

graduate medicine in the University of Pennsylvania: Dr. Joseph McFarland, professor of pathology; Dr. John C. Heisler, professor of anatomy; George H. Meeker, Sc.D., LL.D., professor of chemistry; Dr. Horatio C. Wood, Jr., professor of pharmacology and therapeutics, and Dr. Seneca Egbert, professor of hygiene.

DR. D. D. LEIB, instructor in mathematics at the Sheffield Scientific School, Yale University, has been appointed assistant professor of mathematics and physics at the Connecticut College for Women.

DR. V. H. YOUNG, formerly of the botany department of the University of Wisconsin, has been appointed assistant professor of botany in the State University of Iowa. He takes charge of the work in plant physiology and mycology.

DR. EUGENE P. WIGHTMAN has been appointed professor of chemistry at Richmond College to succeed Professor Eugene C. Bingham. Dr. Garnett Ryland, who was acting professor of chemistry at Richmond College last year, has returned to Georgetown College, Georgetown, Ky., after a year's leave of absence.

## DISCUSSION AND CORRESPONDENCE

### SCIENTIFIC APPOINTMENTS UNDER THE GOVERNMENT

TO THE EDITOR OF SCIENCE: Discussion of the President's scientific appointments may tend perceptibly toward politics, which is to be regretted in a scientific journal. Nevertheless I am in entire accord with the views of your correspondent "R" in last week's number, with the exception of two lines, which I take leave to criticize. No doubt the Coast and Geodetic Survey is one of the most important of our scientific bureaus, and one of which we can be most proud. The men at the head of it, as described in his most interesting article in your issue of July 14 by Dr. T. C. Mendenhall (not excluding himself, as he modestly does), form a very distinguished company, and we all wish that the quality may be kept up. I at least wish that the President had seen fit to appoint a superintendent whose name could be found in "Who's

Who in America." Nevertheless I am informed by those competent to know that the present superintendent is a very efficient head, and we know that many of the scientific bureaus have been at times under the direction of non-scientific persons who have succeeded admirably as administrators. Several of them are now under the direction of men who have not received the blue ribbon of election to the National Academy of Sciences, although some of their subordinates have done so. Even the Coast Survey was once under a chief clerk from another department. Personally I should be glad to see a geodesist at the head of the survey, which has, if I mistake not, never been the case. Even Dr. Mendenhall does not mention that one of the things that made the Coast and Geodetic Survey most famous in Europe was the remarkable work of Dr. Hayford in connection with the subject of isostasy, so that it appears that we have geodesists in this country, as well as hydrographers.

Personally it is no more repugnant to me to have a scientific bureau headed by a non-scientist than to have a university under the presidency of a person who is not a distinguished scholar, a contingency that is not unknown. Sometimes this works very well, as in the case of the late Seth Low, who converted Columbia from a provincial college into a great university. To be sure it is whispered that the power behind the throne was his present successor, but the case is a noteworthy one. Believing, as I do, that nothing is of more importance than learning, and in learning, than science, I do not wish to minimize the importance of the selection of suitable heads of learned and scientific institutions.

I come now to the matter which prompted the writing of this communication, and I take the liberty of being somewhat personal. I wish to protest against the characterization of "the recently organized and mobilized aggregation of assorted geniuses from which the President and the country at large are expecting so much." As a member of the Naval Consulting Board I am getting very tired of such sneers, and do not expect them from my scientific colleagues. I was named for that board by

the president of a society which I am proud to represent, and my colleagues, with two exceptions, were named in a similar manner. Can your anonymous correspondent suggest a better way to select members of such a board? I was not altogether pleased with the list of societies selected, and did not hesitate to say so. But I did not for that reason refuse to serve. None of the members of this board claims to be a genius, assorted or otherwise. I do not discuss the question whether Mr. Edison is the most wonderful man the country has ever produced. I know he invented the phonograph and the incandescent lamp, which is enough to have made him famous, even if he had then stood pat, like some others. But I know that he is a fertile and tireless worker, and I am glad to serve with him. During the past year I have attended nine or ten meetings of the board, at an expense to myself of over five per cent. of a year's salary as a professor, and at a still greater sacrifice of time, which, like the money, I can ill afford. But I have thought the sacrifice justified if I could be of some small use to the country at large. I have worked occasionally before for the United States government, and I do not expect pay—thanks it is not possible to get—but I do not expect to incur jibes from fellow-scientists. This is an age of cooperation, and I believe science is at the dawn of a great epoch. We all need to pull together. Under the circumstances I accordingly feel justified in calling upon "R" for an apology, disclaimer or disavowal—the word is unimportant—either in print, under his anonymity, which I do not ask him to break, or in private over his own name, which will be treated confidentially.

In case I have made a mistake, and the National Research Council is intended, the apology should be addressed to Dr. George E. Hale, but the principle is the same.

ARTHUR GORDON WEBSTER

October 23, 1916

#### PREPARATION FOR MEDICINE

DURING the past two years I have become convinced that there is a very typical course of college study through which prospective

medical students are almost invariably passed. This conviction is based upon personal experience, recent enough to be very vivid, and upon conversations with many medical students.

Assuming that a man has selected his medical school, it is a very simple matter for his adviser to pick up a medical school catalogue and indicate that so much physics, so much chemistry, so much biology and such and such experience in French and German will be required in order for the student to enter the chosen school. These requirements can usually be met in two years of college work. Whether or not a college degree is necessary, the fact remains that the majority of the men in our best schools hold such degrees, and have therefore had at their disposal two extra training years. It is with these two years that I am concerned, for if they have been properly administered they can be of vast value, and almost always they are completely misdirected. A typical premedical student usually takes a year of physics, two years of inorganic chemistry, a course in organic chemistry with very deficient laboratory work, and finally a year of biology. These courses, as a rule, more than fulfil the requirements for admission to the selected medical school, and the work as arranged occupies about two and a half years of the college course. It is taken with the usual classical subjects leading to an A.B. degree. The remaining year and a half are carefully directed toward medicine by filling them with biology!

Those of us who have recollections of our college ideas of medical study will agree that there was a mysterious omnipresent picture of human dissection which occupied the entire foreground of our conception, and behind it, rather remote, a surgical background which we might some day reach. Elementary biology with its varied dissections of lower forms fitted the picture beautifully, as did histology, embryology and finally text-book courses in human anatomy and physiology. The prospective medical student finds such courses very pleasant. They are not difficult. He works much harder upon them than upon his