirit, inserting a champagne tap in the cork of the nitre bottle, attaching a glass tube to it by means of a small piece rubber tubing and, after inserting the glass tube in the alcohol, opening the cock of the champagne tap and inverting the nitre bottle. If a hole is made in the stopper of the alcohol bottle and the glass tube snugly fitted into it there will be no loss. The writer believes that faulty manipulation is the cause of so many samples of Spirit of Nitre being reported below standard by the inspectors.

Fowler's Solution—This preparation is made by boiling arsenic trioxide and potassium bicarbonate in a concentrated aqueous solution until the arsenic is dissolved, adding the remainder of the water and the color.

The U. S. P. says that when pot. bicarb. is heated to this temperature, it is converted into the carbonate which is more alkaline than the bicarbonate and consequently it dissolves the arsenic more readily. This being true, why not use the carbonate in proper amount instead of the bicarbonate?