

both as to ability and shortcomings; his constant contact dealings with conditions and people will teach him the proper value and balance of things as nothing else can.

Employment in the big city drug store also offers the best opportunity for studying up-to-the-minute business methods and policies. The average big city drug store functions from a business standpoint, along the lines that are as correct as human minds can make them. This is not so generally true of small town stores; but there is hardly a big city store business method or policy that would not work to an advantage in the former.

The standing of the retail drug business of the future is almost entirely in the hands of to-day's graduates. The standards of any business or profession rest entirely on the shoulders of that business or profession's personnel. The profession of pharmacy of the future will be as good or bad as the ideals of the present-day graduate.

---

### MODERN PHARMACY IN CHINA.

BY CHARLES O. LEE.\*

Not so long ago the writer went into a modern dispensary in a large inland city of China. This store was found to be well stocked with all sorts of imported proprietary and patent pharmaceuticals. There was also a good stock of surgical instruments and supplies and a complete line of toilet articles. Most of these goods were in original sealed packages so that the purchaser could feel reasonably sure of the quality of the goods purchased here. There is also a prescription department in this store where modern prescriptions are received and filled in all confidence. Upon inquiry it was found that the pharmacist in charge had learned pharmacy in a store in Shanghai, having served a little more than a year as an apprentice.

This is the story of western pharmacy in China as it rapidly spreads from the larger centers inland. Those of us trained in the profession, with respect for it as such, receive a shock when brought face to face with such conditions. We are told that there are no laws in China regulating western medical and pharmaceutical practice. However, both foreign and Chinese western trained practitioners are quite well organized, so that there is at least a strong moral influence as regards modern medical practice in China. There is no such good thing for western pharmacy.

Nearly all of the branches of science, including medicine, are offered in the curricula of various Chinese and foreign modern educational institutions in China. So far we have heard of only one place where western pharmacy has been made a part of the regular educational work. Even in this place only a start has been made and just a few have completed the pharmacy course.

The mission hospitals in China have found it quite necessary to train some responsible young man to do their routine pharmacy work. Nothing like a sound course in pharmacy can be offered in hospital dispensaries, where equipment and teaching staff are scarcely adequate to carry on the most urgent part of the work. Occasionally a hospital has been able to train a few more men than it needed for its own use, thereby allowing them to be released for other places. Quite often

---

\* Nanking University, Nanking, China; on furlough until 1925, Purdue University.

men with the meager training of a few years in a hospital pharmacy go out and establish a small dispensary for themselves. To know some of these men is to wonder what happens to the tolerant and suffering public.

Of the many educational surveys of mission work in China, none, not even the most recent, has seen fit to recommend any educational work in pharmacy. Rather a very recent survey recommended that our mission institutions do not offer courses in pharmacy. It is quite clear that those making such a recommendation were not pharmacists in any sense. The writer, however, is quite convinced that the opportunity has come and the need for educational courses in western pharmacy is at hand. He is also assured that at least one reputable mission university would be interested in adding such a course to its curriculum if funds were provided for its maintenance. The funds needed to offer a course in pharmacy in a school that already has courses in chemistry, biology, physics and other allied subjects should not be large. It would be necessary to offer, in addition to the present courses, only the necessary courses in pharmacy and materia medica.

Students taking such a pharmacy course could graduate with a degree equivalent to the degrees offered in science, agriculture and forestry. Such a course as suggested would be the equivalent of our best courses in America, so far as the essentials are concerned. Men so trained would be prepared to do the pharmacy work of modern hospitals; or if they should choose to open dispensaries, they would be educationally if not fundamentally better qualified than most apprentices are to do so.

In China, as in America, we find doctors promoting the best interests in medicine, agriculturists working for better conditions and larger returns in agriculture, foresters not only planning ways for best conserving the forests at hand but also working on the problem of afforestation. The engineers are busy at developing the industries of the country. Men who are promoting the best interests of their science or profession are largely men of schooling and experience. Pharmacy, in this respect in China, has hardly made a beginning. The door is wide open to make a worthwhile place for pharmacy in science and education. Pharmacists will have to claim for pharmacy whatever place she is to have in China. There is no other hope. We have shown that western pharmacy is already in China, and is here to stay. We have suggested the route by which it has come. The drug manufacturing interests of nearly every leading country have found China a buyer.<sup>1</sup> Drugs are a great matter of interest to these people. They have a complete and extensive system of pharmacy of their own, which will gradually give way to the newer and, we hope, better system of the west.

The students of China know virtually nothing of pharmacy as a subject of science and research, and are interested to hear about it, as the writer has occasion to know. Not only is there an unusual opportunity for good schools of pharmacy in China but there is a rich field for research in native drugs and chemicals. The writer was told recently by a native drug dealer that China has one hundred thousand different important drugs used in medicines. Perhaps so. At least it would

---

<sup>1</sup> The United States Pharmacopœia has been translated into Chinese—see under Committee Reports. Professor Lee suggests that here is a possibility for the American Pharmaceutical Association to promote pharmacy in China. He suggests a department of pharmacy for Nanking University.

be interesting, and no doubt valuable as a contribution to modern medicine, to study the possibilities of Chinese native drugs and drug products.

---

## WHAT SHOULD A PHARMACIST KNOW TO SERVE FULLY?

### THE COMMONWEALTH STUDY OF PHARMACY.

BY JULIUS A. KOCH.

The committee in charge of the study of pharmaceutical education from the functional point of view is convinced that the knowledge necessary in order that the pharmacist may serve adequately should be determined in the light of the public demands upon them rather than in relation to the ideas of any particular group.

While a comprehensive survey of all the duties expected of a pharmacist would undoubtedly serve as a satisfactory basis for determining the specific background of knowledge essential for their proper fulfilment, the question naturally arises as to the manner of the interpretation of the data obtained. Pharmacists are of course concerned deeply in knowing the extent to which the opinions of outstanding successful practicing pharmacists are to weigh in the final decision.

The entire study is based upon the actual experience of pharmacists and the committee keenly realizes that the ideas of those actively engaged in the practice of pharmacy have value of the highest order. The committee has planned to avail itself liberally of the views of practicing pharmacists, primarily, because of their value, but also in recognition of the fact that pharmacists are the ones most vitally concerned in the outcome of the survey.

Since the true gauge of success in any endeavor is inclining more and more toward completeness of the service rendered to the public, the committee has decided to consider exhaustively or in detail this aspect of pharmaceutical activity. It believes that, measured by this standard, pharmacy should certainly be entitled to high standing.

Basing its opinion upon years of fair dealing characterized by an emphasis on the part of the pharmacist toward the public good rather than material gain, the public has come to regard the pharmacist, not merely as a surveyor of merchandise, but a man who is ever ready to give honest and expert advice regarding his merchandise.

This public regard charges the pharmacist with a deep responsibility. Public opinion concerning him and his profession earned through generations of self-sacrifice upon the part of pharmacists everywhere is possibly one of pharmacy's chief possessions. Even those who seem almost entirely to neglect professional practice, or at least regulate it to an inferior place in the conduct of their business, freely admit the tremendous value of the prestige of the professional aspect of pharmaceutical practice.

How best to conserve this public regard and, if possible, increase the extent to which pharmaceutical service can be developed, is the problem of those studying pharmacy from the functional point of view. A consideration of all the data obtained from a survey of representative stores, together with the other information, should, the committee believe, if properly interpreted, serve as a satisfactory basis for determining the knowledge necessary in order that the pharmacist may serve fully.