preached in Christ Church Cathedral on May 18, 1890, by the Bishop of Missouri. The book is illustrated by plans of the garden, a large number of views of the museums and other buildings, including Mr. Shaw's house and a fine statue of Humboldt.

Everything is now in full working order, and we have just received from Prof. Trelease a capital synopsis of the American species of the difficult genus Epilobium, containing full botanical descriptions and figures of all the species. The herbarium now contains about 20,000 mounted sheets of flowering plants and ferns, also a large collection of Fungi and other Cryptogamia.

Géologie: Principes—Explication de l'Époque Quater-naire sans Hypothèses. Par H. Hermite. Pp. 145. (Neuchatel, 1891.)

ON taking up this little book the geological reader is at once struck by the words "sans Hypothèses" in the title. A volume on Pleistocene geology free from hypotheses would seem to him to usher in a new era in geology, and would be most heartily welcomed by him. The title of the present work, however, is misleading; the book is almost entirely devoted to theoretical explanations of purely hypothetical facts. We have not space to notice in detail the various subjects of which the author treats, but as an example of his method we may point to his "Origine des Pluies Quaternaires" (p. 39). In this section he accepts the hypothetical Quaternary "Pluvial Period "-which, by the way, seems to have been characterized by a singularly poor aquatic fauna and flora-and he then accounts for the supposed excessive rainfall during Tertiary and Quaternary time by the amount of vapour thrown out by volcanoes, adding that the small rainfall of the Secondary periods is accounted for by the absence of volcanic action during those periods! Then we meet with our old acquaintance the former excess of carbonic acid in the air and its influence on the ancient climate of the polar regions—possibly correct, but certainly hypothetical. Further on, speaking of the origin of the continental platform at a depth of 200 metres, the author states that this feature results from the raising of the general level of the sea from the melting of the Quaternary ice; and from this hypothetical raising he arrives at the result that the mass of the Quaternary ice corresponded to the total mass of the sea now lying above the level of the continental platform. Another speculation relates to the breaking through of the Indian Ocean across Siberia to the Polar seas, thus causing a milder climate, and accounting also for the parallel roads of Glen Roy and the terraces in Norway and Greenland. We cannot pretend to follow the reasoning, but it is all somehow connected with the author's theory "qu'à une diminution de la densité des mers correspond un abaissement de leur surface."

Webster's International Dictionary of the English Language. Revised and Enlarged under the Supervision of Noah Porter, D.D., LL.D. (London: George Bell and Sons. Springfield, Mass. U.S.A.: G. and C. Merriam and Co.)

WEBSTER'S Dictionary is so well known on both sides of the Atlantic that it is unnecessary to do much more than note the appearance of the present edition. The work was published originally in 1828, after which it was steadily improved in successive issues. It has now been revised so thoroughly, and with the aid of so many competent scholars, that for popular use it can hardly fail to maintain the ground it has already won. Much promin-ence is given to "the definitions and illustrations of scientific, technological, and zoological terms," and in the preface to the English edition it is stated that no pains have been spared to make this part of the book "as perfect as possible in both text and illustration." The

definitions in particular branches of science have been revised by such men as Prof. H. A. Newton and Prof. E. S. Dana-names which are a sufficient guarantee for the way in which the task has been accomplished. In the department of etymology, Prof. E. S. Sheldon, of Harvard University, has carefully dealt with the results presented in the last edition, bringing them into accord with the philological ideas of the present day. The pictorial illustrations are numerous, and well adapted to the purposes for which they are inserted.

Elementary Chemistry; for Beginners. By W. Jerome Harrison, F.G.S. (London: Blackie and Son, 1890.)

THIS volume of 144 pages consists of an expansion of the author's notes of lessons prepared for teaching children from nine to thirteen years of age according to the outlines given in the education code. The information is conveyed in familiar language, and each chapter the outlines given in the education code. closes with a series of questions which are well calculated to test the child's progress. It is a pity to issue any book that deals with scientific matters without a contents table and an index, and we fear that the absence of these in the present case will lead to inconvenience. And we would suggest that the quantities selected for the examples might approximate more closely to those most generally employed. The hydrogen from the use of a ton of zinc, the preparation of 1000 lbs. of carbon dioxide, eighteen quarts of oxygen mixed with an equal volume of hydrogen and exploded, ten gallons of hydrogen mixed with half its volume of chlorine and exposed to sunlight, indicate experiments on an extravagant if not an appalling scale. These, however, are matters of detail. The notes of so successful a teacher as Mr. Jerome Harrison cannot fail to be valuable to others who are engaged in a like work as well as to the students themselves.

Examination of Water for Sanitary and Technical Purposes. By Henry Leffmann, M.D., Ph.D., and William Beam, M.A. Second Edition. (London: Kegan Paul, Trench, Trübner and Co., Ltd., 1891.)

THE fact that a second edition has been called for only two years after the issue of the first, shows that this excellent hand-book has been very generally appreciated. The authors have revised the work and made many additions to it chiefly of processes that have recently grown in importance. Among the principal of these additions, we observe that the three pages on "Living Organisms in Water" of the first edition are now expanded into a chapter of thirteen pages entitled, "Biological Examinations." table of culture phenomena of some of the more important microbes is given. But concerning this matter the authors state that "until pathogenic microbes are more clearly indicated and described, the methods will be of little use in dealing with the problem of the determination of the sanitary and technical value of water supplies.'

## LETTERS TO THE EDITOR.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of NATURE. No notice is taken of anonymous communications.]

## The University of London.

I Do not wish to criticize in the least Prof. Lankester's valuable statement in your last issue, with which I entirely agree; but I desire to point out that unless some energetic action is taken very soon we are likely to be farther than ever from the ideal which he has in view—namely, the establishment of a strong professorial University in London. The only scheme at present in the field is that put forward by the Councils of University and King's Colleges in the proposed charter for an Albert University.