THE METHODS OF A VETERAN INVESTIGATOR AND TEACHER

TO THE EDITOR OF SCIENCE: It occurs to me that some of my scientific colleagues may be interested in the following statement of what I regard as the most important educational and scientific outcome of fifty years of study and forty-two of teaching: (1) All parts of a given animal should receive one and the same serial number. (2) Slips should be used for promptly recording new observations, references, ideas, and all data (e. g., localities, donors, modes of preparation) not ascertainable from the specimens themselves. (3)Beginners should be taught correct methods by explicit directions. (4) Before lecturing upon a species or a group there should be shown a specimen or a representation of one. (5) In all composition the following should be sought in the order named: clearness, consistency, correctness, conciseness, complete-(6) Published ness. errors should be promptly corrected. (7) All natural classification is dichotomous. (8) For the study of the structure, development, succession and relationships of vertebrates the best group to begin with is the Selachians, the sharks and rays; if several forms can be studied the first should be-and if but one, that one should be-the acanth or "horned dogfish," Squalus acanthias. (9) The objective study of the brain should begin in the primary school; the pupil himself should expose, draw and dissect the brain of the acanth shark; with successive appropriate changes as to forms and methods the high school graduate should have gained as much real knowledge of the human brain as is now possessed by the average graduate in medicine.

Burt G. Wilder Cornell University, June 20, 1911

QUOTATIONS

THE DEPARTMENT OF AGRICULTURE AND DR. WILEY

It begins to look pretty clear that the real problem before the President in connection with the Wiley affair is how to let it drop with the least amount of disturbance and inconvenience. This does not imply that he will decide the matter without looking into its merits. His decision will not be made until he has personally examined the record. But it requires neither a gift of divination nor a preternatural command of legal intricacies to predict with a great degree of confidence that the recommendation made by the personnel board of the Department of Agriculture, and approved by Attorney-General Wickersham, will not be followed by Mr. Taft. Every day that has passed since it was made has strengthened not only the belief that the punishment proposed was utterly disproportionate to the alleged offence-even supposing that offence to have been of precisely the character asserted-but also the impression that the President is quite as well aware of this as anybody. The Washington news, in papers of all shades of opinion, has been steadily pointing in the direction of a smoothing over of the affair-not for Dr. Wiley, but for Mr. Wickersham.

Before the matter goes further, and the initial stages of it become hazy in the public mind, it is well to recall just what Attorney-General Wickersham did in the case. The personnel board of the Department of Agriculture had found that in the arrangement made by Dr. Wiley with Professor Rusby, an eminent pharmacological expert, the terms of a law limiting the compensation of experts employed by the Agricultural Department were violated. It was not alleged by anybody that Professor Rusby had been overpaid for his work; it was not alleged by anybody that Dr. Wiley's object in securing his services was anything but that of getting the best possible results for the government. The charge was simply that the law made \$4,000 a year the maximum pay for an expert, that it had been decided that this means that the per diem pay of an expert shall not exceed \$11, and that Dr. Wiley had made an arrangement for an annual compensation of \$1,600 to Professor Rusby, in such a way as to result in his getting a per diem compensation greater than this obviously inadequate one, for the days that he gave up to the work. Now, nobody would have complained if Mr. Wickersham had informed the President that this is a violation of the law. Nobody would have found fault with him if he had expressed his opinion that such violation was a serious matter. But when he went outside his province as a lawyer and told the President that in his judgment this disregard of a peculiar regulation, in so small a matter, and without the slightest trace or suspicion or hint of bad motive, was sufficient reason for approving a recommendation calling for the resignation of a faithful public servant, filling with exceptional zeal and devotion an office of unusual importance, he invited just such criticism as he has been subjected to in the past few days.

In deprecation of such criticism, the curious point is now put forward that Mr. Wickersham's report was not intended to be made public, but was designed solely for the President's private information and guidance. This may be a good point for Mr. Taft himself to fall back upon, but it is difficult to see how it can do anything for Mr. Wickersham. If the report was one for the President's private ear, the President might, to be sure, throw it into the waste-paper basket; but that can not have been the purpose for which it was originally destined. So far as in him lay, Mr. Wickersham backed up the personnel board's recommendation; and it is impossible to see wherein there is any less demerit in the advice to do an act of injustice because the advice was given in secret. To most minds, we fancy, that is an aggravation of such an offence, not an extenuation. And it is impossible not to recall the fact that in the unhappy muddle over the Lawler memorandum in the Ballinger case, in which Mr. Wickersham bore a conspicuous part, a bungling policy of secrecy was responsible for the worst of the trouble.

There is another analogy between the present affair and that of the Ballinger-Cunningham-Pinchot difficulty which the President will do well to bear in mind. In this case, as in that, there are two aspects which the subject presents; in this case, as in that, everything depends upon maintaining a sense of proportion as between these aspects. There is the narrow view of the mere lawyer and the mere disciplinarian; there is the broad view of the man responsible for large and difficult affairs. It is not necessary to ignore the requirements of law or even the exactions of red tape in order to do justice to the larger things. But it is one thing to insist that even the most zealous and well-intentioned of officers must obey the law; it is quite another thing to permit the enemies that such officers are constantly making to seize upon little errors, or technicalities, or violations even of official etiquette, as a means of getting them out of the way. Such work as that of fighting land thieves or food adulterators demands enthusiastic zeal and inexhaustible energy; if you are going to make the situation impossible for a man who has these qualities unless he combines with them an immaculate record upon every technical point, you might as well surrender at once to the land-grabbers and the And it is because the plain adulterators. people understand this that they insist upon any such affair as the Ballinger case or the Wiley case being uncovered from top to bottom. Any attempt to confine it within narrow or technical bounds is sure to fail.-New York Evening Post.

SCIENTIFIC BOOKS

Contributions to Medical Science. By HOWARD TAYLOR RICKETTS. Chicago, University of Chicago Press. 1911. Pp. ix + 497. \$5.33.

The committee of the Chicago Pathological Society which was intrusted with the office of preparing a suitable memorial of Howard Taylor Ricketts have issued a memorial volume containing many of the chief original studies of this remarkable investigator.

The volume opens with a brief and dignified statement by Hektoen of the main events of Dr. Ricketts's career, ending in his untimely death in Mexico City from the deadly Mexican typhus, the disease whose secrets he