tained in our meetings, as you know, that the schools of America and its educators set the pace for what the public think about us, and we have to look to pharmaceutical educators to elevate the ideals or ideas that the layman has of pharmacy as a profession. I think that Dr. Shepardson is exactly right when he places the blame upon pharmaceutical educators, and I for one, representing at least a certain type of educators of America, thank him for his courage in coming here and making that statement before us. He is a man from the outside and that expression of opinion from Illinois will do the pharmaceutical educators of America a whole lot of good, and indirectly be responsible for improving our professional standing.

F. J. WULLING: Dr. Lyman's statement that "pharmaceutical educators are responsible for conditions" should be modified somewhat. If he would say a faction of pharmaceutical educators are to blame I would agree entirely. There is another faction of pharmaceutical educators who feel that they have been working toward these higher aims and ideals against great odds, and they have accomplished something in the face of those odds. There are schools and practicing pharmacists at the present day who are equal to the best schools in medicine and practitioners of medicine.

I arose to say this particularly: That we are all thinking along the same lines, and those are upward lines. President Kraemer, of the Faculties, has made a recommendation which is exactly in line with this. Others made similar recommendations last year and three or four years ago, namely, that the present condition in pharmacy be recognized, that there are reputable and well-trained pharmacists, educated men who can meet representatives of other callings. The situation has been recognized in the recommendation for two classes of pharmacists or two classes of drug stores—one the pharmacist practitioner and the other a drug store—and that the colleges also arrange themselves accordingly. Possibly there would be no objection to the same college having two courses; I don't know. The fact is, we are working practically along the same line with the idea suggested by Dr. Shepardson.

Another thing: Many years ago a large number of pharmacists said that unless we pharmacists as a whole, the body pharmaceutical, puts its house in order, somebody else will do it for us. Here we have an instance of somebody stepping in who is not a pharmacist. I am not passing judgment upon the commission; many things Dr. Shepardson said I heartily agree with; in fact, he has endorsed my sentiments in many respects. This is only one instance of an outside agent coming in to regulate pharmacists and to say what they are to do and enforce what they are to do. We have let that slip away from us.

BOLSHEVISM IN PHARMACY.*

BY CHARLES H. LAWALL.

Words and phrases have associated concepts which may differ so greatly in different individuals that when these individuals enter into a discussion they are often talking about things which are diametrically opposed. "Pharmaceutical education," "pharmaceutical practice" and "pharmaceutical progress" are examples of phrases, often the subject of controversy in which there is no common ground of understanding. Indeed it is often true that these concepts are changed in the individual under the influence of time and environment. No definition of a liberal education has ever been given which surpasses the following, by Huxley, which is quoted to show how comprehensive and detailed a definition sometimes becomes.

"That man, I think, has had a liberal education who has been so trained in youth that his body is the ready servant of his will, and does with ease and pleasure all the work that, as a mechanism, it is capable of; whose intellect is a clear, cold, logic engine, with all its parts of equal strength, and in smooth working order; ready like a steam engine to be turned on any kind of work, and spin the gossamers

^{*} Read at the November meeting of the Philadelphia Branch of the A. Ph. A.

as well as forge the anchors of the mind; whose mind is stored with a knowledge of the great and fundamental truths of nature and of the laws of her operations; one, who, no stunted ascetic, is full of life and fire, but whose passions are trained to come to heel by a vigorous will, the servant of a tender conscience; who has learned to love all beauty, whether of nature or of art, to hate all vileness, and to respect others as himself."

When we come to the question of pharmaceutical education or any other kind of scientific or professional education, however, we are dealing with a more restricted and specialized field. Without attempting to inflict upon you an arbitrary definition of this kind of education, I will state that I believe that man is best educated who is most useful to his community and to his profession or trade, whatever it may be. For further explanation of my personal views on some of these questions, I will take the unusual liberty of referring you to two previous articles in which I have expressed them. One is the address of the chairman of the Section on Education and Legislation of the A. Ph. A., published in the Proceedings of 1910, page 605. The other is an article entitled "When Is an Education not an Education?" Jour. A. Ph. A., 1915, p. 176. The views expressed on fundamentals in these two articles have not materially changed during the passage of time, but conditions have recently arisen which seem to call for further expression of opinion on certain phases of the situation.

There seems to be at present a peculiar tendency to throw discredit on commercialism of any kind in connection with pharmacy. The reason for this is seen every time one looks into the windows or sees the advertisements of a certain type of drug store, but why the large number of high-minded, ethical pharmacists, who are practicing their profession with the respect and support of leading members of the medical profession in their communities, should on that account be held up to scorn, is hard to understand.

We are led to believe that because Mr. X. or Mr. Y. makes a larger proportion of his gross profits from the sale of merchandise other than drugs, pharmacy is going to the dogs. Why should any stigma attach to a man because he is a good merchandiser? This double responsibility of such an individual to the community has been well expressed by Dr. Jacob Diner, as follows:

"On one side we must have the professionally trained man; on the other we must prepare the same man to be commercially able to avail himself of every honest, legitimate means for the financial advancement of his business."

The attempt to classify pharmacists according to professional attainments has been recurrent for centuries past. One of the first recorded legal enactments affecting pharmacy was that of Frederick II, of Sicily, in 1233 A. D. This law mentions "apotheca" in the sense of warehouses where drugs were stored; compounders of medicines were called "confectionarii," and sellers of simple medicines were called "stationarii." As throwing light on the subject of "side-lines," the following will be found of interest:

In the 16th century the Guild of Nuremburg druggists presented a memorial of grievances in which, among others, are the following complaints:

1. The sale of all confections has now fallen into the hands of the sugar dealer.

- 2. Counter sales (of spices) are now made by all of the large spice and cheap corner grocery shops, thus robbing the druggist of a source of profit that he is justly entitled to.
- 3. The sale of sundries, such as sealing wax, fumigating pastilles, paper, ink and pens is now taking place in common huckster shops.
- 4. The sugar dealers are not only selling confections but also all kinds of fruit juices and all such preserves as do not deteriorate in the course of a year.

These same Nuremburg pharmacists stated that "many of our brethren have matriculated at universities,* some have attended academies, and others have even graduated as doctors. We consider that our profession is not a trade but is in reality a free art."

In the 18th century the pharmacists were held in derision for their claim to professional recognition, by Professor Hoffmann, one of the early professors of the University of Halle, who stated their scope of knowledge in the following way:

"The apothecary should know that an acid and an alkali, when brought into contact, will effervesce. It will suffice if he but know the effect although he may be ignorant of the cause."

Business or commercial ability is fundamentally responsible for success in any profession or for the continued existence of educational institutions, even those engaged in the most academic and intellectual lines of work. All rivalry or competition is in reality commercial rivalry or competition, and whether this is carried on fairly or unfairly depends upon the underlying principles of honesty, fair dealing and ethics possessed by the participants.

What are the primary objects of a college education in pharmacy? Is it to produce mental contortionists and star performers who can assimilate syllabi and transform the pabulum into passing marks for registration examinations, or is it to produce worthy, helpful members of the community? If we decide that the latter is preferable, the means must be studied and methods applied which will tend to produce the desired results. I say "tend to," for no idealistic attainment of results will ever be possible. We must work toward a desired end, whether we at first reach it or not.

We must discourage empiricism in scientific work and encourage an interest in and thoroughness of training in principles. Efficiency, success, service, are all factors of value and importance. We must encourage and teach the student to become accurate in his work and in his habits of thought, and if our work is conscientious and thorough, and the student is receptive and interested, we shall have contributed to the community an individual who will be a credit to his work and to his college and who will be a safe and ethical dispenser of extemporaneous medicines, whether they constitute five or fifty percent of his gross sales.

A certain number of the members of any group of young men and women have a natural aptitude and a greater liking for scientific work than for general drug store work. These should be given the necessary post-graduate instruction to enable them to become the neighborhood analysts and bacteriologists, to act as clinical advisers to the physicians of their communities, and should be trained to be helpful even along the broader lines of sanitation and hygiene, so as to give

aid to local health officers when needed. The preliminary education required for the best results should be a minimum of four years of high school work. This requirement should be enacted into the State laws, as has recently been done in the State of Illinois.

Any college of pharmacy with the proper equipment and instructional staff should be able to, and should have the right to teach both of such classes of pharmacists in such numbers as present themselves with properly accredited entrance credentials. That pharmacy is gradually separating into two distinct classes no one will deny. That it has been predicted for years, everybody knows. That it can be brought about over night by resolution, agreement or law, is impossible. Such views savor of Bolshevism, a specious, plausible, irresponsible type of propaganda which has been worrying statesmen for several years, but has not previously appeared in educational discussions.

To accomplish these changes needs more than the fiat of any individual or group of individuals. We cannot effect reform by resolution any more than we can decide scientific questions by a majority vote. Diplomas, degrees and certificates are but "scraps of paper" unless upheld by legislative enactment. Reformers frequently forget that laws are primarily for the protection of the public and not for the development of theories which are impossible to put into practice.

It is in the matter of legislation that we find our greatest stumbling block to rapid progress. Our "pre-requisite" legislation is too recent and not widespread enough as yet, to make such radical changes as would be necessary to effect an immediate sharp separation between drug merchandisers and professional pharmacists, desirable as it may seem in some extreme instances. Economic factors would be ignored, State laws would need to be changed, boards of pharmacy would have to cast aside the traditions and practices of a generation. Doctor Beal has truly said, "Compromise is the price of progress," and with this thought in mind, we should take pains to see that legal restrictions and educational qualifications should be coordinated and drawn closer together, not forced apart.

Looking back, therefore, at the whole subject, it is clear to my mind that any educational institution should be proud of the opportunity of training both pharmacists and druggists, if by druggists is meant the large number of self-sacrificing individuals who, during the recent influenza epidemic, closed everything but their prescription departments so as to devote their entire attention to the pharmaceutical needs of the communities in which they practiced.

The object of an education is that a man may learn to benefit himsef by serving others, one who exemplifies the words applied by our own Dean Remington to a noble deceased pharmacist:

"A man whose soul is pure and strong, Whose sword is bright and keen; Who knows the splendor of the fight And what its issues mean."