

which I speak who hold important positions and have shown that they are well trained for the work.

H. J. GOECKEL: I am basing my remarks on my own experience, and I would like to have Dr. Jacob Diner speak on the subject, as I know he is thoroughly acquainted with it.

JACOB DINER: I can only agree with Dr. Goeckel in part. The teacher of the subject should have not only a theoretical knowledge of it but a thorough practical experience and he must everlastingly keep at his work. It is a mistake to make a sweeping remark to the effect that the subjects and courses cannot be given in a school of pharmacy or are not being given. Pharmacists are often better qualified for this work than the average physicians. To them it is scientific work; to many medical students it is drudgery, a subject from which they hope to pass on to what, in their estimation, is more important work. The pharmacist considers such work a privilege, in which he participates with the physician and is imbued with the responsibility involved. In my opinion the educated pharmacist is eminently qualified for this work, and in the selection of teachers regard should be had for their training and experience.

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### WHERE ARE PHARMACISTS TEN YEARS AFTER GRADUATION FROM COLLEGE?\*

BY ZADA M. COOPER.

At various times in discussions arising in this Section or in sessions of the American Conference of Pharmaceutical Faculties, the statement has been made that, if we insist upon high school entrance requirements, graduates of colleges of pharmacy will not remain in retail pharmacy. In other words, a man or woman with four years of preparatory work and two or more years in college will be too ambitious to be satisfied with retail pharmacy, in consequence of which the clerk shortage will become more acute and the proprietor more and more overworked. It would be conceded, perhaps, by most of us, that most localities would be better off with fewer drug stores, even though the reduction in numbers were the direct result of inability to get clerks, but that is not the question. Rather, *is* it true that pharmacists who have graduated from our high schools will not remain in retail pharmacy?

Because I always doubted the probability of their leaving pharmacy to any considerable extent, and to verify my belief, I have gathered together a few figures from the College of Pharmacy of the State University of Iowa. Of course, I know that one can make statistics prove anything and I know, too, that what is true in Iowa may not be true in any other state in the Union. However, I suspect that all of the neighboring states of the upper Mississippi valley would show pretty much the same state of affairs.

During the ten year period ending with June 1918, 10.8 percent of our graduates had not been graduated from high schools, though only during the last three years of the period was there a high school entrance requirement. During the other seven years large percentages were voluntarily high school graduates. The investigation might almost have ceased at this point, for, if they chose to come to a college of pharmacy after having high school preparation one would hardly expect them to quit after graduation to go into something else.

What then actually became of these graduates? This is what I found: only 7 percent are out of the profession, 6 percent probably permanently. Closer examination of these figures revealed the fact that one-fourth of them are practicing

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\* Read before Section on Education and Legislation, A. Ph. A., New York meeting, 1919.

physicians, one-fourth are women who married and gave up pharmacy, one-fourth never practiced, and most of this group were not high school graduates, the last fourth practiced pharmacy for some time but had then gone into other business ventures or retired altogether. So much for those who have gone into other fields of endeavor.

Nine percent are in manufacturing or analytical lines. All of these had high school preparation and most of them have had Ph.C. degrees, but not all. Between 2 and 3 percent are teaching and these all had high school preparation or more; 3 percent have held hospital positions; 76 percent are in retail pharmacy either as clerks, managers or owners; insufficient records make it impossible to classify the remaining 2 percent. Of the whole number, 10.3 percent have had advanced work, a figure a little below the combined percentage of those who are in manufacturing or analytical work or teaching.

Probably statistics covering a twenty year period would show somewhat different results, for, naturally, more people would be retiring during the second ten years than the first. On the other hand, to go much more than a decade back would give us conditions less like those that exist now. That is particularly true of education, and conclusions drawn from a period more than ten years ago would not be of much value in present day conditions.

Perhaps some one may be wondering what became of students who did not graduate. Now that we have a prerequisite law, that is of no special concern, but before its enactment approximately one-third of the students who matriculated did not graduate. I haven't statistics as to their preparatory work, but no doubt the number of high school graduates was somewhat less than in the other groups. Records are in every way less dependable than among graduates, but I find that 75 percent stayed in the profession, 18 percent are out of it, and the whereabouts of 7 percent are unknown. A comparison of these figures indicates at least two and one-half times as many out of the profession as in the group who remained in college to take their degrees. Where I have had personal acquaintance with this group, it is evident that many of these were misfits who stayed only a short time. Of the 75 percent who continued to be druggists, many did poorly in school and quit early in the year, or at the end of one year, because of being conditioned in one or more studies. Almost none were of the sort that would spend much time in any sort of education nor were they individuals with great ambition, the reverse rather. The fact that those who did not graduate show a higher percentage of low entrance preparation, did poorer work in college, landed in plugging schools or took board examinations after short preparation and still a slightly smaller percent remained in retail pharmacy surely does not disprove our original statement. Of course we must grant that such material added just that many so-called pharmacists, if that alone is the desideratum.

Again, if a high school requirement is too high, it should keep young people from entering pharmacy at all and that such an argument is advanced we are all well aware, though that is not a question to be discussed in this connection, except incidentally. Instead of choosing something else as we might expect them to, the record in states where it is in force shows that if there has been a falling off at all, it has only been a temporary one with an early return to normal attendance and with a much more desirable class of people.

A few facts about the enrollment of the year just past may be of interest. It was a strange year in many ways and perhaps not typical, but so far as preparatory work went it did not differ much, if at all, from that of other recent years. Of the whole enrollment including the S. A. T. C., 22 percent had had one or more years of liberal arts work in addition to the required four years in an accredited high school; 8 percent did Ph.C. work. One cannot predict what they will do when they get out of college, or how long they will stay in pharmacy, but a good proportion of them intend to go into retail pharmacy. Doubtless not all of them will remain in that branch of it, for some are sure to take more college work, if not immediately then a few years later.

To come back to the original thesis, that high school graduates do not stay in retail pharmacy: granting that 7 percent leave the profession isn't that rather a small number?—and granting also that 15 percent become analysts or manufacturers or hospital pharmacists or teachers, is that not a fair ratio? Where are these branches of the profession to get new recruits if not from the output of colleges of pharmacy? Is it not better that they take their training with that end in view than that they should go into retail pharmacy and, later, when they have put all their thought and all their energy into retail problems decide to transfer? No one believes in a narrow individual and the retail experience is good to have and will make anyone bigger and broader, but the goal should be in mind from the beginning and its realization should not be too long deferred. Whatever skill they have acquired by the years of retail practice is skill that is hardly applicable to other different problems only in so far as all training is good discipline.

Again, do not the existing percentages indicate a fair ratio of retailers to other workers? I have no statistics, but I fancy it is not far from correct, and if it is wrong I wonder if it does not err in the wrong direction; that is, should we not be supplying a larger number of men and women to manufacturing and analytical laboratories? Is not the shortage there just as acute as in the retail business?

If this present ratio is about right why should we make entrance requirements low to be sure that we do not lack for clerks and trust to those who have more preparation to supply other branches? It seems obvious that such procedure would be a scaling down of quality all along the line.

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### “FOR THE GOOD OF THE PUBLIC”—THE SLOGAN FOR SUCCESSFUL LEGISLATION.\*

BY W. H. ZEIGLER.

Webster defines the word “slogan” as the “war cry,” gathering—or watchword of a clan in Scotland.

I have selected as the title for this paper “For the Good of the Public,” because after years of experience on a legislative committee intrusted with pharmaceutical affairs, I believe it is the slogan or watchword to be used in all legislative matters.

I am from a State that has been first in a great many historical events, and while we cannot boast of having been the first to pass a prerequisite pharmacy law,

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