

—Prof. William Ferrel, recently connected with the signal service, has resigned his position, and removed to Kansas City, Mo.

—It is proposed to hold a meeting of the various scientific societies in Australia and New Zealand in 1888 (the one hundredth anniversary of the foundation of those colonies) upon the lines of the British association meetings, and to form an Australian association for the advancement of science with similar aims and objects. There are some twenty scientific societies in the Australasian colonies, and the number of members is between twenty-five hundred and three thousand. The sections proposed are, A, astronomy, mathematics, physics, and mechanics; B, chemistry and mineralogy; C, geology and paleontology; D, biology; E, geography; F, economic and social science and statistics; G, anthropology; H, medical and sanitary science; I, literature and the fine arts; J, architecture and engineering. In addition to the general and sectional meetings for reading and discussing papers, etc., it is proposed that excursions should be organized to various places of interest, such as the various mining districts, the Jenolan, Wambeyan, and other caves, the Blue Mountains, and similar places of interest to geologists and others. A preliminary circular signed by A. Liversidge of the University of Sydney has been issued.

—The September number of the *Political science quarterly* is largely devoted to economics. Prof. Henry C. Adams of Cornell has a learned article on 'American war financiering,' in which he criticises, from a theoretical stand-point, Secretaries Gallatin, Dallas, and Chase. Hon. Alfred E. Lee writes very clearly and strongly concerning 'Bimetallism in the United States,' showing in a way that even 'cheap money' advocates should be able to understand the real status and effect of our silver coinage. Prof. Richmond M. Smith of Columbia, who described the state bureaus of labor statistics in an earlier number of the *Quarterly*, now reviews favorably the first annual report of the national commissioner of labor. Dr. Bowen continues his interesting account of the conflict in Egypt, and Dr. C. B. Spahr discusses the 'Taxation of labor.' The department of book reviews is unusually full; and the notices of Gneist's 'Das Englische parlament' by Mr. Goodnow, of von Treitschke's 'Deutsche geschichte im neunzehnten jahrhundert' by Prof. Munroe Smith, and of a group of books on constitutional law by Professor Burgess, are of more than passing value.

—Dr. Shakespeare of Philadelphia has just returned from Europe, where for a year he has been

investigating cholera. He has studied the disease in Spain, France, and Italy. During his absence, he also visited India to observe the disease in its home. As Dr. Shakespeare was sent out by the President, his report will be made to him, and forwarded to congress at its next session. From the little that we have been able to learn of Dr. Shakespeare's opinions, we infer that he agrees in the main with Koch and his German collaborators, and that he regards the comma bacillus as a diagnostic sign of the existence of cholera.

—The next meeting of the National academy of sciences will be held in Boston at the Institute of technology, to begin Tuesday, Nov. 9, at noon.

LETTERS TO THE EDITOR.

**.*Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

Education and the cost of living.

I AM glad that your timely comment on education and the cost of living (*Science*, viii. 313) seconds the proposed abolition of tuition-fees at Columbia college, in the case of graduate students, as 'a step in the right direction,'—one which 'we trust . . . will be taken, . . . and followed by other institutions.' It is but just to add, that Cornell, possibly first and alone among our great universities, has the honor of having already taken this step, 'lo, these many years;' that even in her days of poverty, as now in her prosperity, her library, laboratories, and lecture-rooms have been open to all college graduates who would make good use of them; and there has been no charge except for breakage and for supplies consumed.

But the Cornell experience apparently confirms your thought, that "more efficient and advantageous . . . is the foundation of numerous graduate scholarships and fellowships." We have had here such fellowships for more than two years; and, though there are only eight, their effect in raising the standard of both graduate and undergraduate work is, I think, quite marked.

If the proper business of a university be to improve the community's intellectual and educational ideals by developing in young people that have already some general culture the power of independent, well-directed investigation, of course the presence of earnest graduate students can hardly be too much encouraged.

J. E. OLIVER.

Cornell university, Oct. 11.

The genesis of the diamond.

I send you the following abstract of a paper read by me at the Birmingham meeting of the British association for the advancement of science, September, 1886, in the hope that it may interest your readers.

The discovery of diamonds at Kimberley, South Africa, has proved to be a matter, not only of commercial, but of much geological interest. The conditions under which diamonds here occur are unlike those of any other known locality, and are worthy of special attention.

The first diamond found in South Africa was in 1867, when a large diamond was picked out of a lot