There are few of us who have not been told by our most cherished and attached patients that we ought to attend to one or another specialized problem ourselves; that they "do not like to be turned over to some one else." Thereupon too many worthy practitioners play the fool; strive to cover too large a territory; assume responsibilities outside of personal capabilities, and thereby come to grief; whereupon the patient, taking counsel with a shrewd neighbor, promptly leaves us.

A plan which is simple and promises much efficiency for all concerned is this:

In any small community of about fifteen or twenty practitioners, there will be found those who are better qualified by inherent aptitudes, acquired skilfulness, experience, taste or office equipment to render special service; for instance, in departments of surgery, in electrotherapeutics, especially in roentgenology, now so imperative in diagnosis; or in expert diagnostic methods for the heart, lungs, skin, etc.; in short, in many ways to cooperate with his colleagues to the best interests of all concerned, especially the patient.

Let there be a well-defined basis of fees for this semispecialism—to which few patients will object. They can be educated to realize the advantage to themselves. Or, if circumstances warrant it, when there are, say, twenty-five or fifty doctors near each other, let them form partnership groups, each treating all the patients who apply to him and yet cooperating in specialized lines.

Individual independence can be maintained, if desirable, except as described. Then, whoever specializes or semispecializes can well afford to purchase equipment and spend time and money in centers of learning.

The outworn idea that any one man is capable, or should be expected to be capable, of being an all-round expert in conserving the physical and moral welfare of the community is sheer folly. To persist in encouraging people to think so encourages all sorts and conditions of charlatans, breeds discontent, strife and evil-speaking, alienates friends, jeopardizes efficiency and imperils human lives.

The group-unit, judiciously evolved, will go far toward raising the index of efficiency of the medical profession. Above all, it will raise to a most desirable position of advantage the professional potential, to well-deserved confidence, honor and esteem in the community.

J. MADISON TAYLOR, M.D., Philadelphia.

# The Rattlesnake-Venom Treatment of Epilepsy

To the Editor:—In The Journal for March 29, 1913, appears an editorial on "The Rattlesnake-Venom Treatment of Epilepsy," which, although chiefly aimed at another worker on this subject, is, in many instances, so manifestly unfair that 1, who am wholly responsible for the origination of this method of treatment, cannot allow it to stand without a protest.

In the first place, you seem to think that the essential feature in the setting aside of the epileptic seizures by crotalin resides in the injurious shocks and "severe reactions" which are incidental to its injection. Nothing could be farther from the truth. It is a fact that when the drug was first injected it was given in larger doses than have since been shown to be necessary to produce the desired results; but that it is absolutely indispensable to call forth a profound local or general reaction is not true, and against this I have protested for more than two years. It may be regarded as a safe Working rule that the reaction at the seat of injection, or throughout the body, bears no vital relation to the best effect of the drug. Extended experience points out that it is always desirable to begin with small doses in all new cases, and to increase them gradually as immunity becomes established.

The second objection which you offer is the fear that adventurous experimenters ignore the fact that "all snake venoms have a hemolytic power." This might be serious if it were wholly true, but it is one of the half-truths that have done duty before in the defense of extravagant statements. If snake venom is hemolytic, so are the eyanids, the only dif-

ference being that this action is much more accentuated in the latter than in the former; but I hope that this is no reason for excommunicating them from the non-official formulary, if they ever found a place therein. The same action is also characteristic of phosphorus, mercury and other medicinal agents; yet, from last accounts, they have not been Jonahized by the Council on Pharmaey and Chemistry. The real truth is that neither snake venom nor the other agents here named have been proved to be destructive to the blood in minimum doses.

Third, you apprehend that venom injections may surreptitiously hide some dangerous germs in their meshes, and thus pave the way for fearful pyogenic infection. This is a mere surmise, resting on an extremely flimsy basis; for, among the more than six thousand injections of this drug, I have yet to meet my first case of this kind.

Fourth is the hasty claim that before snake venom is employed "in human beings" it should be subjected to "careful animal experimentation" and "be accurately standardized." If you know of any drug that has undergone a more vigorous, protracted and extensive scrutiny at the hands of expert investigators, I should like to hear of it; and, if you have any doubt about the snake being less capable of standardizing its venom than the official standardizer, you should make a series of tests, at certain intervals, with five or six equally large doses of the natural venom, abstracted from different snakes of the same species. Rattlesnake venom, of whatever source, retains an unimpaired activity for a long time. I have found that, when kept in a dry state for twenty years, it is just as powerful as that which was ejected freshly at the end of that period.

Finally, with a great deal of earnestness, you expatiate on the well-known fact that epilepsy is sometimes temporarily arrested by shock, high infectious fever, surgical operations, injuries, etc., and then, presuming on the credulity of your reader, you share with him the profound secret that in the dark ages traumatism was applied as a remedy for "falling-fits," whether by decapitation or by less sanguinary methods you fail to state; but you console yourself with the thought that the benefit which epileptics are said to experience from the action of snake venom is, after all, more apparent than real.

On the one hand, you bring what you undoubtedly believe to be a series of overwhelming charges against snake venom as a remedy for epilepsy, of which not one stands the test of even a cursory examination, making it certain that if it ever shall be shown that snake venom is useless in relieving epilepsy it will not be on account of any of the beforenamed imputations. On the other hand, a set of men, all of whom are well-known practitioners of a professional standing as high as your own, who are fully as able to distinguish between the false and the true in therapeutics, consider it a sacred hippocratic obligation to save life and lessen suffering whenever they can, even though they are compelled to step outside the rock-worn restrictions of the non-official formulary; they are interested in snake venom, not as a cure-all for epilepsy, but as an agent which, by further clinical investigation, may be found to possess the power of giving permanent relief to many of these sufferers who are even admitted by you to be "too commonly help-

THOMAS J. MAYS, M.D., Philadelphia.

[COMMENT.—Nothing in Dr. Mays' protest alters the scientific facts on which the editorial was based, and it is not the purpose of this reply to enter into polemics to support them. There is another phase of the matter which can now be elaborated.

While Dr. Mays comes forward as the spokesman and champion of Spangler's rattlesnake-venom treatment of epilepsy, we can hardly believe that he stands ready to defend the lay press write-ups by which this hazardous therapeutic experiment has been promulgated and commercialized. Except that the subject is one of less general interest, its sensational publicity has been on a par with that of Shafer's Phylacogens and Friedmann's tuberculosis treatment. Through it, victims

of incurable epilepsy have been led to submit themselves to a method of therapeutic experiment wholly empiric and fraught with just such dangers as our editorial indicated. Physicians otherwise conservative, through the importunities of patients aroused by these newspaper accounts, have been led to test Spangler's treatment, and it is on the basis of such trials by competent epileptologists that we condemned the method and cautioned the profession against its adoption.

Dr. Mays' letter gives the opportunity of protesting again against the tactics by which the crotalin treatment of epilepsy has been forced into public notoriety.—ED.]

#### Prescribing Proprietaries, and Managing the Detail Man

To the Editor:—The professions of medicine and pharmacy are distinct, and the best results are obtainable only when the physician and the pharmacist each attends to his own business and the two work in harmony. As the result of the activities of our pharmacologic society, composed of physicians and pharmacists, the conditions in Evanston are a surprise to visitors to our city. The use of proprietary medicines is reduced to a minimum. Still further to reduce the nuisance of the detail men and their samples, at the last meeting a committee was appointed, consisting of one physician and one druggist, to whom detail men must present their case before they will be received by the other members. Exploiters of proprietary mixtures will be refused endorsement, as will those also who have been involved in doubtful financial transactions in the past. Would it not greatly aid the general condition if the Evanston example should be generally copied through the country?

HENRY B. HEMENWAY, M.D., Evanston, Ill.

[COMMENT.—The Evanston method of dealing with the proprietary question indicates that the physicians of that town are alive to their responsibilities. Would it not be simpler and just as efficient, however, to accept the findings of the Council on Pharmacy and Chemistry as constituting credentials for the detail man? Many physicians are using New and Nonofficial Remedies for just this purpose.—Ed.]

### Needed Reorganization of the Indian Medical Service

To the Editor:—I have read with a great deal of interest Dr. Wimberly's letter to The Journal (May 17, 1913, p. 1558), and in most respects agree with his exposition.

During the last year the Medical Association of the United States Indian Service has been formed and has appointed a committee to draft a bill for introduction in Congress either for our amalgamation with the Public Health Service or for the organization of the medical work among the Indians along the same lines. Conditions at present are deplorable in the extreme, not only for the Indians and the physicians concerned, but for the public at large. When over 20 per cent. of the Indians have trachoma, in Oklahoma over 68 per cent., how long will it be before the white settlers around and on the reservations also become infected? Owing to its antiquated methods of handling hygienic and sanitary questions and the restrictions imposed on the physicians, the Indian Office has shown its utter inadequacy to deal with the problems involved.

The physicians in the Indian Service are, I believe, fully as capable as the ordinary practitioner on entering the service. They are selected by a competitive civil service examination and must possess the same qualifications and pass the same examinations as physicians for the Isthmian Canal Service, Coast and Geodetic Survey, Reclamation Service. Philippine Service, etc., and the Indian Service physicians receive only from \$1.000 to \$1,200 a year whereas the others enter at \$1,800. After assignment to the reservation, they find in many instances no quarters or quarters unfit to live in; no means of transportation or an old worn-out team or saddle pony with which they are supposed to cover several hundred square miles of territory. Not only that, but every act is subject to the superintendent's wishes. The teams they

drive, the drugs they purchase, the quarters they occupy, their chances of increase in salary or promotion of any sort depend on his whims. Some of the superintendents are anxious to improve conditions but are either lacking in funds or fear to antagonize the Indians, while others lend as little support as possible. The reservations are so large that it is impossible often to give an acute case the attention it really deserves; besides, there is often much antagonism on the part of the Indian to treatment by white physicians.

Most of our work should be along sanitary and hygienic lines. This would require not only a larger allowance for medical work but also a complete reorganization of the Indian Medical Service. It should be separated from lay control entirely, some one skilled in medical science placed at the head and then organized along the lines of the Public Health Service or Medical Corps of the Army and Navy. Better still from economic reasons would be its union with the Public Health Service, where it in reality belongs.

C. W. LANE, M.D., Lincoln, Wash. Secretary and Treasurer, Medical Association of the United States Indian Service.

# Limited Usefulness of Fish in Destruction of Mosquitoes

To the Editor:—In The Journal, May 3, 1913, p. 1348, there is an item on a small fish, native of Barbados, called commonly "millions," which is used in the Cape Province, South Africa, for the destruction of the larvae of anophelines as one means of combating malarial fever. Similar experiments with the same species of fish, from Barbados, were carried on in the Canal Zone by the Sanitary Department of the Canal Commission three years ago. The method was found to be applicable only to small permanent collections of water unsuited to drainage or oiling. The fish are so small that they easily become prey of larger fish in streams and ponds of any size, and the smaller collections of water are usually more easily treated by oiling or drainage. For these reasons the value of this method of mosquito destruction is limited.

Alfred G. Farmer, M.D. District Physician, Gatun, C. Z.

# Queries and Minor Notes

Anonymous Communications will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

CRITICISM OF A PRESCRIPTION FOR "LIVER TROUBLE"

To the Editor:—Please criticize the following prescription, which
I am informed was given after a diagnosis of "liver trouble":

Resorcin Acid borac															
Sodli blearb															
Tinct, nuc, vom															
Syr. ipecae															
Fl. ext. rhubarl	)		 												
Fl, ext, hydrast		Ċ						ĺ	i	i	Ċ	Ĺ	ì	i	มีก
Elix, digest, con															

JAMES WILTSE, M.D., Brewster, N. Y.

Answer.—Our correspondent's implied criticism of the diagnosis seems to us appropriate. We might say that the prescription fits the diagnosis. It is rather characteristic of the type of mind that is satisfied with an indefinite diagnosis like "liver trouble," to attempt to cover possible therapeutic indications by a monstrosity of polypharmacy. Aside from the impropriety of combining so many ingredients in one prescription, there are several obvious chemical incompatibilities. The mixture of sodium bicarbonate and boric acid in a solution would result in the formation of carbon dioxid and a salt of sodium — a borate. The antiseptic power of the boric acid is considerably reduced by such a reaction. The combination of an alkali like sodium bicarbonate with a compound of strychnin is likely to give rise to a serious incompatibility. In this case it is probable that the strychnin might be held in solution by the alcohol