THE AMERICAN INSTITUTE OF PRESCRIPTIONISTS.

H. V. ARNY, PH.D.

Reform in American Pharmacy is the call of to-day. We hear of prospective legislation which will separate the real pharmacy from the bazaar drug store, even as in Germany we find the Apotheke separated from the "Drogen Handlung." A year or so ago much was said of the creation of certified pharmacists by joint committees of physicians and pharmacists, and the latest is the appointment by the New York State Pharmaceutical Association of a Committee of Eleven, to study the entire question from one end to the other.

The interesting subject has been given much thought by the writer ever since the idea of the certified pharmacist was first broached. This idea, while considered sympathetically, never seemed very feasible to one who knew how exceedingly difficult it is to get physicians and druggists in conference assembled, to agree on questions of policy. What physicians consider essential, scarcely fits the views of a majority of druggists, and what the druggists decide on, rarely agrees with medical views of the same subject.

The next thought was that the certified pharmacist should be decided by the medical men alone. The main idea of a certified pharmacist is a man fitted to cater to physicians' wants by accurately filling prescriptions and otherwise contributing to the progress of the healing art. The question therefore rose as to the possibility of establishing the idea of the certified pharmacist under the guise of "accredited agents" of the American Medical Association. This idea, however, was soon abandoned and no one realized more clearly than the writer that any plan of a medical protectorate over pharmacy will not meet with the approval of the majority of pharmacists, even those who specialize on prescriptions.

This led to a third plan, in which the certification of pharmacists is to be done by pharmacists only and this idea is here presented under the fanciful name of The American Institute of Prescriptionists.

Let us imagine the practicing prescriptionists of this association—not the manufacturers, not the professors, nor the frankly commercial retail druggist—forming an organization under the motto, "prescription compounding our foremost consideration," and let them formulate such requirements of membership as follows:

- 1. The candidate must be a graduate of a recognized college of pharmacy and must be a registered pharmacist in the state wherein he resides. This will be agreed to with little opposition.
 - 2. He must be the majority owner of a pharmacy and an actual compounder in same.

This is apt to cause a split at the beginning, since much available timber may be found among those who are employes in stores owned by others, but this proviso seems essential to head off the inclusion in the plan of corporation drug stores.

3. He must show that ——— percent of the business of his store is in prescriptions.

It will be noticed that the actual percentage is left blank and that the amount of prescription business is expressed as a ratio to the total business rather than as

a minimum fixed quantity. A man running a business of only ten prescriptions a day should be eligible, if his prescription receipts represent say, 30 to 50 percent of his total business; whereas a corporation store putting up fifty prescriptions a day should be ineligible if it were shown that the prescription receipts represent only 10 percent of the total sales.

4. He should show his interest in his prescription department by having it properly equipped with the necessary appliances and properly located in his store.

Any druggist sticking his prescription department on a hot and stuffy platform, midway between floor and ceiling, in order to use the space properly belonging to it for some rankly commercial purpose, shows by that act that he considers his prescription business of minor importance and by that act renders himself ineligible to membership in the Institute. Again, any druggist who is content to run his prescription department with broken graduates, and cracked mortars and with a scarcity of even these, shows he does not care for prescription business. As to suitable appliances, these are to be the subject of a paper at this meeting, so the only suggestion I offer is that the list should be based on the needs of a tenprescription-a-day business and that of course a proportionally larger list must be formed in those stores where more than ten prescriptions are put up each day.

5. He must have the knowledge and the ability necessary to perform the tests of the pharmacopæia and routine analysis in clinical chemistry and must have in his store the necessary appliances to carry out such work.

A painter's supply store, some years since, used in its advertising literature the legend "a paint seller should know his paints as a druggist knows his drugs," which strikingly indicates the estimate set by the public upon the druggist's ability. The colleges of pharmacy have spent years teaching students how to detect adulterations in chemicals, how to assay drugs and how to determine the quality of powdered drugs by means of the microscope.

It is not, therefore, asking too much to expect the "member of the institute" to be sufficiently interested in the products sold under his name to be willing to examine these by means of official tests.

As to work in clinical chemistry—such as urinary analysis—this is the logical side-line for the prescription pharmacist, and it might be added that unless the pharmacist is ready to assist the physician in this direction, he can scarcely expect to interest the modern practitioner.

6. Membership is limited to a three-year term, and is renewable only when the member's qualifications remain unchanged.

In all callings is found the condition that certain representatives vested with the prerogatives of the occupation in question, find more profitable work and embarrass their original calling by using its prerogatives in their new field of endeavor. A man may honor himself and his country in the national legislative halls. Or he may be a great corporation lawyer and as such win great wealth and distinction. But when a man who has won a reputation in Congress spends his vacation looking after the interests of a corporation, such a combination of functions is—to say the least—in rather bad taste. So it is entirely possible to

imagine that a man selected as "member of the institute" may attract the attention of large commercial establishments who might consider the presence of this person on their staff as a distinct asset. This might be so, and even so it might be a distinct advantage for the person in question to accept the new position, but in this event his privileges as "member of the institute" should automatically terminate and that for the simple reason that membership in the organization is limited to practicing prescription pharmacists who own their own establishments and to such independent prescriptionists only.

Now that the six requirements for membership have been stated, an entirely proper question to ask is who shall enforce these requirements and how? This leads us to the question of organizing the Institute.

We are all aware of the propriety of the private club, which essentially consists of a self-organized group of men or of women of similar tastes and of similar ideals. A small number of these gather together and organize and then invite other desirables to join with them. This is exactly the method that should be used in organizing the American Institute of Prescriptionists.

Let some twenty to fifty prescription druggists, whom we recognize as leaders in retail pharmacy as a profession and those preferably consisting of representatives from every section of this country of ours, get together and organize, and let them, and them only, invite others possessing the qualifications stated above to join them, and thus start the Institute. It should of course be operated under a national charter and if possible the title, "Member of the Institute of Prescriptionists" (M. I. P.), should be legally protected from imitation. While the membership should be unlimited as to numbers, most rigid adherence to the conditions of membership should be observed. On first thought, it would seem that no one would want so trying a position as that of member of the committee on admissions, but the work of the American Conference of Pharmaceutical Faculties clearly shows that severe conditions, strictly adhered to, have the effect of keeping out undesirables and that with little bad feeling.

As to the short period of membership, it is plain that a one-year term is not possible without reorganization each year, hence it will be well to place duration of membership at three years, thus leaving two-thirds of the members at all times in active service.

And after all is said and done, what will be the use of the Institute to its members?

If properly conducted it will be the honor roll of retail pharmacy in America, and a druggist will be as proud to belong to it as a French scientist is to be invited to be long to the Académie Française.

To be a member of the Institute, to have the privilege of attaching to one's name the initials "M. I. P." will carry the prestige which unfortunately neither the registered pharmacist certificate nor any pharmacy college degree can possess.

The registered pharmacist certificate merely gives the right to run a drug business anyway—within the law—that its holder chooses. The college degree is of little value unless the college behind the degree is doing good work, and while a certain degree from a certain college may be a real distinction, the same degree from another college may be a joke. That both the registered pharmacist certificate and the college diploma are considered important, is shown by the fact that

provision is made that the "member of the Institute" shall be the possessor of both documents, but greater than these should be the title "M. I. P.," since it will show all, notably the prescription-writing physician, that here is a man to whom prescriptions are of the first importance, a man who by the vote of his fellows, is shown to be a real pharmacist.

Once launched, the Institute itself will be in a position to devise plans of cooperation that will be of financial advantage to each of its members, but that is a detail that cannot be discussed in this paper.

In conclusion, some one may say that the American Institute of Prescriptionists (A. I. P.) is an attempt to ape after the American Institute of Surgery, which in turn according to some of its critics, is an imitation of the Royal College of Surgeons. Of course, the primal thought of organization in the mind of the writer resembles to some extent the basic principles of the institute of surgery, but in detail the Institute of Prescriptionists no more resembles the surgeons' organization that it does the American Conference of Pharmaceutical Faculties or the association of certified public accountants, both of which are self-constituted private organizations frankly designed to sift the excellent from the inferior. And, if the American Institute of Prescriptionists can accomplish that purpose in retail pharmacy, it will more than justify its existence.

DISCUSSION.

MR. F. M. APPLE:—Mr. Chairman and Gentlemen:—I personally thank Dr. Arny for bringing this paper here, and I think that all of you ought to do likewise. He states in the latter part of his address, the Society of Certified Accountants in this way sifts the good from the bad and protects its Association by that means; and if such an effort should be applied to pharmacy it would be praiseworthy indeed.

We will first of all take up the question of desirability. There is no question but that it would be desirable to have an association of this kind under certain conditions, and those conditions would depend very largely upon the method by which it is organized and the restrictions placed upon the question of membership therein.

Now comes the question of the advisability of it. It would seem as though there could be no objections to this whatsoever; but on thinking over the question you will encounter this difficulty; men who would desire to be enrolled,—and I may be one of them; I don't say I would be one of the eligibles, because I don't know what the requirements are, but those who are rejected would allude to the eligible graduates as a lot of Pharisaical Pharmacists who confer upon themselves degrees, claiming they are better than anybody else, but who cannot substantiate their claims.

The durability of such an association will depend largely upon its effectiveness, that is, how practical it is in its application. That will naturally determine whether it shall be permanent or only a temporary effort. Again, there is a duty incumbent upon us that it shall not be organized in a "hit or miss" or thoughtless manner so that it may interfere with any effort that may be made later in a better way, so if it is not organized with great care it should not be organized, in deference to those who will come after us and who may possibly have better thought on the subject than we have.

As for the requirements, which seems to be "the milk in the cocoanut," as the saying is,—the essential part,—we will agree that any man who wants to be a member of such an Institute should naturally be a graduate of a reputable college of pharmacy, and also be a registered pharmacist in the state in which he practices. As for the second requirement, that he must be the majority owner of the store, that is a very difficult problem to settle. Take, for instance, our beloved Dr. Hynson, who is the father of this Section. I do not know what percentage of the Hynson-Westcott Company he owns, hence I do not know whether he would be eligible for membership in an Institute with such a provision. I have no defi-

nite recommendation to make there, for it is a very knotty problem, but I simply call your attention to that condition as an illustration of what you would encounter if you adopt that principle.

As to the percentage of the prescription business being a vital and essential requirement, I do not think that quantity should determine such a question. Quality should have precedence over everything else. If a man had all the other qualifications and he was unfortunate in being located so that he had to meet certain forms of competition that arose in his career; that he had to include in his business other lines of merchandise which departments he has conducted in harmony with his prescription business, should he be debarred? It depends altogether, to my mind, on the manner in which he conducts his store and how much of his time is devoted to a direct supervision of the prescription department, and not, as I said before, on the percentage of his prescription business as compared to his total volume of business.

As to the appliances, I certainly believe that any man should have appliances to carry out any process of manufacture or dispensing. It is not as vital, to my mind, that a man may have a few graduates with the lips knocked off as that he have mentality represented in first-class clerks, because a first-class clerk with a cracked graduate I would trust every time far more than I would a half-prepared one with a magnificent array or accurately determined prescription graduates. A person ought to have appliances enough to carry out the process properly, but I would add thereto as an essential requirement, reliable assistants. By that means you can control this question automatically. The semi-prepared men to whom I allude are those dangerous fellows, the qualified assistants, who, according to law, are permitted, "temporarily," to run the store; and the word "temporary" has been figured out to mean anything from a half hour to a couple of weeks. If a man wishes to go away on a vacation trip with the expressed intention of coming back he is only away "temporarily." It is based upon the principle that it takes time for a man to make a mistake and jeopardize the health of a community. It does not take but a few seconds of time to bring about a calamity at any time, as we well know.

As for the man being competent to test his drugs, that, I think, is answered automatically by the first requirement; if he is a graduate of a reputable college of pharmacy he should naturally have those attainments, because I think it would be a serious reflection on a college of pharmacy if its graduates could not carry out these processes.

As for the time-limit of membership, I think that three years is too long a period of time for membership, for this reason: that a man may be a good man to-day and for some unexplainable reason he may go wrong to-morrow and the Institute would have to suffer the detriment that would accrue to it from his continued membership, and you could not get rid of the man under the three years period. You do not want to make any limit of that kind. That wants to be so arranged that a man automatically drops himself from the Institute.

And that brings up the question of whether it shall be a membership or a license. I would recommend rather a license than a membership, on the basis, also, of a financial deposit on the part of the man, in order to guarantee his sincerity. I am led to recommend this by something I recently noticed in our local papers in Philadelphia. A golf club was being organized somewhat along this line; that when a man wished to leave the club or was expelled from the club, his money was returned to him. That is why the man could not bring legal action against them. They could get rid of him by saying, "Here is your money; get out." That is the same way, I think, here; the money could be returned, except such portions thereof as would have to be retained to meet current expenses that must be provided for first, and he must agree to that when he is accepted as a member. But I would not tie the hands of an Institute of this kind by a monetary consideration, that a man has any hold whatsoever by reason of any right you have given him, or by reason of any money he has invested therein. Make it so you can immediately get rid of any man that is obnoxious. Keep your escutcheon clear from all blots.

Mr. Mayo then stated that Prof. Arny had hit upon a medium which seemed to be full of promise, and was the first suggestion that seemed likely of solution of this very important problem, and one which had occurred time and time again in his state. At the state meeting

of the New York Pharmaceutical Association held in Saratoga Springs in June, a committee of ten was appointed to discuss this question of the separation of the sheep from the goats. He thought the proper solution of the question was one that required careful deliberation; that it was well worthy of a further study and moved that the proposal be referred to a subcommittee for consideration during the year, with instructions to report to this body. He again referred to the fact of the appointment of the committee in New York, and thought it quite likely that other committees had been appointed in other states.

Dr. Arny stated the idea of the paper was merely to present the subject that the members might think it over. He referred to the appointment of the committee in New York to look into this particular matter. In conclusion, he wished to say relative to Mr. Apple's criticism, that naturally the requirements of membership were purely tentative; that it was merely the thought he was trying to present, and therefore he would be most happy to go before the committee.

Dr. Apple, replying, said he wished Dr. Arny to understand that his remarks were not criticisms.

THE PHARMACY OF ADRENALIN.

C. P. BECKWITH.

Adrenalin has, to-day, a well-established place in the materia medica. In therapy, its field is large and expanding. Its chemistry and pharmacology have been studied elaborately. Of its pharmacy, however, comparatively little has been written. In dispensing this sensitive substance, there is much opportunity for error. I believe it a moderate estimate that of adrenalin-containing prescriptions met in actual practice, more than half are either ill-written or improperly compounded. In the present paper, it is proposed to discuss briefly the pharmacy of adrenalin, and, particularly, to suggest certain expedients and precautions favoring the conservation of its activity alone and in mixture.

The structural formula, when known, constitutes, perhaps, the most precise possible definition of a pure chemical compound. In the case of adrenalin, the formula has been established, beyond doubt, by both analysis and synthesis; for the sake of precision, therefore, let us define adrenalin as the lævo-rotatory isomer of the formula,

The dextro-rotatory isomer of the same formula, which has been found in the synthetic product only, is probably nearly or quite inert.

While this formula is before us, it is well to observe that the molecule contains groups that characterize it at once as an amine base, an alcohol and a phenol,—an observation that will help to a clearer understanding of its chemical behavior.

Adrenalin occurs naturally in the medulla of the suprarenal gland of warm-blooded animals, including man. Suprarenal glands of oxen, which are most readily obtainable in sufficient amount, supply the adrenalin of commerce. We