The solvent mixture is repeatedly extracted with 10-cc. portions of 0.04 normal sodium hydroxide until absence of color shows complete removal of phenolphthalein. The solvent mixture is then discarded. The phenolphthalein is precipitated from the combined alkaline extracts by slow addition of 0.1 normal sulphuric acid in slight excess. The precipitated phenolphthalein is completely extracted from this mixture with ether. The ether solution is again extracted with 0.04 normal sodium hydroxide, discarding the ether after complete removal of the phenolphthalein. The alkaline solution is acidified with 0.1 normal sulphuric acid, being careful to use only one or two cc. excess acid. The resulting precipitate is allowed to stand over night to permit coarse crystals to form. The crystals are collected on a tared sintered glass Gooch crucible, washed with four (5 cc.) portions of cold water, dried at 100° C. and weighed. The filtrate and washings are transferred to a 250-cc. volumetric flask. The beaker which contained the crystals is washed with 0.04 normal sodium hydroxide until colorless washings are obtained. These beaker washings are added to the 250-cc. flask containing filtrate and the solution is made up to 250 cc.

A standard phenolphthalein solution is prepared by dissolving exactly 0.03 Gm. of pure phenolphthalein in 250 cc. of 0.04 normal sodium hydroxide solution. The quantity of phenolphthalein in the filtrate and washings is now determined by matching the color of that solution against suitable dilutions of the standard solution. This quantity is added to the weight previously found.

Determinations by the described method are consistent and agree with theory. An analysis in duplicate of an emulsion prepared to contain 0.321% phenolphthalein indicated an averaged phenolphthalein content of 0.311%, the individual values being 0.319% and 0.302%. Similarly, another emulsion, the phenolphthalein content of which was less exactly known, contained an averaged phenolphthalein content of 0.289%, the individual values being 0.280% and 0.297%.

Occasionally emulsions of this type show some separation after aging. The nearly clear aqueous layer at the bottom of such a separated emulsion contained less than 0.01% phenolphthalein. The following table gives the amounts of phenolphthalein found in the top and middle portions for three samples of mineral oil and agar emulsions contained in bottles.

	Per Cent Phenolphthalein.	
Sample.	Top Portion.	Middle Portion.
B	0.335	0.310
	0.333	0.332
E	0.315	0.320
F	0.377	0.373

These data show that, although the bottom aqueous layer of an emulsion which has undergone separation is low in phenolphthalein content, the remainder is quite uniform in respect to the quantity of phenolphthalein present. The whole sample will again have a uniform distribution of phenolphthalein after shaking to re-incorporate the separated water.

THE CLINIC PHARMACY.*

BY JOSEPHINE NICHOLS.

We speak of a Clinic as an organized group of doctors working together for the welfare of the patient. With such a group a pharmacist has a very definite place. It is here that pharmacy can be practiced in its most professional aspects and should therefore appeal to the pharmacist who is interested in the science itself and who need not be hampered by the economics of business management and

* Section on Practical Pharmacy and Dispensing, A. PH. A., Dallas meeting, 1936.

salesmanship. In these days of more group practice among doctors, the time should be opportune for establishing more of these pharmacies.

No two professions are more closely associated than medicine and pharmacy, and both doctors and pharmacists realize that close coöperation between the two professions is most essential as well as advantageous. The professional pharmacist must depend entirely upon the doctors for his work, and in turn the doctor is assured by experience that his prescriptions are being filled accurately by some one who is as much concerned in helping the patient as in making money.

We should make ourselves essential to the doctors, too. This can be done in a variety of ways. In a Clinic one has access to all the current medical journals and the latest information of all kinds in the practice of medicine. It is well to avail oneself of this opportunity to keep informed on the ever-changing trends in medication and learn the medical point of view on old and new drugs. This is not for the purpose of making suggestions to the doctors unless they ask for them, but you will find they will appreciate your ability and willingness to help them with some medications when they ask for your coöperation. One is surprised and interested to read of the amount of research being done with many of the U. S. P. drugs and it is easy to understand why doctors change so much in their treatment of many of the common diseases. For example, during the past year there has been a great deal of literature on Iron Therapy in a simple anemia. All the regular iron preparations and many of the fancy proprietaries have been used only to find that Reduced Iron in large doses is most efficient. In our own Clinic we were using the large doses long before most others were using any but two- and three-grain doses. A few years ago we would have been astounded if a doctor ordered seventeen Blaud's Pills to be taken each day but we learn that is the amount necessary for a person to utilize what iron he can from them. It is worth one's effort to keep informed on biologicals in the same manner.

There are still many doctors who prefer writing prescriptions for their own combinations of drugs rather than always write for some ready mixed and easily dispensed preparation. When they know they can be assured the accuracy and time necessary for doing this, they will take advantage of it. In compounding prescriptions for the same group of doctors the pharmacist will be acquainted with their favorite combinations and can keep many preparations such as nose and eye drops, capsules, ointments, etc., made up. As you know, many of these preparations require much time to make because of chemical reactions and long compounding procedures, and having them on hand saves time for both the doctors and patients. The pharmacist is also thoroughly acquainted with the doctors' idiosyncrasies in prescription writing and consequently mistakes can be avoided.

A small Clinic Pharmacy has many business advantages. The space occupied is small and equipment can be arranged compactly. No space is needed for display or advertising material. We have a new glass front dispensing room through which the patients, if they choose, may follow every step in the procedure of filling their prescriptions. Many people are impressed to see how accurately and painstakingly this is done. One need not be interrupted by having to sell a five-cent cigar or any other item, and that in itself should lead to better work.

Buying, as in any business, is very important if the business is to be successful. When one works so closely with the doctors there need be no dead stock and this can be done without having to ask the doctors to use certain preparations because you have a lot on hand. One knows about how much of the standard preparations they are using, and can be very conservative with the new ones until he sees how they are being prescribed. Often one feels he has to buy according to what the detail-men say the doctors are going to use. In knowing the doctors, the pharmacist will be able to tell whether they took the line of least resistance and said, "Sure, I'll prescribe it," or whether they really will use it. Most of the stock in a Clinic Pharmacy can be quick turnover items so that it need not be large at any time. By making use of his time, one can save a great deal by making up many preparations. There are many things, of course, that it does not pay to do this with, but it is surprising how much can be accomplished when there are no "small sale" interruptions.

I believe the refill business in the Clinic Pharmacy is better than in a regular drug store. Frequently a patient comes in to ask if the doctor wants him to continue with his medicine. The prescription can be looked up by the use of a card index and the doctor informed what it is. Very often we have the opportunity of refilling it. It is well to have the patients realize the importance of identifying their prescriptions by prescription number rather than "that red liquid I got last month," or "those brown tablets for the baby." This teaches them that medicines are prescribed for each individual in treatment for one certain condition and are not to be passed on to friends and relatives who seem to have similar complaints.

In our Clinic, nothing is sold over the counter except bandages, adhesive tape and boric acid. Every tablet and liquid bears a prescription label. This, we feel, is as beneficial to the patient as to the profession. There are many preparations that have become counter items which should have remained strictly prescription drugs. In illustration, a great deal of harm has come from people becoming familiar with the names of the phenobarbital derivatives and being able to buy them without restriction. Doctors see the great harm in this but often find it easier to tell the patient to go and get a certain medicine than to write a prescription. In most cases doctors do not realize the extent the lay people abuse and misuse this information. With a little coöperation from the Pharmacist, they will be glad to do their part. After all, we must keep in mind the welfare of the patient and not just how much we can sell.

The Winona Clinic consists of six doctors, two of whom do little else than surgery; one is an eye, ear, nose and throat specialist, and three are general practitioners. In spite of the fact that these doctors are very conservative in their prescription writing, one pharmacist is kept constantly busy.

The Pharmacy is owned by the Clinic and was opened January 1, 1925. There was a consistent increase in business until 1932 after which it remained constant until a recent change of location when it has increased. More than 56,000 new prescriptions have been filled averaging 4980 annually which has led to a good income. Business is done on a cash basis.

The Pharmacy consists of two adjacent rooms 8′ x 11$^1/_2$′ and 6$^1/_4$′ x 11$^1/_2$′. We have a chute from the upstairs, where the doctors' offices are, into which the doctors may drop their prescriptions as they are written so they will be ready for the patient when he leaves the Clinic. Patients are free to have their prescriptions filled at any Pharmacy they choose, but we find that the Clinic Pharmacy fills

90% of all those written by our doctors. Nine months ago the Clinic was remodeled and the Pharmacy was moved from the back of the second floor to the first floor, directly across from the elevator. Since this change, the Pharmacy income has increased an average of $100.00 a month over that of the corresponding month of the previous year.

In closing, I wish to say that in my opinion no "set up" could give more professional satisfaction to the pharmacist than a Clinic Pharmacy. Daily contact with the same group of doctors and attendance at their monthly staff meetings has made me feel that I am a most essential part of their organization. With this self-satisfaction and the knowledge that the Pharmacy has been most successful financially and professionally, I can most heartily urge any pharmacist to become a part of a similar group.

THE PRINCIPLES FOR CORRECT PRESCRIPTION PRICING.*

BY GEORGE LOUIS SECORD.

Since the Prescription Department is the yardstick by which drug stores should be measured, it follows that prescription pricing is obviously of paramount importance. A seeming lack of understanding by great numbers of pharmacists of the principles underlying the operation of the Prescription Department and the great variation of the estimated cost of operation, even in the same districts, has offered to me the necessary stimuli to undertake a general investigation of the subject in an attempt to arrive at a rational basis on which to price medicine to the patient.

Two facts seem to stand out prominently in making a preliminary survey which in themselves would justify any effort made in this direction:

1. Insufficient remuneration from the Prescription Department resulting in discouragement to the pharmacist and thereby promoting more and more the merchandising phase of his business.

2. Lack of uniformity in pricing and the absence of a definite and reasonable basis for establishing the charge. This angle of our business is responsible for the skepticism of the physician and the frequent criticism he pours forth due to the lack of solidarity within our own ranks and the obvious lack of understanding on his part. Who could blame him when such great discrepancies such as we have all seen are brought home to him by his patients. This is one of the vital factors which has stimulated dispensing by many physicians. Naturally the physician wants his patients treated fairly and when one is charged more for the same item than another has paid, he immediately forms the opinion that the one paying the higher price has been charged too much. It has been my experience that usually the one paying the lower price has been charged too little. Patients with the same experience as cited for the physician, develop mistrust, start the shopping practice and finally resort to the unsavory and dangerous practice of self-medication. Need I remind you, that in many cases of this nature, the patient receives a large measure of co-

* Section on Practical Pharmacy and Dispensing, A. PH. A., Dallas meeting, 1936.