highest part of our downs in hot summer days, which always amuses me much, without giving me any satisfaction with respect to the cause of it; and that is a loud audible humming as of bees in the air, though not one insect is to be seen. This sound is to be heard distinctly the whole common through, from the Moneydells to my avenue gate." (Vol. ii. p. 94, Macmillan's edition.)

W. TUCKNELL.

November 30.

Fireball of November 22.

ON November 22, at about 6h. 51m. I observed, in a sky quite overcast, a brilliant prolonged flash quite different to lightning. The whole firmament was illuminated for more than a second with an intensity greater than that which the full moon could have occasioned, and the glow seemed strongest in the south-east. Not a star was visible, but though the origin of the outburst could not be observed, no doubt existed that a fireball of the most brilliant type had fallen.

Mr. R. Sheward's letter from Eastbourne (NATURE, November 28, p. 78) affirms this conclusion, and it would be well if he or others who witnessed this striking object would give particulars as to the path it traversed. Appearing, as it did, at a convenient time in the evening, it must have had many observers, though unfortunately in the west of England the sky was veiled in cloud. For purposes of calculation it is not sufficient to have descriptions which merely indicate the general direction of the meteor's flight, as, for example, from east-north-east to west-south-west. We require to know the altitudes as well as the azimuths of the initial and terminal points, or the co-ordinates read from a celestial globe or star chart. A particular account of the path relatively to the stars near would be equally useful.

It is to be hoped that such information will be forthcoming in regard to this splendid meteor, which, from the manner in which it illuminated the clouded sky, must have been a very exceptional object of its class.

At this period in November many large fireballs are directed from the region of Taurus; but it is impossible to say, in the absence of necessary details, whether or not the fine meteor of November 22 last belonged to the Taurid stream.

Bristol, November 29.

W. F. DENNING.

IN reference to the letter of Mr. Sheward in last week's NATURE, it may be of interest to mention that whilst talking to a friend in a dark road in this locality on the evening of November 22 the sky at the time being entirely overcast, we were startled by the sudden illumination of the clouds as if by the outburst of a bright light above them. The effect was similar to that which might have been produced by the explosion of a large magnesium shell sufficiently brilliant to illuminate the entire sky. The light appeared suddenly, but faded out gradually, its estimated duration being three seconds. It appeared to me to emanate from a point in the north-east, at an altitude of about 60°. My friend, whose face was turned in the opposite direction, could not localise the outburst, though he remarked that the light suffused the clouds almost equally in the west and south-west. I noted the time as 6.48 p.m., which so nearly coincides with that mentioned by Mr. Sheward, that although so far apart it seems probable that we were witnesses of the same phenomenon.

R. T. LEWIS.

Ealing, W., December 2.

A Joint Meeting of Associations for the Advancement of Science.

My suggestion for a joint meeting of the British, Australasian, and American Associations for the Advancement of Science at San Francisco in 1897, at some time conveniently near to that of the Toronto meeting of the British Association, published in your issue of October 24, meets favourable reception in the United States and Canada. I have recently received a letter from Sir Wm. C. Van Horne, President of the Canadian Pacific Railroad, and a member of the British Association, in which he says that he will instruct his superintendent to reopen negotiations with other transcontinental roads to secure favourable rates of transportation. Prof. Joseph Le Conte, who has for years given earnest effort to secure a meeting of the Association on the Pacific coast, writes from Berkeley, California: "I will certainly interest myself in your scheme . . . I am glad you are moving the affair so early, and thank you for drawing my attention to it."

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The following is a copy of a letter just received from the Mayor of San Francisco:—

MY DEAR SIR,—

Your communication of October 9, 1895, was received and thereafter forwarded to the Board of Supervisors.

That body, on October 28, 1895, passed a resolution, and it is herein inserted in print.

"Resolution No. 13, 120 (Third Series).

"Resolved—That his Honour the Mayor be, and is hereby empowered and requested to invite the American and Australian Associations for the Advancement of Science to meet in this city in 1897; also, to invite the British Association of the same character to meet said Associations in this city as invited guests, and to that end to take such action as may be proper to arrange for their comfort and accommodation on that occasion.

"And the clerk is hereby directed to advertise this resolution as required by law.

"Board of Supervisors, San Francisco, October 28, 1895."

Pursuant thereto, an invitation is thereby sent to your Society—the American Association for the Advancement of Science.

It is my sincere hope that San Francisco may have the good and rare fortune to receive the visit of all three of these distinguished bodies.

The gathering of the world's chosen scientists is at once recognised as of high importance to our Municipality.

Its citizens will feel honoured in extending a generous welcome to men eminent in the cause of truth, and representing the three great branches of the Anglo-Saxon races.

Should this invitation be accepted, an early notification thereof is requested.

Invitations have been sent to the British and Australian Associations. (L. S.) ADOLPH SUTRO.

Application will be made to Congress at its session, which begins on the first week of December, for an appropriation to assist the American Association for the Advancement of Science towards defraying the necessary expenses of holding a meeting so distant from the homes of most of our members. It is, of course, impossible to foretell what Congress may be willing to do in the matter; but as it has never before been asked to subsidise the Association, we may hope that some appropriation may be secured.

WM. H. HALE.

Brooklyn, November 18.

The Metric System of Weights and Measures.

THE adoption of the metric system in this country can be best effected by first familiarising the people with it for some years. I would suggest that the following would form a good beginning:—

(1) Its adoption by the Post Office. At present the weight of a foreign letter that will go at the minimum rate, must not exceed $\frac{1}{2}$ oz. if posted in England, while 15 grammes are allowed on the continent, which is rather more. The 15 grammes limit should be adopted in England for foreign postage, and 30 grammes for inland postage. Parcels and newspapers should also be charged according to the metric system.

(2) The metric system should be employed by the Meteorological Society and Meteorological Office. At present our weather statistics cannot be compared directly with those published on the continent. The same course should be also followed by other sciences (e.g. geology, astronomy, &c.) that still use miles, yards, feet, &c.

(3) Government topographical and geological maps should all bear a scale of metres and kilometres.

There are, of course, many other ways in which the metric system could be brought before the public.

December 2.

JOHN W. EVANS.

"Dendrexetastes capitoides."

DR. FORBES has been kind enough to send me for examination the typical specimen of *Dendrexetastes capitoides* of Eyton, now in the Derby Museum, Liverpool, to which he has called attention in a letter in NATURE of October 24 last (NATURE, vol. lii. p. 619). I have compared it with specimen *a* of *Dendrexetastes temminckii* in the British Museum, and do not hesitate for a moment to say that they are referable to the same species. Both are from Cayenne, and of the ordinary unmistakable "Cayenne make." But it is quite true that, as pointed out by Dr. Forbes, the cross-bands on the belly, which

are very visible in the British Museum specimen, are quite non-apparent in the Derby Museum specimen. These cross-bands are, in all probability, remnants of the immature plumage, the British Museum specimen being not quite adult. I was, therefore, wrong in using this character ("Cat. Bds.," xv. p. 140) to separate *Dendrexetastes temminckii* from *D. devillii*, which, however, are quite different species, easily distinguishable by other characters. But *D. capitoides* = *D. temminckii* in my decided opinion, as has been stated in the "Catalogue."

P. L. SCLATER.

"The Zoological Record."

IN reference to the note in NATURE of November 21, about the *Zoological Record* for 1894, I must ask to be allowed to say that it is stated in the preface that Prof. Hickson could not undertake a record of Cœlenterata. Consequently there has been no failure of contract on his part. Prof. Hickson has been a valued contributor to the *Record* for several years, and his work was always ready at the time agreed on.

Cambridge, November 23. D. SHARP,
Editor of the *Zoological Record*.

THE LONDON UNIVERSITY.

FORTUNE so far has not been too kind towards the efforts made for adding teaching functions to the existing University of London. As already chronicled in NATURE, the answer of the late Government to the request of the deputation to Lord Rosebery from institutions mentioned in the Report of Lord Cowper's Commission was the introduction of Lord Playfair's "University of London Act, 1895," enacting the appointment of a Statutory Commission to give effect to the recommendations of the Royal Commission. Before it had been read a second time, the Government went out of office and the Bill was dropped. From reports which have lately appeared in the press, it would seem that on June 13 a deputation from the members of Convocation hostile to the scheme waited on the Duke of Devonshire and Lord Salisbury, then in Opposition, and were led to believe that these statesmen were not unwilling to support an amending clause to Lord Playfair's Bill, which would entail the scheme, when arranged by the Statutory Commission, being submitted to Convocation for approval in the manner prescribed for a senatorial election, *i.e.* by voting-papers. And by July 1, Sir John Lubbock, in seeking re-election for the University, had pledged himself to oppose the Statutory Commission Bill unless such a clause were inserted, and comes into line with those against whom he voted in the Senate a year previously. Following this, came the Duke of Devonshire's reference on August 15 to the "strong opposition taken by a large and not unimportant section of Convocation" to the scheme of Lord Cowper's Commission, coupled with the announcement that legislation on the subject would not be undertaken in the short session then commencing.

Judged from such incidents, the outlook could not be regarded as reassuring, and with the return of Ministers to town, steps have been taken to bring to the notice of the Government the urgent necessity of dealing with the burning question of a Teaching University for London. On November 21 the delegates represented on the deputation to Lord Rosebery, met at the University of London, and unanimously passed the following resolution:—

"That the Government be requested to introduce, at an early date, a Bill, similar to Lord Playfair's London University Commission Bill, 1895, appointing a Statutory Commission to carry out the recommendations of Lord Cowper's Commission, but with an added clause giving [in accordance with precedent Acts of similar tenor¹] to all Institutions or persons directly affected by any Statute

or Ordinance proposed by the Statutory Commission, a right of appeal to the Privy Council for the disallowance or alteration thereof, previous to such Ordinance being laid before Parliament for confirmation."

The Duke of Devonshire, on Thursday last, received a deputation in support of this resolution, the delegates present representing not only the institutions named in the Report of Lord Cowper's Commission, but also the members of that and of the earlier (Lord Selborne's) Commission on a Teaching University for London, as well as members of the recent Bryce Commission on Secondary Education. The deputation was introduced by Lord Kelvin, and its views were enforced by Prof. Rücker on behalf of the Senate of the University of London: Dr. Allchin for the Royal College of Physicians, Mr. Heath for the Royal College of Surgeons, Sir George Young (University College), Principal Wace (King's College), Dr. Frederick Taylor (Medical Schools), Principal Whitehouse (Nonconformist Theological Colleges), Sir Henry Roscoe (Association for promoting a Professorial University for London), Prof. Silvanus Thompson (Annual Committee of Convocation), and Mr. Anstie (Committee of Graduates).

In the presence of so emphatic an expression of the unanimity not only as to the need for but also the method of the reorganisation of the present University existing among the many institutions and persons interested in the settlement of this grave question, a sympathetic reply might surely have been expected from the official head of the Education Department. This, however, was not to be the case. The Duke, after conceding the representative character of the deputation, made no further reference to the manifold interests represented by the delegates; no reference to the needs of higher education in London; no reference to the widespread recognition of the necessity for a Teaching University without which, in view of the conflicting nature of the interests concerned, little approach towards a united appeal for a Commission with executive and judicial powers for their settlement could have been gained. On the contrary, his reply dwelt on the difficulty of securing the present status of the external students under the scheme of Lord Cowper's Commission, while admitting that the scheme and deputation were at one in insisting that this should be maintained unimpaired; on his desire to obtain, if possible, an expression of opinion on the subject from the external students, and on the differences in opinion which had arisen in Convocation about the scheme. In Convocation the Duke of Devonshire recognised three sections—those who accept the scheme with such modifications as may be made by the Statutory Commission, those who are irreconcilable, since they express the view that if a Teaching University for London is needed it should be founded apart from the existing University, and those who are of opinion that it would not be enough for the amendments they desired introduced in the scheme to go merely as recommendations to the Commissioners when appointed, whence their claim for a veto on the scheme when arranged, to which we may add a fourth, *viz.* the large proportion, nearly one half of the members, who, so far, have not been beguiled by the foregoing three to express any opinion at all. And recognising only these three, he dwelt on the expediency of everything possible being done to conciliate the opposition, if only on the ground that it is extremely desirable that the Bill, if it comes before Parliament, should come before it in a shape which should excite as little opposition as possible.

It is not too much to say that, in tendering this advice, the Duke showed that he had not had time to balance the relative importance of the views laid before him by the deputation from some members of Convocation in the summer, and those which had been so strongly urged by the delegates whom he was addressing. Had it been otherwise, the disparity between the interests involved is

¹ Oxford and Cambridge Act, 1877, sec. 46.
Scottish University Act, 1889, sec. 20 (a).