

infancy by legislative restrictions. Under the rules of the electric lighting act of 1882, no commercial company could light a district successfully, in a financial sense. In the new parliament, this, among other matters, calls for urgent notice and remedy. Meantime the Anglo-American Brush corporation is endeavoring to induce small groups of house-holders, four, six, or more, to unite in a joint local installation, at an initial cost of about \$500 for an average-sized house. The plant proposed for such a group is either a steam or gas engine, dynamo, and secondary batteries, whose great use in domestic lighting has been repeatedly demonstrated by Mr. Preece, Mr. Swan, and many others interested in the matter.

At the recent opening of the session of the Society of arts, the president, Sir Frederick Abel, F.R.S., directed attention to machinery and appliances used in mines, and, contrary to general expectation, showed that explosions were not the greatest cause of loss of life in coal-mines. In the ten years 1875-1884, out of 11,165 deaths from accidents of all kinds in coal-mines, only 2,562, or roughly one-fourth, were due to fire-damp explosions; the remainder being caused in about equal shares by, 1°, falling in of roof and sides, and, 2°, other causes. The address, which is replete with interest, and can be read in full in the journal of the society for Nov. 20, concludes with some strong comments upon the part taken by the *Times* in regard to the delay in the report of the royal commission (of which the speaker was a member) upon the whole subject.

Two other presidential addresses lately delivered need a word of notice. The Marquis of Lorne (late governor-general of Canada), the president of the Royal geographical society, referred in some detail to the discoveries made in the basin of the river Kongo, in Africa, by Rev. G. Grenfell (a Baptist missionary) and Lieutenant Wissmann, as well as by Portuguese travellers. He then called attention to the recent endeavors of the society to improve geographical education in English schools and colleges, and to the exhibition, shortly to be held, of appliances and methods of teaching it, collected by the society's special commissioner, Mr. J. S. Keltie, in a recent continental tour.

During November a meeting was held in London to celebrate the granting of a royal charter to the Institute of chemistry, a body which has been at work for some years, with the avowed object of raising the status of analytical chemists, and doing for them what the College of surgeons, the old guilds, and the modern trades-unions, do for their respective professions and trades. An address was delivered on the occasion by Professor Odling, the president, who holds the chemical

chair in the University of Oxford. He began with a history of the movement, and the increasing need of 'professional services,' and then considered the position of 'experts' as witnesses in the law-courts. The part of his address, however, most criticised, is that in which he dealt with the vexed question of the endowment of research and the pursuit of research, on the one hand, for its own sake alone; on the other, for the pecuniary rewards which are sometimes the result of it. *Nature* concludes a long article upon it in the words, "We wish it to be known, therefore, that the spirit it (Professor Odling's address) breathes is an alien spirit, repugnant to students of pure science in this country." W.

London, Dec. 1.

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.*

Newcomb's 'Political economy.'

MR. JAMES has quite misunderstood my remark about bimetallism. I admitted that the word *assume* did not correctly convey Professor Newcomb's idea; and I thought I sufficiently indicated that Professor Newcomb's sole intention, in the passage in question, evidently was to tell the student what was *meant* by a system of unlimited bimetallism. In other words, his sentence (which I admitted was unfortunately worded) was simply meant to state that the government *chose* a fixed ratio of values in their system of coinage. Newcomb says nothing at this point in the way of discussion; in a later part of the work he devotes a considerable amount of space to an examination of the arguments on both sides, and does not find that we can positively declare either that the bimetalists are wrong, or that they are right. Under these circumstances, I leave it to the reader to decide whether Professor James has dealt fairly with his author in insinuating that he caricatured the views of bimetalists.

As to the rest of Professor James's reply, I shall permit myself only one remark. He, in common with many of his school, seems to identify English political economy with *laissez-faire*, and persistently confuses the question of scientific method with that of practical conclusions. This is illustrated by what he says about Sidgwick. He does not deny — what is obvious to every reader, and what Sidgwick expressly asserts — that Sidgwick's method is essentially that of the earlier English economists; and this was the only relevant question. Of course, Sidgwick's book shows marks of his indebtedness to German writers, when he explicitly acknowledges (as I mentioned) his special obligations to Held and Wagner; but this does not in the least modify the fact that his method of investigation (or 'style of reasoning,' to quote Professor James) is quite unaffected by these writers; and this was the only point at issue. But with a writer who sees no distinction between an adherence to the methods of Mill (which was what I spoke of) and an adherence to his 'methods and system' (whatever that may be), it is hardly profitable to carry on a controversy. FABIAN FRANKLIN.

Baltimore, Dec. 11.