have been thirty dollars additional, or an increase of six hundred percent. The case cited is only theoretical; however, in practice, those pharmacists engaged in such work will testify to the increased financial return gained by such service.

The examination of urine, however, is only a small branch of a large field of important work. All reputable pharmacy schools give thorough courses in bacteriology and the pharmacist of to-day with very little additional effort can equip himself to do commercial bacteriological work. Such work would naturally include the examination of urine, milk and water for micro-organisms, the isolation of pathogenic organisms in sputum and other body fluids, and other miscellaneous work, such as the preparation of sterile media, etc. This is a tremendous field for work of a truly professional character. The author knows of a pharmacist residing in Maryland, who, immediately after announcing his intention to do such work, secured the task of examining the entire water supply of a railroad, which yielded excellent monthly returns. This is but one instance of success in this line of work, and there are others sufficiently numerous to render it an attractive field for the well-trained graduate in pharmacy.

Another branch of clinical service can be easily inaugurated in the profession of pharmacy by the pharmacist making direct use of the chemical training he has received. The modern physician is a great user of standard solutions and other chemical reagents. These can be supplied very conveniently by the pharmacist, and in so doing he enhances his professional reputation and increases his monetary return. Not only can the pharmacist render chemical service to the physician but the laity will not be slow to learn of an innovation of this character in a pharmacy, and he can render to them chemical service in several of its minor branches.

Some advocates of clinical service in pharmacy have urged the pharmacist to enter into the work more fully and to do such service as the Wassermann test, blood count, separation of groups for blood transfusion, etc. In the author's opinion this class of service does not belong in the hands of the pharmacist, since one who is not medically trained cannot appreciate the clinical importance of such tests.

Finally, the great problem arises as to how the retail pharmacist may establish such a business as herein described. It can be done in many ways: First, by sending circular letters to physicians and other reputable citizens announcing the participation in such work; second, advertising in the drug store; third, creating a professional atmosphere in the pharmacy, and, lastly, by adequate preparation and equipment.

When one resorts to these means he seldom fails in establishing a professional business doing clinical service as a phase of pharmaceutical service, and thus solving the problem of professional standing of the American pharmacy.

PHARMACY DEPARTMENT, University of Maryland.

## THE PHARMACIST IN THE OUT-PATIENT DISPENSARY.\* BY FERDINAND P. SILBER.

Having never had the opportunity of visiting other hospitals or dispensaries, I am, of course, not qualified to speak of hospitals and dispensaries in general, but will limit myself to a brief description of the work conducted in the Out-Patient department of the Cincinnati General Hospital.

<sup>\*</sup> Read before Section on Practical Pharmacy and Dispensing, A. Ph. A., New Orleansmeeting, 1921.

Although the Out-Patient Dispensary is located in one of the buildings of the hospital, it is not, strictly speaking, a department of this hospital, but a department of the Medical College of the University of Cincinnati.

The Out-Patient Dispensary is conducted primarily for the benefit of the poor of Cincinnati and vicinity. Here they receive free treatment; paying only the actual cost of the medicine prescribed for them, and, when necessary, pay a small fee for X-ray plates, Wassermanns, etc.

We have, of course, a small number of charity patients to whom we furnish medicines without cost. These cases are investigated by the Social Service Department of the dispensary.

The work in the dispensary is done by our pharmacist (myself) and consists chiefly in compounding the prescriptions for the patients of the dispensary. Almost all supplies, such as fluid extracts, elixirs, ointments, chemicals, etc., are bought on requisition through the City Purchasing Department. However, I do manufacture some of them myself in case of emergency. I also make up my own tinctures, solutions, special formula preparations, etc. Our prescriptions are not limited to a few numbered stock preparations, but are about as many and as varied as those encountered in any busy prescription pharmacy.

However, to facilitate handling and to save time, I keep on hand saturated solutions of the iodides, bromides, salicylates, etc., as I have from twenty-five to thirty-five prescriptions to fill during the two clinic hours each morning and about the same number in the afternoon.

In addition to this, I am also Instructor in Pharmacy to the students of the Medical College, a certain number of junior students being assigned to the drug-room during the morning clinics each day.

The advantages of the hospital and dispensary pharmacist as compared to the retail pharmacist are many. The salaries, in almost every instance, are equal to, if not greater than those of the average retail pharmacist, while the hours are usually much shorter, the Out-Patient Department generally being closed on Sundays and holidays. To be privileged to labor in this highly professional atmosphere is, in itself, a distinct advantage, as well as an inspiration to higher professional ideals.

Permit me, in this connection, to offer a few suggestions to those pharmacists who believe that pharmacy is a profession and is entitled to recognition as such:

The only way in which this can be accomplished is by increasing the standard of education for pharmacists to the level of other professions. The colleges of pharmacy should, for instance, include in their curricula thorough and complete courses in bio-chemistry, bacteriology and serology, including the Wassermann technic, blood chemistry, urinalysis, etc.

The pharmacist has been called the physician's helpmate. Endowed with this highly professional training, he would be, indeed, enabled to take his place as such.

CINCINNATI, OHIO.