cuse. Field studies and plans have already been prepared for portions of the main highway between Utica and Albany and the state highway between Utica and Syracuse is now being carefully studied. It is not the idea of Professor Francis to line the highways with straight rows of trees. Natural vistas showing beauty spots away from the highways will be left open, and it will be suggested that other vistas be made so that the highways will not alone be well planted with trees and shrubs, but there will be more nearly a park-like effect with opportunities of seeing the beauty of the country on either side. Professor Francis is urging the use of native trees and shrubs, taking advantage in so far as possible of the material on the ground. It is expected that these studies of highway planting will result in a publication showing just how definite areas of highway may be treated to best advantage. This will supplement a bulletin on "Suggestions for Street Tree Planting" which has already been given wide distribution by the college.

United States patents have been issued to Dr. Clifford Richardson on an improved "bituminous substance" and on the process by which this product is manufactured. Similar patents have also been granted in Canada, Great Britain, France and Italy. It is said that these are the first patents covering a product and process involving the introduction of colloidal matter into bitumens of all types. According to the inventor, he obtains "an increased degree of body or stability in these bituminous substances, by means of the addition to and intimate and uniform dispersion through the bituminous substance of a proper proportion of a substance in the state of a disperse colloid. The process consists in the introduction of clay in the form of a colloidal aqueous paste and combining this paste with the bitumen in such a way that when the water is subsequently driven off, the bitumen forms the continuous phase of the colloidal material. The products resulting from this method of incorporating clay in colloidal form with bitumen has markedly different properties from products into which the mineral matter is introduced in the form of a dry powder. The products made by the Richardson method range all the way from materials resembling vulcanized rubber to plastic, but at the same time very stable mixtures suitable for paving and many other uses.

The *Journal* of the American Medical Association reports that an institute for vaccines, bacteriology and chemistry at Buenos Aires was recently inaugurated. Penna, chief of the public health service, Malbran, chief of the bacteriologic service, and various professors with university chairs in these specialties, all delivered addresses. Magnin, chief of the chemical department, reported that already he had researches under way which might aid materially in remedying the scarcity of imported drugs. A number can be made and many are now being made in the workrooms connected with his department. An isolated pavilion has been set apart for a training school in applied chemistry. The national board of health has had a chemical department since 1880, but this new triple institute is said to be equipped for the science and needs of to-morrow as well as to-day.

UNIVERSITY AND EDUCATIONAL NEWS

The Carborundum Company of Niagara Falls, N. Y., will construct an administration building on lands of the Niagara Falls Power Company on the Niagara River front. It is proposed to tender the use of the present offices to the Massachusetts Institute of Technology, which has decided to establish a research laboratory at Niagara Falls.

Charles Gilman Hyde, professor of sanitary engineering in the University of California, has been appointed acting dean of its college of civil engineering, to serve during the present year because of the absence on account of illness of Professor Charles Derleth, Jr.

The following former members of the Medico-Chirurgical College faculty have been duly elected members of the faculty of under-

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