July 1929

SYRUP OF CITRIC ACID.

Several liters of plain syrup were first prepared by percolation and this product was used in the manufacture of all syrups in the table below. Each student prepared 100 cc. syrup of citric acid, making up to volume in a 4-ounce prescription bottle as described previously.

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Student number.	Weight of syrup used.	Specific gravity.	Student number.	Weight of syrup used.	Specific gravity.
3	34.8546	1.271	5	35.5546	1.297
10	34.6126	1.262	4	35.5870	1.298
17	35.1548	1.282	7	35.6226	1.299
2	35.3574	1.289	11	35.4452	1.293
13	35.4584	1.293	12	35.5196	1.296
6	35.4392	1.293	15	35.6250	1.299
8	35.4656	1.293	16	35.6406	1.300
20	35.4590	1.293	19	35.6384	1.300
9	35.5122	1.295	18	35.7094	1.302
14	35.5474	1.295	1	35.8196	1.307

The variations in the specific gravities of this syrup are greater than we had anticipated, since all students were using from the same sample of plain syrup. Three 100-cc. samples of syrup of citric acid were prepared at a later date by a member of our faculty, who used a plain syrup having a specific gravity of 1.308 and made them up to volume in a 100-cc. cylinder. The specific gravities of these three samples were found to be 1.302, 1.302 and 1.303.

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PHARMACEUTICAL MANUFACTURING AND ITS RELATIONSHIP TO THE DRUG STORE.*

BY EDWARD D. DAVY.¹

Increasing the professional standing of the pharmacist in the community is of unquestionable interest to the pharmacist, pharmaceutical organizations and schools; but the manner of accomplishing it without additional fundamental training is a very difficult problem.

It is intended here to present one phase, largely discarded, but which I believe will help the cause, and that phase is manufacturing on a small scale in the drug store.

The reasons ordinarily offered for not continuing the old practice of making some of these commonly used products is lack of time; the lack of time being largely occasioned by customers for hair nets, toys, post cards, sandwiches, etc.

Ordinarily, if the stock above mentioned does not obtain in the drug store, considerable time is available, which one man could give to the manufacture of certain preparations which do not require elaborate apparatus.

^{*} Section on Practical Pharmacy and Dispensing, A. PH. A., Portland meeting, 1928.

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The pharmacist should present to the medical profession, as occasion warrants, the many official preparations which are obtainable for his use, and also the possibility of preparing special formulas, if desired, many of which may be for experimental purposes only. The common practice of quietly passing out proprietary or semi-proprietary preparations on prescription or at retail should be discouraged.

Many special formulas and test solutions are of necessity needed, and it is chiefly in the hospital that the physician learns the practical application of these. When he goes into private practice he is immediately confronted with the readyto-use products which, later, leads to their almost constant use and office dispensing.

The idea of individuality in pharmacy must be brought about by the combined initiative of employer and employee, and certainly no better way can be found than by properly presenting to the physician and public some preparations, with the contents and manufacture of which the management is thoroughly conversant.

A great number of special formulas require considerable thought, if a presentable product is made, and the technique used in making them can readily be taught in our schools of pharmacy with very moderate equipment.

Many pharmacists are truly professional men and command the respect that is justly theirs; too many have become merely purveyors of commodities, yet expect to be removed from the tradesman class.

The responsibility rests with the pharmacists and the schools training them, to see the need for individuality in pharmaceutical endeavor. I have often asked of the retailer, "Why do you not make certain preparations?" The reply is, "I can buy them cheaper than I can make them." A glance at the price list of crude materials for a given preparation soon shows the fallacy of such an argument. The total cost of crude materials is usually from one-fifth to one-fourth that of the list on the finished product, and the pharmacist usually has the crude materials at hand for his limited prescription work. The difference in cost of materials and the list on the product represents a little work.

If the pharmacist values his time according to one advertisement which recently appeared, purporting to show how the pharmacist could save money by buying this particular product instead of making it, in which his services were allowed for at the rate of 61.5 cents per hour, then it is the more imperative that he use his brain, pencil and muscle to increase his wage scale.

It would be futile to advocate the preparation of tablets, products requiring assay, or products with high alcohol content; but there still remain many preparations requiring the mortar and pestle, percolator and pill tile, which should not be forgotten.

An added advantage in manufacturing experience may be gained through familiarity by contact with these preparations. Taking tablet manufacture as a concrete example, few stores will have sufficient demand for tablets to warrant their manufacture, but a study of the details of granulating the various materials, either singly or combined, lubricants, coloring, disintegration, types of machines, etc., places the purchaser in a position to know what and how to purchase and enables him to answer questions concerning tablets or other preparations which he probably dispenses every day.

If you will pardon the reference to our manufacturing laboratory in connection with the school, I should like to add that, as a result of our direct relationship with the hospitals, a better understanding is brought about among the pharmacists and the medical men and a great deal more work is being turned over to the pharmacy of the hospital, aside from that which the school is doing. In addition, the physician, who has had hospital training under these conditions, when going into private practice, looks to the pharmacist to supply his needs. As a result, we have numerous queries from local pharmacists concerning formulas, which is, I believe, proof that the pharmacist, even in a limited way, may develop a better understanding with the medical profession and the public by showing originality along some strictly pharmaceutical lines. Eventually, two types of stores will probably be evolved—the pharmacy and the drug store.

FOLLOWING THE LEADER.*

BY ROBERT P. FISCHELIS.

Merchandising experts advocate, as one method of drawing trade, concentration from time to time on a single item or group of items which can be offered at attractive prices or in company with some special service feature. Such items or group of items are designated as "leaders."

It is not difficult to attract customers when the "leader" is a standard product offered at a greatly reduced price. It is more difficult to attract trade when the "leader" is an unknown product, even though its price is low in comparison with standard products of a similar character.

It may be still more difficult to bring customers into a store when the leader is a special product made in the store or a new form of service, although there is room for a difference of opinion here. There would doubtless be a sufficient number of specific instances available to prove the case either way.

What is the real test of the success of the plan to concentrate public attention on the "leader?" Undoubtedly the answer is "the number of followers." If the "leader" is not followed by an ever growing number of permanent customers it is largely a failure.

Every retail pharmacist can doubtless point to some items in his stock or to some service rendered by his organization which causes people to return to him for that item or that service and incidentally for other things. These are his "leaders" whether he recognizes them as such or not. If he keeps proper records he will recognize them and eventually capitalize them.

The object of this paper is to point to one "leader" that will insure a following greater than is possible with any other. I refer to prescriptions and I desire to cite only one incident of recent occurrence which gives indisputable evidence of the great power of Prescription Compounding as a "leader" for any retail pharmacy.

An establishment in one of the larger Eastern cities has had a slogan emphasizing prescription work for years. It never was a strictly prescription store but took full advantage of its transient location to build up a general drug and sundry business, with soda fountain, etc. It recently filled its two millionth prescription. A year or two ago this establishment was compelled to seek new quarters because of a demand from its landlord of an increase in rent amounting to five times what

^{*} Section on Commercial Interests, A. PH. A., Portland meeting, 1928.