Granting that a graduate in pharmacy does acquire culture as well as practical information, why not assume the same attitude as teachers in liberal arts colleges in regard to employment? The liberal arts college does not worry about placing graduates. It tries to train and develop the mind of the individual and thinks little of some special position. The college of pharmacy, therefore, not only opens the possibility of definite employment but also does everything else for the student that any other type of curriculum can do. Let me repeat that the student should be interested in science, and if so, why worry about employment.

Women, in general, think of marriage as their ultimate career. If again the woman is interested in science, will any other science course better fit her for the home than training in pharmacy? The fact remains that a woman graduate in pharmacy is as well prepared for her life career, be it what it may, as any other type of science graduate. The faculty of a pharmacy college will usually try to find employment for all of its graduates but it should not worry about employment or discourage women from entering as students. The main thing is to give fundamental instruction that will develop the student and leave the question of employment in the background.

Professor Ina Griffith, of the University of Oklahoma, comments as follows:

"In Oklahoma our women graduates have not presented a special problem. The women graduates of the school of pharmacy average about ten per cent of the graduating classes. They have found places in practically every branch of the profession. They go into retail business as successful proprietors of stores and as pharmacists. They are in hospital pharmacies, both in the drug dispensing and technician departments. We include in our curriculum training for technicians and our women are interested in it and capable. Our women graduates are also filling positions in technical drug laboratories and in the teaching profession. In Oklahoma the supply of women has never caught up with the demand."

## HOSPITAL PHARMACY.

BY LOUIS C. ZOPF.\*

For many years hospital pharmacists have been active in the Section on Practical Pharmacy and Dispensing of the American Pharmaceutical Association. The establishment of a sub-section provides a specific place for the discussion of problems directly related to this branch of pharmacy.

Increasing demands are being made of the Hospital Pharmacist. His basic training must be of the best. His knowledge of newer products and research progress must be up-to-date. This increasing demand may be a natural evolutionary process, but the stand taken by the American Colleges of Surgeons in their minimum standards for a Hospital Pharmacy and the editorial in "Hospitals," Journal of the American Hospital Association, have helped much. As early as October 1932, a resolution by the Council on Medical Education and Hospitals of the American Medical Association evidenced a need for adequate supervision of Hospital Pharmacies. The resolution as adopted was,

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"Resolved: That a change be inserted in the 'Essentials of a Registered Hospital' requiring that the pharmacy of a hospital should be adequately supervised and should comply with state laws."

Who is concerned in this problem of the hospital pharmacist? The answer, I believe, is —firstly, the hospital pharmacist himself, secondly, the teachers in our colleges of pharmacy and thirdly, the other members of the pharmaceutical profession.

The hospital pharmacist must use a bit of introspection and without prejudice analyze, firstly, his adaptability for this type of work; secondly, his qualifications for the tasks he is required to perform; thirdly, his ability to work with medical men and that without an inferiority complex; and fourthly, the completeness of the service he extends to the hospital. There are other important factors, but these appear as paramount. They must and can be answered by the hospital pharmacist.

The colleges of pharmacy have a vital part in the development of better hospital pharmacists and pharmacies. Whenever possible, colleges should have a connection with a hospital where their students can obtain some experience in hospital dispensing. This pharmacy should be under the supervision of a registered graduate pharmacist who is approved by or is a member of the staff.

Sufficient training in hospital pharmacy should be made available to all students so they may determine whether they desire this branch of pharmacy as their life's work. Such training is essential and fundamental. All students of pharmacy, regardless of their future intentions, can profit by such a course.

Duties of the hospital pharmacist vary with the size and type of hospital he serves. Some are required to do bacteriological and pathological work. Others are kept busy with the compounding and dispensing. Some are requested to assist in the instruction of materia medica for nurses and to offer assistance to interns in prescription writing. Detailing the medical staff on U. S. P. and N. F. preparations and assisting in formulary specifications are very important essentials. Many are required to purchase drugs and supplies and, therefore, must understand methods of stock control and storage. These and many other special duties are going to require that graduate courses be offered in such subjects; for, as the demands increase so must the ability and the quality of the pharmacist advance.

The opportunities for hospital pharmacists are increasing. We have more hospitals, people are overcoming the hospital-shy attitude, doctors in the country towns no longer perform their surgery in the home or office, but seek the facilities of a hospital. Opportunities for research and coöperation with other health professions are many. The equipment of the modern hospitals with the constant care of nurse and resident physicians, the diagnostic laboratories and X-ray equipment mean but one thing—graduate registered pharmacists must be on duty to properly prepare and dispense medication for these patients.

The wards and laboratories require routine pharmaceuticals and chemicals. Parenteral solutions must be prepared and sterilized. Hospitals are requiring adequate supervision of their pharmacies. They should have had it long ago. Interns and nurses have a definite place in the hospitals, but not in the pharmacy.

As to other members of the profession, it is evident that through hospital pharmacy we have one of the strongest links with our allied profession, medicine. This test can be strengthened or broken, depending upon the type of people who

represent our profession in this field. The best people are needed, but they must be backed by a profession consisting of men and women representing pharmacy at its best. Every individual is a representative, and it is necessary that they conduct themselves so that no reflection be cast on the profession.

Retail pharmacists are realizing that if their businesses are to survive they must get back to professional pharmacy. This move will strengthen the standing of our profession; it will rebuild confidence in the public and develop a definite need and service for the medical profession.

Much ground work is necessary for the building up of a strong organization. In this direction we have attempted to advise all hospital pharmacists about the establishment of this sub-section, but it is possible that many were not reached, as a complete list of pharmacists so employed was not available.

I wish to thank the deans of the colleges of pharmacy for their coöperation in supplying a list of their graduates who are employed in hospital pharmacy.

Our program at New York will be composed of papers dealing with the every-day problems of hospital pharmacists and, in addition, we hope to have an expression from the Pharmacy Committee of the American Hospital Association as to their needs in pharmaceutical service. Further, it is expected that some interesting information will be supplied in regard to hospitals now entirely without pharmaceutical service. Another important point for consideration is that of working out the details of the minimum standards for a hospital pharmacy. These problems require that all pharmacists become active and take an interest in this work; we have taken a forward step, and through coöperation with the American Colleges of Surgeons, American Hospital Association and American Medical Association we have a great opportunity for the extension of pharmaceutical service.

Dean Edward Spease, Secretary E. F. Kelly, H. A. K. Whitney and others are taking an active part in this work and we are encouraged by the interest of Hospital pharmacists and others.

## A GRADUATE COURSE IN HOSPITAL PHARMACY.

## BY LEROY D. EDWARDS.\*

The recent developments in hospital pharmacy have been extensive and rapid. The American College of Surgeons and the Catholic Hospital Association of the United States and Canada have adopted "Minimum Standards for a Hospital Pharmacy." The American Hospital Association appointed a Committee on Pharmacy during 1936; a like committee will function during 1937. The American Pharmacy Association has established a sub-section on Hospital Pharmacy. These steps all point to the immediate future developments of pharmacy in the hospital, and definitely offer one interested in professional pharmacy an opportunity for action.

Immediately, a number of questions present themselves. Will the present-day pharmacy school graduate be able to meet the requirements as this movement grows? Will the hospitals of the future ask for better trained pharmacists? If so,

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<sup>&</sup>lt;sup>1</sup> Bull. Am. Coll. Surg., 21, 202 (Oct. 1936).