tory for pathological chemistry recently opened at the New York Post-Graduate Medical School and Hospital.

Professor William E. Brooke, of the College of Engineering, University of Minnesota, has been appointed to fill the vacancy caused by the retirement of Dr. H. T. Eddy, the head of the department of mathematics and mechanics. Dr. William F. Holman takes the place made vacant by the retirement of Dr. Arthur E. Haynes, from the department of mathematics.

Throop Polytechnic Institute, of Pasadena, California, is materially enlarging its department of chemistry with a view to keeping in touch with the industrial development of southern California, especially in connection with the oil industry. Dr. Richard Sidney Curtiss, Ph.B. (Yale, '88), Ph.D. (Würzburg, '92), now professor of organic chemistry at the University of Illinois, has been appointed professor of organic chemistry and research associate. Charles Andrew Brautlecht, Ph.B. (Yale, '06), now doing graduate work at Yale, has been appointed instructor in chemistry and physics. William Ruthven Flint, A.B. (Yale, '98), Ph.D. (Yale, '09), continues in the department as professor of inorganic and analytical chemistry.

Owing to the rapidly growing interest in the science of chemistry and the recognition of its importance in the development of the state resources, the president and regents of the University of California have provided for the enlargement and reorganization of the department of chemistry. In addition to the present staff, the following appointments have been made: Professor Gilbert N. Lewis, of the Massachusetts Institute of Technology, professor of chemistry and chairman of the department; Professor William C. Bray, of the same institution, and Professor Richard C. Tolman, of the University of Cincinnati, assistant professors of chemistry. Several additional instructorships and assistantships have also been created. Owing to the absence of Professor Morgan, the course in elementary chemistry will be in charge of Professor Harry W. Morse, who has received for this purpose leave of absence for one year from Harvard University. Professor Edmond O'Neill has been appointed director of the chemical laboratory. Owing to the crowded condition of the present laboratory, a new building on the site provided in the Hearst plans will soon be begun. In the mean time, a temporary building is being constructed, and will contain a laboratory of physical chemistry, several offices and research laboratories and shops for mechanician and glass blower. Much attention will be given to the development of advanced study and research. A considerable number of men, several of whom come from other institutions, will enter next term as candidates for the doctorate. Advanced seminars will be offered in organic, inorganic and physical chemistry.

DISCUSSION AND CORRESPONDENCE

THE HEATING IN THE CULEBRA CUT

To the Editor of Science: Mr. MacDonald's interesting article on the heatings in Culebra Cut, in your issue of May 3, No. 905, is paralleled by the spontaneous combustion of bituminous coals, and even of the anthracite culm banks, owing to the oxidization of pyrite. It is a common occurrence, and is the cause of endless trouble in preserving museum specimens of pyrite in fine dissemination during damp weather.

In the case at issue the iron content proceeded from the ferro-magnesian silicates, as Mr. MacDonald has stated; but from ordinary surface oxidation, as is always the case in regions containing the black bisilicates, and as shown by the rustiness of springs and streams. The sulphur content is also generally present in lagoons as more or less dilute sulphuric acid. The presence of carbonaceous material points to a lagoon formation at Culebra Cut.

The function of iron is to be a carrier of oxygen from the air to the precipitated organic débris, changing from hydrated sesquioxide to protoxide: picked up by the above acid: again breaking up as hydrated sesquioxide, and continuing its endless rounds unless it happens to be included and imprisoned under a mass

of vegetation; when the round is stopped, the sesquioxide and the solution of sulphate in which all the ingredients are bathed are robbed of the oxygen and form pyrite.

The classic laboratory experiments show that organic animal matter acts with greater rapidity and sureness, and the resulting pseudomorphs of sphalerite, chalcopyrite, or pyrite, when a live clam is placed in a saturated solution of a sulphate of the above, are well known. We find them abundantly in nature, in the Trenton rocks as well as in the coal measures.

EDWARD H. WILLIAMS, JR.

THE CROCKER LAND EXPEDITION

TO THE EDITOR OF SCIENCE: The Crocker Land Expedition which was to have gone northward this summer under the leadership of George Borup and D. B. MacMillan, has been postponed to the summer of 1913, on account of the lamentable death of George Borup and the impracticability of finding a substitute for him in the short time remaining before the expedition was to start.

The Honorary Committee, consisting of President Henry Fairfield Osborn, Mr. Chandler Robbins, General Thomas H. Hubbard and Dr. Walter B. James, and the Committee in Charge, comprised of Dr. E. O. Hovey and Mr. H. L. Bridgman, have begun the reorganization of the expedition along such lines as circumstances may necessitate, without changing the main objects of the enterprise, as set forth in the prospectus issued in January 1912.

Colonel Borup and a number of the principal supporters of the expedition have united in the furtherance of the new plans; the expedition will be a memorial to George Borup, the young explorer who was so keenly interested in it and who was the mainspring of the original undertaking.

Mr. MacMillan's connection with the enterprise continues as heretofore, and he is utilizing the intervening time for the purpose of making additional preparation for the scientific work of the expedition.

A considerable part of the supplies and equipment had been prepared. The prepared material has been put into safe storage for use next year, while the special apparatus is being assembled at the museum. Subscriptions already made are sufficient to insure the starting of the expedition a year hence.

EDMUND OTIS HOVEY,
HERBERT L. BRIDGMAN,
Committee in Charge

UNIVERSITY CONTROL

LETTERS FROM HARVARD UNIVERSITY

I AM on the whole very pleasantly impressed, as you know, with the general constitution that has been worked out at Harvard: a bi-cameral arrangement for the general governing boards; one large academic faculty and several professional faculties for the boards of instruction; comparatively independent divisions and departments, with a considerable range of initiative within their own fields; a president who is, while powerful, still subject to a great many decidedly distinct and potent sorts of checks from alumni and from various boards. This constitution does not seem to me perfect. The president at Harvard has probably still too large a range of discretion. The result is certainly not bad; but is also still subject to further growth. The bi-cameral system (the "overseers" elected by the alumni, able to advise but not to initiate legislation, able also to veto; the "corporation," self-perpetuating and capable of initiating, but always subject to the overseers' veto), seems to me to work well but unevenly, since the overseers have their seasons of too great or too little activity, while the president is probably a little too potent in influencing the corporation legislatively. Nevertheless, I regard the result of the interaction between the "overseers" and the "corporation" as so useful in many crises, and so convenient both in calling out and in holding in check the interests of the alumni, that I can not be convinced of the value of your proposals 1 and 2, if they were regarded as contemplating a constitution intended to take the place of ours. I should say, in place of your proposal (1), that a bi-cameral governing body like ours is preferable to the