Pyramid known at present to exist either in Europe, or even in Egypt, was received last week in Edinburgh from Mr. Waynman Dixon, a young engineer who has recently completed an iron bridge across the Nile between Cairo and Jeezeh. The specimen possesses, Prof. Smyth says, in a more or less injured condition, five of the anciently-worked sides of the block, including the upper and lower horizontal surfaces, together with the levelled surface between. It was the exact angle of this levelled slope which led the late Mr. John Taylor to what Prof. Smyth calls "the immortal archæological truth, that the shape of the entire monument was carefully so adjusted and exactly fashioned in its own day to precisely such a figure that it does set forth the value of the mathematical term  $\pi$ , or does, vulgarly, demonstrate in the right way the true and practical squaring of the circle." Whether this be the case or no, Prof. Smyth declares that the length of the front foot of the stone, or that line or edge from which the angular  $\pi$  slope of the whole stone commences to rise, measures, "within the limit of mensuration error now unavoidable, the number of just twenty-five pyramid inches, neither less nor more. And twenty-five pyramid inches have been shown to be the ten-millionth part of the length of the earth's semi-axis of rotation." Prof. Smyth is very severe on the Egyptologists of the British Museum for the manner in which they conduct their department.

THE Athenaum informs us that the first volume of a Russian translation of Mr. E. B. Tylor's "Primitive Culture" has appeared at St. Petersburg. The German version of the same work is also announced as being just about to appear; and a French translation of Mr. Tylor's "Early History of Mankind," with notes by the translator, M. Emile Cartailhac, and by M. Quatrefages, is stated to be in preparation.

Conclusive proof has been obtained by a correspondent to Notes and Queries, that the treatise "On Probability" is not by De Morgan, but by the late Sir John William Lubbock. On inquiry at the Museum, the little slip of paper containing the original title was produced, and which gives the authorship to Sir J. W. Lubbock. On the back of the slip was inscribed the note—"Information from Prof. De Morgan, Dec. 62."

WE see from the *Times* of India, that Mr. Griffiths, of the Bombay School of Art, with a few of his students, intends, about the end of December, to go to the remarkable caves of Elephanta, to copy the very beautiful painted decorations which still cling to the walls, in spite of damp, neglect, bats, and the relentless teeth of time. These caves are on a small island in the harbour of Bombay, about seven miles S.W. of the city, and contain some very interesting Indian antiquities. They get their name from the gigantic figure of an elephant which formerly stood near the shore, but has now fallen to decay.

A CORRESPONDENT, Mr. W. B. Shorte, writes under date Nov. 4, from on board the steamship Tanjore, Bombay, giving us a few notes on the occultation of Venus, which he witnessed on the evening of Nov. 5. A small telescope with a magnifying power of about 100, and a pair of good binoculars, were the instruments employed. The planet shone with such lustre that it was clearly seen by the naked eye even before sunset, and after sunset appeared for some time as if resting on the upper part of the dark limb of the moon. In a few minutes a very gradual diminution of the planet's light was noticed, and as the occultation proceeded a singular phenomenon was observed, namely, the apparent position of Venus within the moon's circumference, the planet actually appearing for some time as if situated upon the disc of the satellite, though much diminished in size, and shining as a minute point of light. This continued until the moment of complete occultation, the Bombay time of which was 5h. 46m. 47s. The re-appearance on the illuminated edge occurred at 6h. 26m. 32s., so that the planet was invisible for 39m.

## THE ORGANISATION OF ACADEMICAL STUDY IN ENGLAND

IN connection with the question of the best application of the endowments of Oxford and Cambridge, a public meeting was held at the Freemason's Tavern, on Saturday Nov. 16 by members of the Universities and others interested in the promotion of mature study and scientific research in England. The meeting was called in response to a preliminary resolution to the effect that "the chief end to be kept in view in any redistribution of the revenues of Oxford and Cambridge is the adequate maintenance of mature study and scientific research, as well for their own sakes as with the view of bringing the highest education within reach of all who are desirous to profit by it."

The Rev. Mark Pattison occupied the chair. He explained

The Rev. Mark Pattison occupied the chair. He explained that gentlemen present were not the representatives of any political party or political movement, but were there simply for an academical purpose. Neither were they to be considered as having met to take an initiative: the initiative had already been taken by Mr. Gladstone in appointing a commission to inquire into the revenues of the colleges and universities. They were only there to discuss the direction which, in their opinion, ought to be taken by any reform, initiated, not by themselves, but by

other people.

Professor Rolleston, who was the first speaker, commenced by remarking that until the end of the last century, it would be admitted that the Universities were neither seats of learning nor seats of teaching. The first thing that was done was to make them seats of examination; and, as far as that is concerned, they work tolerably well at this moment. The great danger is that they should be made simply into that utilitarian sort of machine a machine for examining and a machine for teaching. speaker by no means wished that their capabilities in the way of examining and that kind of work should be curtailed. Still he thought it of very vital consequence, in this somewhat utilitarian age, to make the Universities into places where original research, and where the production of fresh facts and means of knowledge, instead of the mere communication and reproduction of it, should be recognised. One result of our present examination system is that men who, as grown men and during the whole of their university career, are subjected to the ordeal of examination in futuro, do not look at what they have under study as so much truth, but look upon it as something to be reproduced on paper, and to further their designs on Fellowships and Scholarships, and other pecuniary rewards. Now when a man is kept for something like twenty-three or twenty-four years of his life under that sort of training, he gets apt to look at all work whatever of the intellectual kind, from the point of view of the examination merely. Men get demoralised by the process. They do not look at the truth for itself. They have no notion of shovelling forward the elements of knowledge into some area into which nothing has been before. That is entirely a new vein to them: and he thought one of the first things requisite was that examinations should be considered rather more the work of boys, and of people just emerging out of boyhood, than that they should be prolonged into a sort of struggle for men who have got to man's estate. We have then to consider:—how is it possible for us to encourage that which we feel is an advantage of a greater kind, although it is one which can only be shared by a larger number?—How is it possible to encourage original research without sacrificing soundness of learning in the many? How can we encourage the few to research without at the same time sacrificing the great advantages which we do get for the whole public, by passing a great number of mediocre men through the mill which does make them useful machines for doing work in this country of ours? There is a very serious objection which may be urged :-"But how do you propose to encourage original research? Original research is a work of genius—you cannot fetter genius original research is a work of genus—you cannot refter genus by law—you cannot tie a man who has this gift of original research by rules and laws. You cannot give him definite duties to perform, within a definite time; and then you are in this dilemma:—a man has nothing given him to do—will he not then do nothing?" That is a very common saying among people who have got effectually case-hardened by looking at things in a schoolmaster's point of view. A man who has nothing to do, they tell you, will do nothing. Now he believed by using the system of examination judiciously, by rewarding people for what they do and show under that particular ordeal, and then by giving them something or another which does keep

them, so to speak, from beggary for the time being, it is possible then, by a well-adjusted system, to keep their minds open to original research. But we know that funds must be found for it. A man cannot prosecute research unless he has got something to find him bread for the passing moment. Although he thought we should be entirely wanting in our duties if we laid aside the examination system, which has rescued the universities from the slough of idleness in which they were eighty or ninety years ago, yet, he said, we neglect our duty even more by neglecting the encouragement of men who have the capacity for original investigation and research. Again, a man who has not some notion of what original research means, is not fit to be a teacher at all. He would go even further, and say, if a man has the gift of original research, even if he entirely lack the power of communicating, and, what is another thing, the taste for communicating knowledge, he ought to have a place found for him. A man of that kind is like a light shining all around; setting by his example and his work a higher tone to society, a man who has the power of going into some new sphere, so that he may say to those whom he is teaching:—We are the first who ever burst into that silent sea.

Dr. Carpenter then spoke of the different system pursued by the German universities to that which prevails in our own.

Dr. Burdon Sanderson continued on the desirableness of fostering at the universities a class of what in Germany is called the *Gelehrter*, that is, said Dr. Sanderson, a man who not only possesses as adequate a knowledge as other men do of subjects in general, but has made a perfect study of some particular subject. The speaker then dwelt on the study of physical science, and of physicology in particular, as it should be conceived at an university.

The resolution "That to have a class of men whose lives are devoted to research is a national object" was then carried.

Sir Benjamin Brodie said that he had the strongest opinion that when the report of Mr. Gladstone's commission is published, and the true revenues of the colleges of Oxford are made known to the House of Commons and the world, the greatest surprise, and he might also say, the greatest indignation will prevail. He admitted fully that a great amount of good educational work is done by the Universities, but certainly thought that the work is totally disproportionate in every way to the machinery which exists for its performance, and it is idle and useless to say that we want an expensive collegiate system—a system of colleges manipulating actual revenues of thousands of pounds a year for the purpose of educating, however admirably, 2,000 students who, we may also say, absolutely pay for their education besides. When those statements are made, as they will be made, as to the property of the Universities and the Colleges, there will be the greatest danger that we may have a reform which perhaps none of us wish for—a reform which may be no improvement at all, but which may simply consist in the alienation from the purposes of knowledge of these great funds. Now with regard to the pro-motion of knowledge in various branches, this great object was entirely lost sight of by the Executive Commission in 1854. He believed that most persons in Oxford who are interested in real education, are not very well satisfied with the fruits of this Commission. The few things that they did in regard to the promotion of knowledge were done partly with that view, and partly under the pretext of reviving old foundations, such as the Linnæan professorship at Merton College, and four professorships at Magdalen College, and two or three other small institutions which the University had long ago buried under ground. The Commission dug these up, and therefore so far did something for the promotion of science. And indeed it is impossible, unless you absolutely destroy Oxford and Cambridge, to get rid of every record of the idea that those universities are founded for the promotion, and not solely for the diffusion, of knowledge; for that idea really runs through the whole university system. The great libraries of Oxford and Cambridge, and also the great collegiate foundations, bear witness to it. Now we wish to take up this thread where our predecessors dropped it, namely, this idea that the universities are institutions, not only for diffusing knowledge and education, but for absolutely promoting knowledge and investigation. However, a much more important object than that is the real welfare of the nation, as that welfare of the nation may be promoted by the growth of science and know-With regard to scientific research, men are really hindered from investigation on all sides from the want of means of subsistence, and means of work. Certain aids are afforded to the investigators of science by existing institutions, by the Learned

Societies of England and the Continent; and we have also two or three national institutions which certainly on such an occasion as the present ought by no means to be forgotten, because we shall be told that this is not an object for the nation to care One of those institutions is the British Museum, which really exists solely for the purpose of preserving knowledge. Another institution is the Royal Observatory at Greenwich. We have again private foundations: the Meteorological Observatory at Kew; the Radcliffe Observatory at Oxford, and the like. All those institutions are founded, not in the least with regard to education alone, but for the purpose of promoting the growth of knowledge. He thought it really very little use for us to be too indefinite; and that, if we wish to produce any result, we must have some definite plan and programme. His own idea was tha it would be very desirable to found in the universities of Oxfordt and Cambridge certain specific institutions for the promulgation of scientific research; using the termscientific research in its widest sense, and include in it all knowledge which is capable of being made the subject of research; but certainly specific institutions should be founded for this object. It will not do to trust these great institutions to the growth of mere ordinary professorships, but he would certainly like to see certain specific institutions devoted to this object, which should represent the various great departments of human knowledge. Those institutions to be conpartments of human knowledge. Those institutions to be connected with professors specially selected for the objects which they have to fulfil, and where the professors would be provided with assistance and apparatus, and every means and appliance which could really be valuable and useful to them for the pur-poses of research; and he did not think that much less, or anything less, than this, would fulfil the object which we desire.

The Chairman moved, as the next resolution, "That it is

The Chairman moved, as the next resolution, "That it is desirable, in the interest of national progress and education, that professorships and special institutions shall be founded in the

universities for the promotion of scientific research."

Professor Seeley spoke on the question of prize fellowships. He said the speeches to which he had had the pleasure of listening had brought the question of University Reform to a focus. He anticipated that this meeting, particularly if the movement were followed out further, would convey to the English mind an idea which it had perhaps no very great natural capacity for conceiving. The preceding speakers, said the Professor, have introduced to the Englishman to-night a character for whom we have found it difficult to find a name, because there is no name for him in the English language, and we have been obliged to call him in the German Gelehrter, and in French we call him a savant, but there is no English name for him. He is a person who is engaged in mature study, and who lives by his study; and we have made it plain that our object in University Reform is one definite thing; and that is to find for this person at the same time as we find him a name, a career. But we shall be met by an assertion that he already has a career in England, and he has also a name—that he is, in fact, the Fellow of a College. He wished to say a word or two first about this Fellow of a College, and about certain popular reasons for which it is supposed to be desirable always to have such persons. If you were to ask most English people about the English universities, they would say that the most glorious feature about them is just this—that a young man may go up, from any part of the country, without a penny in his pocket, and may get 300l. a-year given him for life; and to take away that, is simply to take away the scholastic glory of England, and whatever makes its universities superior to the beggarly universities of the Continent. To give a young man 300% a-year, they think, is a thing which explains itself; but if you come to examine their meaning, you will hardly question that they are looking at the matter as a question of charity; that they want the young man to receive so much to do him good, and to give him a start in life.

He would, however, remark that he thought the objects of charity should be those who stand in need of it, and are not likely to be able to help themselves. But we carefully select young men in the vigour of life; and, not only that, but young men who have shown themselves to be possessed of more than ordinary abilities, that is to say, just the very young men who can get on in life without any such help. He recommended, if these institutions are retained, simply on the ground of charity, that these fellowships should be given to men carefully selected, whose abilities are less than those of others. Again, it is said, how excellent a thing it is that a young man going to the bar, in his first year of brieflessness, should have his fellowship to fall

That is partly the same object of charity; but mixed up with it is another notion, that it is a good thing for the bar that in this way men of high education are brought into it. That is a very important question indeed, but he could not say that it is a question which we of the universities are called upon to discuss. There are other institutions which have charge of the interests of the bar—let them consider it. We have in London several great Inns of Court; and it is often said that they have funds. If it be so, and if it be desirable, by means of fellow-ships, to procure men of high education to enter the profession of the law, let them establish fellowships themselves for that purpose. That is a very simple course. But now comes the question which this resolution deals with. Is this fellow of a college, of whom we have been speaking, a person of mature study, a person who devotes his life to advancing the bounds of knowledge? Of course it is quite possible to mention the names of distinguished men, who have risen to distinction in their particular branches as fellows. But the question for us is, are fellows of a college, as a rule, men who are preparing themselves for that career,—is their life devoted to study and to knowledge-are they persons who are either enlarging the bounds of knowledge, or are on the way to enlarging them? He answered, confidently, they are not the class of men. He did not charge them with being a class of men with whom any fault whatever can be found. They are not what we are told they used to be many years ago. It would not be possible, perhaps, to find instances of the torpid, vacant lives which used to be led under the protection of a fellowship. They occupy themselves now in some way. They supply the scholastic world, they supply the clerical world, sometimes they supply the bar, they conduct a great many examinations in the country, and they do a great deal of work which is very valuable; but mature study is a work which they do not, as a rule, engage in, only with some exceptions here and there. The Professor went on to say that fellows were neither chosen by the right kind of electing body, nor according to the right method, for the end of furthering mature research. He criticised the existing terms of the tenure of fellowships, as well as the existing system of examination at the universities.

The Chairman then put the resolution: "That the present mode of awarding fellowships as prizes has been found unsuccessful as a means of promoting mature study and original research, and that it is therefore desirable that it should be discontinued,"

which was carried.

The Chairman then said that the subject of the professoriate is of course a very wide subject, and it is impossible to do more than just indicate the position which that question holds in our scheme. It is desirable that we should make it clearly understood that we are not aiming a blow at what is called the educa-tional efficiency of the place. The question of the professoriate is one which was first mooted twenty years ago as the question of the professoriate v, the tutoriate, and it was regarded as a revolution in the educational institutes of the University. question which we are now raising of converting the University into a centre of mature study was not then raised. The question of University reform turned entirely upon the educational ques-tion of professors v. tutors. What the Executive Commission of tion of professors v. tutors. 1854 did was not to substitute professors for tutors in any great measure in the educational system of the University. storm that had been raised by the mere sound of the word "professor" was so great that they were daunted, and did not dare to propose any large creation of the professoriate. are entirely changed now, and even if we confine ourselves only to educational requirements, we have not that battle to fight. But we have the situation which the Commissioners of 1854 They raised a certain created for us, and that situation is this. number of the then existing professoriates, and added to them a few others; and so called into existence a body of professors, many of whom have been extremely valuable and influential members of the University. But the situation of a professor in the University at present, or at any rate of the philosophical professors, is that of persons who are entirely outside the working of the system. For instance a very eminent professor once advertised a course of lectures on accents simply. of lectures he had prepared not only with very great pains, but he had!for years investigated the subject of the origin and growth of the accentuation of language, in a way in which it had never been done before. His work was an original work. He had collected all the special programmes that bore on the subject, and he had constructed a history of language accentuation.

advertised this course, and proceeded to give it. At the first lecture the room was full; but when they found that this was an original philological investigation, and not a lecture as to the rules for accenting the perfect participle of the Greek verb, in order that they might use it in Moderations, they immediately fell off, and left it. The consequence is that the professors are not at all working now as a portion of the system. Now if we say that we want to set up more of these professors, University men will say, "Professorships are doing no good as they are at men will say, "Professorships are doing no good as they are at present. We are doing the work. It is we, the tutors, who are doing the work of the place, and you professors are simply ornamental." This is the result of the way in which the Commission of 1854 set about its work. They were told that the great evil of the University at that time was that the colleges had absorbed the University, and the first thing that a reform of the University should aim at was the reconstituting the University as against the colleges. Now, it is very important for us to let our attitude be understood to be quite different. We do not want, as the phrase is, to rob the colleges to make the University rich. The antithesis between colleges and university is nil, for our pur-We do not intend to perpetuate the mistake which the Commissioners of 1854 did, and to take away a few thousand pounds from the colleges, make it over to the universities, and leave the colleges as they are. The speaker then went on to specify the diversions of college revenues effected by the Commissioners of 1854 by the endowment of professorships, and said that was not the kind of precedent which the present meeting was anxious to see followed. We are agreed (he continued) in desiring the creation of a body of resident students and teachers-real students and real teachers—and the attitude we shall take will be to say, "We will leave the colleges exactly where they are. We do not intend to rob the colleges and give the proceeds over to the University, but we will gradually convert them into what we wish to see them." The supposed antithesis between professor and tutor should be sunk entirely, in our point of view, and the whole body of resident graduates should be brought into one homogeneous association of teachers all working together—these teachers naturally being of different ages, and consequently of different attainments. We would begin, as they do in Germany, with the privat docent. It has been very well said that the privat docent is the order upon which the principle of German univer-sities principally rests. The eminent professors of whom we hear are not the actual working men of the place, but they are the men who have gone through the ordeal of working men as privat They have been trained to that European celebrity under which we learn their names, but the privat docent are the working men of the place. Now, instead of putting the tutors into an attitude of hostility to the professors, as is the case at present, they might be reconciled to the professors by making them also professors, but making them of a lower grade in the teaching system. Of course there are various steps through which a successful tutor should have opportunities of working himself up until he may hope to attain the highest eminence that the University can afford him. Again (remarked the speaker) we must not endeavour directly to oppose the present examination system, however much we may be convinced of its effect, as actually carried out, in sacrificing literary and scientific ability. We must endeavour, as far as we can, to enfilter our system into the examination system; and for this reason we must not talk about professors who can be planted there to pursue their original research only, and make that our single object. We must take up the whole institution of teaching in the universities, and we must endeavour to impress upon the teaching the fact which has already been dwelt upon, namely, that there can be no healthy intellectual training unless the man who conducts it is a person who is himself capable of, and has the opportunity of engaging in, original research. That is the strong point; but we must not set ourselves to go and pull down the present system of examination directly. Another notion of university reform which we shall have to meet is that notion of transplanting a certain portion of the university revenue into the manufacturing and commercial centres of the population. That is an idea which, to those who attend to what one sees in the papers on the progress of opinion on the subject of the universities, has evidently taken deep root, and which more or less that idea has taken such deep root, that it is doubtful whether, if we were to try, we could prevent something of that sort being done. If these persons who are sent over to Manchester and Liverpool are entirely under our direction, and are made not mere persons who go and deliver an evening lecture for the amusement of the fashionables in Manchester, then it would be very desirable if something like a connection between the universities and the centres of population could be opened. One great complaint is, that the manufacturing and commercial interests have outgrown us; that they no longer regard us; that they do not think we have got anything worth having; and of course it would be very desirable to reconquer that class of society, and bring them back; and this tendency in the public mind, to dispose of a portion of the University money, in sending it down to these places, might be directed in such a way as to regain the possessors of wealth for us.

The Chairman put the resolution—"That a sufficient and properly organised body of resident teachers of various grades should be provided from the Fellowship Fund," which was also carried.

After one or two more speeches, it was resolved to hold another meeting in January to continue the discussion. The persons present agreed to form themselves, together with others signing the resolution, into a Society for the Organisation of Academical Study. A provisional committee was elected, and the meeting adjourned.

## SOCIETIES AND ACADEMIES

## LONDON

Royal Society, Nov. 21.—"On the Mechanical Condition of the Respiratory Movements in Man," by Arthur Ransome.— "Further Experiments on the more important Physiological Changes induced in the Human Economy by change of Climate," by Alexander Rattray, M.D.—"On Linear Differential Equations" (Nos. VI. and VII.), by W. H. L. Russell, F.R.S.

Zoological Society, Nov. 19.—The Viscount Walden, president, in the chair. Mr. Sclater called attention to the two Livingstone expeditions into the interior of Africa now in pre-paration, and urged the importance of endeavouring to have zoological collections made in the countries about to be traversed by them.—Mr. A. D. Bartlett read some notes on the birth of the hippopotamus which had been announced at the last meeting of the Society. Mr. Bartlett called particular attention to the fact that on one occasion the young one appeared to have remained under water, without coming to the surface to breathe, for nearly fifteen minutes, and also pointed out that this was the first instance of the hippopotamus suckling her young in cap-tivity.—A communication was read from Mr. W. H. Hudson, of Buenos Ayres, containing notes on the habits of the Vizcacha (Lagostomus trichodactylus), and giving some interesting details of its manner of forming burrows and living in society with other animals.—A communication was read from Mr. George Gulliver, F.R.S., containing observations on the size of the red corpuscles of the blood of the Salmonidæ and of some other vertebrates.—Dr. A. Günther, F.R.S., gave a notice of a snake from Robben Island, South Africa, living in the Society's gardens, which appeared to belong to a new species proposed to be called Coronella phocarum.—A communication was read from Mr. J. Brazier, containing a list of the species of Cassidae, found on the coast of New South Wales, with remarks on their habitats and distribution.—A communication was read from Mr. Andrew Garrett, of Tahiti, in which he gave a list of the species of Mitridæ, collected at Rarotonga, Cook's Islands.—A communication was read from Mr. W. H. Hudson, containing some further observations on the swallows of Buenos Ayres, being supplementary to a previous paper on the same subject.—A communication was read from Dr. J. E. Gray, F.R.S., containing notes on Propithecus, Indris, and other Lemurs (Lemuriana) in the British Museum.

Linnean Society, Nov. 21, Mr. G. Bentham, president, in the chair.—On the Compositæ of Bengal, by C. B. Clarke. The author corroborated Mr. Bentham's estimate of the very small proportion of Compositæ relatively to the whole flora of flowering plants in the Indian peninsula as compared with other countries. In Bengal they show only the proportion of about one in twenty-two, and in Malacca the still smaller proportion of one in about forty-five species. The number of Indian species of Compositæ in De Candolle's "Prodromus" will probably have to be considerably reduced.—On Diversity of Evolution under one set of external conditions, by Rev. J. T. Gulick.—The author recapitulated the facts connected with the distribution of the Achatinellinæ in the Sandwich Islands, familiar to readers of this journal, and drew some general conclusions.

Chemical Society, Nov. 21, Dr. Frankland, F.R.S., president, in the chair.—A paper on the "Standardising of Acids," by W. N. Hartley, was read by the secretary. The author finds it convenient to prepare the solution for rapidly standardising acids by dissolving a known weight of metallic sodium in alcohol and diluting the solution with water; it is then ready for use, A second communication on anthraflavic acid, by Mr. W. H. Perkin, F.R.S., included an account of two new derivatives, diacetyl-anthraflavic acid and dibenzoyl-anthraflavic acid.

Anthropological Institute, Nov. 19, Sir John Lubbock, Bart., M.P., in the chair.—Mr. Heath read a paper on the Moabite jars and inscriptions lately purchased by the Germans. The author entered first into the philological and other arguments in favour of their authenticity, which the English authorities had denied. Certain points in which the Moabite stone had been hitherto considered to throw light upon the earliest forms of Hebrew were shown to be decided differently by these jars, so that the question was still open. The following was given as the inscription on the first jar:—"Inscription on his jar dedicated by Jai, servant of Isaac in Mesha, such as is raised in devotion to Nataracu. This is a devotion to Dov, wife of Domiodu, the same who in the might of her knowledge has been incorporated with Mesho. She is united with Hachuasho in Mesha, raised to unity with Daocush. May he be gracious." In the discussion which ensued it was maintained that further evidence of the actual specimens or casts from them was necessary to the final determination of the authenticity of the jars.—A paper by Capt. Burton was also read on human remains from Thorsmörk, in Iceland, describing the conditions under which parts of a human skeleton were found under a cliff where much rocky matter, possibly moraine, has fallen. No date was given to the relics, which tradition assigned to the time of "Burnt Njah." Dr. Carter Blake gave a particular description of the bones and skulls found, which appeared to accord with those of the Norwegians. He was unable to detect Esquimaux, Irish, Lappish, or Russian affinities. The horse was larger than the present Icelandic horses.

Geologists' Association, November 1.—Mr. T. Wiltshire, president, in the chair.—"On the Influence of Geological Reasoning on other branches of Knowledge," by Mr. Hyde Clarke.

Entomological Society, Nov. 18.—Mr. H. W. Bates, F. L. S., in the chair.—Mr. S. Stevens exhibited an example of Vancssa antiopa captured by Mr. W. C. Hewitson in his garden near Weybridge, so lately as the 1st inst. Mr. H. Vaughan exhibited Crambus verellus, a moth new to Britain, captured at Folkestone by Mr. C. A. Briggs; also varieties of Vanessa Atalanta and Pyrameis cardui. Mr. Meek exhibited Nephopteryx argyrella, a species of Phycude new to Britain, from near Gravesend; also varieties of Lepidopterous insects. Mr. Meldola exhibited a beautiful drawing of the dark form of the larva of Acherontia Atropos. Mr. Wallace forwarded exuviæ of some insect, apparently of the family Tineina, which had committed ravages amongst the dried mosses and lichens collected by Dr. Spruce, in Brazil. Mr. Müller read notes on the entomological papers existing in the "Verhandlungen der Schweizerischen Naturforschenden Gesellschaft," from 1823 to 1864.

Celtic Society of London, Nov. 12.—Dr. Carter Blake read a paper on the Celtic and pre-Celtic populations of Western Europe. After pointing out the value to be attached to traditions of pre-Celtic races, the author commented at length on the extravagant statements of Schlotheim, Berghaus, and Jagel with regard to the alleged diminution of the Celtic race. He gave a description of the races maudites of France, especially of the Cagots, Burhins, and Chizerots, adopting the conclusions of M. Francisque Michel, and denying the affinity of the pre-Celtic tribes to the Basques or to the Laplanders, calling attention to the confusion which existed between the various definitions of the Celtic race, the "Celts" of history, of tradition, of philology, and of craniology not being in accordance with each other. The author defined the cranial characters as those which were most permanent and best defined, such characters assigned to the Celt features, which had been described by Beddoe, Pike, and Davis, and which the author amplified at length. In conclusion he partially adopted the opinions of Dr. Knox on the moral and mental characters of the Celts.

## CAMBRIDGE

Philosophical Society, Nov. 11.—The following communications were made to the Society by Mr. W. Kingsley. 1. Certain advantages in E. B. Denison's Gravity Escapement Clock for re-