livered by taxi. The fact that there is a greater number of automobile owners to-day, as compared to the few who owned cars when the open-all-night policy was started, is an important factor in the continued success of the night business.

The amount of business done at night can be seen from the following percentages. These figures do not include sales at the fountain. The fountain is under separate management and closes at one o'clock in the morning.

	Per Cent of Sales.
24-hour period	100.0
Day-8:00 A.M. to 11:00 P.M.	83.9
Night-11:00 p.m. to 8:00 A.M.	16.1

The total daily prescription business comprises 16.9 per cent of the total sales. The prescription business is divided as follows:

	Per Cent of Prescription Sales.
Day, new prescriptions	66.3
Day, refill prescriptions	20.4
Day, total prescriptions	86.7
Night, new prescriptions	11.5
Night, refill prescriptions	1.8
Night, total prescriptions	13.3
Total, 24 hours	100.0

These percentages show that the majority of the night prescriptions are of an emergency nature, because the refill prescriptions make up one-third of the day prescription business and less than one-sixth of the sales at night.

The essential thing in continuing to make the night business thrive is to advertise. All labels, stationery, signs, pamphlets and every prescription that leaves the store must bear on it "open-all-night." Doctors must be detailed and encouraged to avail themselves of this service. This must be done so that when a night emergency arises, the patient and the doctor will remember that there is an open-all-night pharmacy ready to supply their needs.

## PHARMACY IN PRISON.\*

## BY CHARLES L. PICKENS.<sup>1</sup>

I understand that I am the first pharmacist from the Federal Penal System to be honored by an invitation to present a paper before this Association. This has its disadvantages as well as its advantages. True enough I have no standard to try to reach, neither do I have an established precedent to guide me along the way. If Government regulations permitted my telling you a lot of inside stories of many of the country's most notorious criminals whom I have known and worked with during the last ten and a half years, I could hold your attention whether you were any wiser when I finished or not, but regulations prevent, so that is out of the picture.

<sup>\*</sup> Section on Practical Pharmacy and Dispensing, A. Ph. A., Dallas meeting, 1936.

<sup>&</sup>lt;sup>1</sup> Administrative Assistant, U. S. Public Health Service, U. S. Penitentiary Hospital, Atlanta, Ga.

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Medical relief in penal and correctional institutions maintained by the United States Department of Justice is furnished by the officers of the United States Public Health Service detailed to the Department of Justice for that purpose. All discipline, safekeeping, occupation, maintenance, parole, discharge or disposition of prisoners are handled by the Department of Justice but all matters having to do with the supervising and furnishing of medical, psychiatric and other technical and scientific services as well as all medical and hospital supplies are taken care of by the United States Public Health Service.

The general duties of pharmacists and administrative assistants are those of chief clerk, materiel officer, registrar, personnel officer and commissary officer, for the hospital.

At the time I accepted the invitation to present a paper at this meeting, I thought a proper subject would be, "The Problems of a Penitentiary Pharmacist," but since that time I have attended the annual convention of the Georgia Pharmaceutical Association and have decided that a penitentiary pharmacist has no problems as compared to those discussed at that meeting.

We do not have the financial worries of the retail pharmacy as all bills are paid by the Treasury Department, the Public Health Service being part of that Department; we have no tax problems; no windows to keep dressed to encourage business as we have all the business we want; no soda fountains, in fact no beverages are allowed within the prison except water, milk, tea, coffee and lemon- and orangeades; no tobaccos, magazines, candies, chewing gum and such like, as all that is handled by the institution commissary, which is a separate and distinct department. We have no credit business, as the medicines and all other supplies are furnished gratis to any and all inmates requiring them. Our shelves are not loaded with a lot of patent and proprietary medicines as the stock is restricted to those items carried in the U.S. Pharmacopœia, the National Formulary and the New and Nonofficial Remedies. I might add that many of the inmates think that drugs marked "U. S. P." were made especially for the U. S. Penitentiary. With our stock limited to the drugs listed in these three publications, I believe, that we of the Public Health Service are really nearer true professional pharmacists than those of the average drug store, for there commercial pharmacy with its drug and sundry merchandising is necessarily a most important part of the source of income.

Perhaps many of you doubt if the customer, or patient, is really taken care of with this apparently limited stock, but when you stop to consider that practically all essentials are covered by these three publications, and the many combinations that may be worked out, if the physician and pharmacist are really interested, I think you will agree that when pharmacy makes a cycle and gets back to these drugs that the public can be better and more economically served. I believe that our annual station report for the fiscal year 1935 (the figures for 1936 not being available at this time) is as good an example as can be produced. During that year, although we had a total of 90,215 on daily sick call attendance, receiving 112,965 miscellaneous treatments, of which 32,467 were prescriptions for medicines and that we had 985 admissions to the hospital and furnished them 34,337 hospital relief days and performed 803 major and minor operations out of an average prison population of 2130, we had only six deaths, from all natural causes. Think of it, only 6 deaths,

out of that population. Where is there a city or town in the entire country that did not have as many or more in proportion to population? I think that you must agree that our patients did not suffer from lack of adequate treatment because only the essential drugs were used.

Of course when preparations are not bought "ready mixed" some one is going to have to mix them and that compounding means work and lots of it. I know, because I do all the compounding myself, the assistants being inmates. I make it a habit of not turning the compounding over to anyone, regardless of who he was or what he did before he came to prison. Keeping dependable help is really about my greatest worry; it seems that pharmacists as a whole are either a very law-abiding set, at least, very few end up in a Federal Prison. The Prohibition Act did furnish quite a few during the period it was legal to prescribe alcoholic liquors in certain states, and even now we receive one occasionally for other causes. Before the establishment of the Federal Narcotic Farms, we did get a few who had failed to learn that medicines, especially narcotics, are for a pharmacist to sell and not to use. These unfortunates now go to the Federal Narcotic Farms where the latest scientific treatments are given them.

The assignment to the drug room is considered one of the most desirable in prison, for this reason many of the inmates try hard to emphasize their qualifications that they overdo it. One fellow trying for the assignment, learning that I am a graduate of the Pharmacy Department of the University of Georgia, incidently mentioned that he graduated from the Pharmacy Department of the University of Georgia. I asked him what year he finished and it was two years before the school was established. He did not get the assignment. Now, all assignments are made by a classification board who have the man's complete record before them and the man is assigned where it is thought he will fit in best; his plans for the future, after release from prison, also, being considered.

The diversion of drugs is another serious problem in prison. To meet this difficulty, one needs to be a detective as well as a pharmacist, chemist and general manufacturer. On one occasion the demand for methenamine tablets suddenly multiplied several times over, I went to work on it and found that these tablets were being obtained on every excuse possible and then being pooled and used to heat an after dinner cup of coffee that had been smuggled out of the dining room; the addition of sodium acid phosphate to the tablets ended that trouble as the compound tablets will not burn so well. On another occasion it was soap liniment that was wanted, every one having symptoms requiring liniment; this time we found that again the pooling and hoarding trick was being used, until enough had been accumulated to saturate rolls of tissue paper and then to use this paper as fuel for cooking eggs, steaks and such other edibles as had been smuggled into their cells from the kitchen; this time the preparation of our own white camphor liniment with a water base broke that up and almost killed the demand for liniment. Acetone is another drug that is very much in demand. They take old X-ray, or photographic, films and dissolve them in acetone and make a cement for the manufacture of celluloid rings, canes and such like. These articles seem to be a product of all prisons, often they are made from the handles of multicolored tooth-brushes, so there is not only the loss of the acetone and danger of fire and of a valuable film being destroyed, but you also lose the tooth-brush that had been issued gratis to the prisoner. Anything that might be an ingredient of, or converted into an explosive, is, in prison language, very "hot" and must be kept under lock and key at all times when not being handled by an officer. These include the very commonest of drugs, such as glycerin, nitric acid, sulphur, charcoal, potassium permanganate, potassium nitrate, potassium chlorate and many other items. No jeweler ever guarded his diamonds any more carefully than we do such drugs.

In conclusion, I would suggest that when you have the opportunity that you visit a Federal Penitentiary, for, after all, they are your prisons and we only work there.

## THE EDUCATION OF A PHARMACIST.\*

(BUILDING FOR THE FUTURE.)

BY ERNST T. STUHR.<sup>1</sup>

To discuss the subject of education after the recent experiences of business in this rather disjointed world, is indeed a trying task. It might have been easier or more appropriate to consider what education is *Not!* Then, too—as some one has said, "The optimist sees the doughnut, the pessimist the hole." Realizing that my audience, the educator, the administrator, the practicing pharmacist and the pharmacist in the making, is possessed with a mutual interest, I shall attempt to discuss the educational progress with vital factors (not often alluded to by the average individual) contributing toward the development of a well-informed pharmacist, and the position he is destined to take in the health program and welfare of his community.

Let us consider the prospective student. Registration of an incoming class is always of interest to the faculty of an institution. To the student it is often a period of deep anxiety, mainly because of indecision, lack of finances and a realization of many living adjustments to be made. Most of the students come with high hopes, many wishes and, sometimes, fears. Observing the incoming group faculty members realize that the most timid may become the successful, and the student with excessive ego may develop into a failure through lack of effort, poor preparation or insufficient courage when he encounters a few hurdles. We know that some of the students come to college better equipped than others, not only from the standpoint of actual knowledge but also from the standpoint of mental and physical ability, social poise, emotional control, determination and that all valuable quality of stick-to-it-iveness. It is the duty of the faculty to help this heterogeneous group of freshmen to find themselves in their chosen field and help them to develop into the type of pharmacist who will be a credit to the institution and to the profession.

Before proceeding further perhaps the objectives toward which we are striving in pharmacy should be clarified, so that that which follows will have greater meaning. Professional education may be divided into three main headings:

<sup>\*</sup> Section on Education and Legislation, A. PH. A., Dallas meeting, 1936.

<sup>&</sup>lt;sup>1</sup> School of Pharmacy, Oregon State College.