

completely independent of each other, each "expressing" itself (the word is his own) through its own activity in its own world of what is commonly called reality or external reality. The true reality is thus the monads, the so-called world of knowledge is ideal. The crux of any such theory is its solipsism, but he avowed and defended that attitude. He evaded the objection to solipsism by making community with other individuals part of the essential nature of each individual. I do not myself see how if the universe is each man's expression, it can still contain individuals who, like himself, are independent centres of activity. Often, however, as I pressed this point upon him, he did not seem to feel that it presented a real difficulty, and he seemed to think he had met it by reference to speech and mutual intercourse. In the same way he seemed to me to make the special interpretations by individuals of the physical world too exclusive of each other, and to forget that the very pith of the doctrine of relativity is that physical laws are the same in form for every observer. Leibniz himself had God and the pre-established harmony to save his monadism: but for Carr, God was but a part of the world of each monad; and this, to my mind at least, presents difficulties.

Carr's explicit philosophy is chiefly contained in the work I have mentioned and the earlier "A Theory of Monads". But besides these and his expository books, there were others, which show what a wealth of knowledge he had, outside strict philosophy or only partially related to it; in particular, two books which he published during his Californian period, "Changing Backgrounds in Religion and Ethics" and "The Unique Status of Man". When I happened once to speak to him enthusiastically of Pascal's "Pensées", with which I had made acquaintance quite late in my

life, I found that the book had been his constant companion for many years.

His assiduity and industry were immense, and if his friends knew well the sweetness of his character, the amount of work he accomplished is a witness to the strength and persistence of it. To my mind, Carr's work has been for the philosophy of our time a refreshment, and even, with all allowance for its shortcomings, a fecundation; and I must not forget the singular beauty and simplicity of his style of writing, which reflected his own directness and candour of mind.

S. ALEXANDER.

#### MR. ERNEST NOEL.

MR. ERNEST NOEL, who died at his home, Dulaney House, Patching, Sussex, on May 20 at the age of ninety-nine years, was the doyen of the Geological Society of London. Elected into the Geological Society in 1849—P. Martin Duncan, who afterwards became a fellow of the Royal Society, was also among the chosen in that year—he had been eighty-two years on its roll, a span probably without parallel in the annals of English scientific bodies. At the date of Noel's election (he was then living at Hornsey), Sir Charles Lyell occupied the presidential chair, and Charles Darwin was a member of council. Such circumstances had provided many interesting reminiscences of contemporaries and original workers in geological and general science. Born on Aug. 18, 1831, Mr. Noel was the second son of the Rev. the Hon. Baptist Noel, who himself was the tenth son of Sir Gerard Noel, and brother of the first Earl of Gainsborough (second creation). Mr. Noel was educated at Edinburgh and Trinity College, Cambridge.

T. E. J.

### News and Views.

THE summary by Sir James Jeans of a series of lectures on the annihilation of matter, delivered by him during his recent visit to the United States, which we publish as our supplement this week, is a characteristically skilful presentation of the case for the reality of this process, of which he has for some time been convinced. Although, as he indicates, the doctrine of the permanence of matter has been a leading feature of the greater part of the history of science—it dates at the latest from the time of Aristotle—supporters of the opposite idea have never been wanting. It appears to be peculiar to our own time, however, that they are to be found among followers of the 'experimental philosophy'. Yet, fantastic as the idea would have seemed to the physicists of a few generations ago, it is impossible, after considering the evidence which Sir James Jeans so ably summarises, to dismiss it as unworthy of scientific attention. The process is mathematically possible; it is certainly not fundamentally inconsistent with modern atomic theory; it provides a plausible explanation of a physical

observation—the highly penetrating radiation; and it appears to be the only means of bringing order into the perplexing mass of data concerning the constitution and history of the stars. The cumulative effect of these facts, even if they are not strictly additive, is considerable, and it is not surprising that the hypothesis of annihilation is being treated with marked respect.

GENERAL acceptance of the idea, however, is out of the question until more facts of observation are available. Sir James remarks that "the majority of astronomers think it probable . . . while many, and perhaps most, physicists look on the possibility with caution and even distrust". It is perhaps for that reason that he has devoted the greater part of his discussion to the physical evidence. While his diagnosis of the situation is, perhaps, not very inaccurate, it is scarcely a fundamental one. The reaction of the man of science—whether he be physicist or astronomer—to the idea will depend on his mental constitution. The passage from mathematical possibility to physical



actuality is traversed much more easily in some minds than in others. Physicists have been known whose enthusiasm has sometimes triumphed over their scientific scepticism, and, on the other hand, even an astronomer may demand more than an æsthetic satisfaction in co-ordinating his observations. It would be a mistake to suppose either that the astronomer has a more elastic scientific conscience than the physicist or that the physical evidence for the annihilation of matter is less than the astronomical. The simple fact is that the hypothesis of the annihilation of matter is a legitimate, useful, and stimulating one, with at least as great a probability as any alternative that has been suggested, but that it awaits further observational and experimental data for its final assessment. In the meantime, we may be thankful that in these matters we have both pioneers and critics of the highest quality.

At a meeting of the Council of the Royal College of Surgeons of England, held on July 9, Lord Moynihan was elected president, for the sixth year in succession. This constitutes a record in the annals of the College. Although an election to the presidential chair is made annually, it has become the custom to extend the office to three years. Only once before has this term been exceeded, when the late Sir William MacCormac was elected president five years in succession—1896–1901. During Lord Moynihan's presidency, research laboratories have been opened in connexion with the museum of the College, and research scholarships have been endowed to permit young men who intend to become surgeons to devote one year or more to experimental research. Research scholars are encouraged to maintain their connexion with their hospitals and to continue their participation in clinical work.

On the eve of his re-election to the presidency of the College, Lord Moynihan laid the foundation-stone of an institute for surgical research—to be known as the Buckston Browne Farm for Surgical Research. The object of this farm is to permit the research students of the Royal College of Surgeons to carry out experiments on animals kept under the most favourable conditions. The erection and endowment of this invaluable addition to the equipment of the Royal College of Surgeons has been made possible by the munificence of one of its fellows, Mr. George Buckston Browne, who is giving £100,000 to the College in order that it may complete its scheme of research. Mr. Buckston Browne, as readers of NATURE will remember, purchased Down House, Charles Darwin's home for forty years, endowed it, and handed it over, with its grounds, 23 acres in extent, to the custody of the British Association. More recently, he bought 13 acres of land adjoining the western side of the Down House property and beautifully situated. This land he has conveyed to the Royal College of Surgeons, and it was a site on these new fields which was the scene of the ceremony in which Lord Moynihan played the leading part on July 8. In laying the foundation-stone, he said that owing to the great beneficence of a fellow of the

College, they were laying the foundation-stone of an institute for experimental research which would add the one remaining link required for the proper development of surgery in Great Britain. The donor of the institute, in reply to Lord Moynihan, said that they had been able "to bring the great genius of John Hunter, who did so much to throw light on the living processes of the human body, alongside of the home of that other great genius, Charles Darwin, who did so much to emancipate the human mind from superstition. Both men are now brought together on a sacred spot in Kent." Mr. Buckston Browne's gift has been rightly described as the most beneficent ever made by a surgeon for the advancement of his profession.

To mark the occasion of its jubilee, the Society of Chemical Industry has issued a special number of *Chemistry and Industry* which will undoubtedly appeal to all who are interested in the historical aspect of applied chemistry. The earlier part of the issue is devoted to an account, not hitherto available in compact form, of the formation and development of the Society, which has been very closely identified with the growth of the chemical industry in Great Britain, and to an illustrated series of biographies of past presidents and medallists, amongst whom are numbered such distinguished men of science as Sir William Ramsay, Sir William Crookes, and Sir James Dewar. The second half of the volume, consisting of reprints of twenty-one of the more important papers which have been read before the Society during the past fifty years, indicates the wide range of topics which fall within the scope of the Society's activities. The reprints include the paper read by Sir Oliver Lodge before the Liverpool Section in 1886 on "The Electrical Deposition of Dust and Smoke, with Special Reference to the Collection of Dust and Fume, and to a Possible Purification of the Atmosphere"; Weldon's account of "Some Recent Improvements in Industrial Chemical Processes", read in 1882; Mr. William Macnab's fascinating story of "Some Achievements of Chemical Industry during the War in this Country and in France" (1922); and Sir William Pope's Royal Institution discourse on "Faraday as a Chemist" (1925). Apart from the event which its appearance commemorates, the issue is of importance on account of the great historical value of its contents.

THE Safety in Mines Research Board has issued its paper No. 66, being a report upon haulage accidents in collieries, and, as usual, the report is issued at the nominal price of 6d. so as to be available to all interested in colliery work. The subject is one of very great importance, first, because next to falls of ground, haulage accidents claim the largest number of victims in collieries, and in some districts are even the most prolific cause. Whereas it is quite true that the proportion of fatal to non-fatal accidents due to haulage is much less than that due to certain other causes, such as explosions of firedamp or coal dust, nevertheless, the very large number of non-fatal accidents show that the subject is one worthy of



investigation. An interesting table in the report shows that whilst the number of fatal accidents per thousand persons employed has, roughly speaking, been halved since 1873, that due to haulage accidents is practically unchanged in that period, and this fact alone shows that the subject is worthy of serious investigation.

THE problem is a difficult one on account of the great variations, not only between different districts but also between different collieries in the same district. Thus, it is pointed out that there is a high rate of haulage accidents in Northumberland and Durham, and it is suggested that this may be due to the prevalence of bord-and-pillar working in this coalfield, involving a large use of pony haulage and of young lads in charge of the ponies. Again, it is pointed out that in one of the Scottish collieries the highest accident rate is nearly thirty times the lowest accident rate. The report naturally makes no definite recommendations as to what steps should be taken to decrease the number of accidents, that not being the object of the Committee; its work was simply to prepare a scheme for investigating possible methods of reducing the number of haulage accidents, and accordingly the Committee makes a number of recommendations for research, which appear to be thoroughly sound and well warranted by the conditions, although the Committee itself points out that many of these accidents "are due to causes which could only be overcome by a change in human nature".

THE small tortoise-house behind the old reptile-house—now converted into a bird-house—at the London Zoological Gardens has just been refitted as a tropical house; the atmosphere is most convincingly tropical, and one side is fitted up as a greenhouse-aviary, with stone-plants, rockwork, and a little streamlet and pool. Here are located a pair of African jacanas (*Actophilornis africanus*) and some interesting passerine birds, pittas, sunbirds, sugar-birds (Cerebidae), and small tanagers. On the other side there are three compartments, two tenanted by platyrrhine monkeys, including a howler, and the third by the first hoatzin ever exhibited here. It is interesting to note that, just as the anatomy of this peculiar bird points to several different groups, so do some of its actions recall groups different again—it has the crouching walk and squatting pose on a perch of the cotton-teal or goslets (*Nettopus*) and the upthrow of the wings on alighting of the sandpipers. With the exhibition of this type the number of scientifically important bird-families yet to be exhibited is reduced to five—the todies, jacamars, puff-birds, finfoots, and the Mesitidae of Madagascar. In the present reptile-house, an important acquisition is that of specimens of the Australian frilled lizard *Chlamydosaurus*, an agamid species so rare in captivity that it has only once been exhibited before. It has to rely for notoriety on its frill, its power of rearing and running on its hind-legs being now known to be shared by several other lizards, notably by the iguanid *Basiliscus*.

THE practice of shooting all abnormal varieties of birds is so prevalent that it is worth while to direct

attention to a case recorded by Mr. M. Mason in the *Field* of June 20, in which a white hen grouse was protected instead. The result was that she lived to rear four broods, being at last found dead and torn in her fifth year. Of her offspring, many were pied and one cream-coloured, but no white was found in the second generation. Although it was suspected that her death was due to an eagle, her survival for so long may perhaps be attributed to the reduction in the number of predatory birds by modern game-preserving, but the fact that her offspring so soon lost any trace of her abnormal colouring indicates that other causes besides natural selection by enemies contribute to limit white colouring; it must also be remembered that though a brown protective plumage is so very common among game birds, and generally characterises the females even where the males are conspicuous, yet hens may be green, in *Rollulus*, and black in *Acomus*, while *Crossoptilum tibetanum*, a large, conspicuous bird, is nearly all white in both sexes and at all seasons.

CAPT. C. W. HUME has written protesting against our suggestion that truth had been sacrificed to propaganda in certain statements in "The Animal Year Book". Clearly he has not read our comments carefully, for although we gave page references to two particular statements, his reply omits to mention one and deals with another of which we made no mention and which is on neither of the pages quoted. But the kernel of the whole matter seems to us to be this. If cruelty is to be measured by the amount of suffering borne by the victim, the same punishment may have different cruelty values even in different men, for it will depend upon their sensitivity. Therefore the statement that the degree of pain suffered by a lower animal trapped by the leg is "roughly comparable to crucifixion" suffered by the much more highly organised and, moreover, self-conscious human being, is, to put it bluntly, rubbish. If, on the other hand, cruelty is to be measured by the intention of the torturer as well as by the suffering of the victim, the other statement we referred to is even less accurate, namely, that the torture inflicted by the steel-toothed trap and the common snare is on a par with the medieval torture of human beings. For, apart from the facts of comparative sensibility we have stated above, the deliberately designed tortures of human beings devised for the sole purpose of causing pain stand in a category by themselves. We do not wish to minimise the sufferings caused by steel traps; surely there is no need to exaggerate them.

MESSERS. COOKE, TROUGHTON, and SIMMS have produced a simple instrument known as "The Orientator", for enabling architects, builders, house-agents, and others to determine visually from plans the direction in which the sun's rays will fall on any window, building, or wall during winter or summer. It consists of a flat metal ring, to the central end of a radius of which is attached a thread terminating in a small ball representing the sun. A portion of a second ring (which, if complete, would form a short

(Continued on p. 111.)



cylinder) is fixed to it at such an inclination that if the first ring is horizontal the edges of the second follow respectively the paths of the sun in the sky at the summer and winter solstices. Any one instrument is, of course, suitable only for a single latitude. The instrument is placed on the plan with the centre of the horizontal ring over the window or wall in question and with an appropriately marked point in the north direction, and the thread is stretched by holding the ball between the fingers. When the thread rests against an edge of the inclined ring (on which a scale is engraved giving the hours of the day) its direction is therefore that of the sun's rays at the corresponding solstice. Observation of the plan from above then shows immediately what obstacles to sunlight, if any, are encountered. The makers point out that since the declination of the sun changes only slowly near the solstices, the instrument is trustworthy for a considerable portion of the year; but an obvious improvement would seem to be the provision of slits in the inclined ring, through which the thread could pass to represent the sun's rays at intermediate times. The instrument can be supplied for any latitude, north or south. It weighs 1 lb. and is 6 in. in diameter at the base. It is constructed of stout brass, which is chromium-plated to resist corrosion and to prevent soiling of the plans. The cost is £2 2s.

AN international festival of folk-dancing is to be held in Copenhagen on July 25, when representative teams from all Scandinavian countries, including Finland, Greenland, and the Faroe Islands, will attend. An English team of members of the English Folk-Dance Society will also take part. The festival should be of the greatest æsthetic and scientific interest, especially as some of the dances—those from the Faroes, for example—must be of considerable antiquity, and in certain cases suggest, almost unquestionably, an ancestry to be traced ultimately to a form of sun worship. Folk-dancing is becoming increasingly international, and thus, when the dances of different countries are seen side by side, affords exceptional opportunities for the comparative study of survivals of primitive custom and belief. For example, in the year-book entitled "In Northern Europe 1930", edited by Mr. Rolf Gardiner, there are accounts of expeditions to East Prussia, Silesia, and the Baltic towns, as well as a description of the English tour of the German singers, when they were accompanied by English dancers. Further, the English Folk-Dance Society is arranging to visit Paris for a demonstration on July 25 in the British Music Society's English week at the Colonial Exhibition, and it is hoped to bring Transylvanian dancers to England next January. An endeavour is also being made to organise an international festival on a large scale, to be held in London in 1936.

A NOTABLE advance in naval machinery has been made in the destroyer H.M.S. *Acheron*, of which some particulars are given in an illustrated article in the *Engineer* for June 26. The *Acheron* is one of the 'Acasta' class, being 312 ft. long and of 1330 tons

displacement, but whereas the *Acasta* and other vessels have a working steam pressure of 300 lb. per sq. in., the steam pressure in the *Acheron* is 500 lb., with a total steam temperature of 750° F. instead of 600° F. The engines have been built by the Parsons Marine Steam Turbine Co., Ltd., and the hull and boilers by Messrs. J. I. Thornycroft and Co., Ltd. In the *Acheron* there are two sets of turbines, each consisting of one high pressure, two intermediate, and one low pressure turbine, and one astern turbine coupled to the shaft through double-reduction gearing. The designed shaft horse power is about 34,000. The three boilers are of the three-drum Thornycroft type, the drums being of forged steel, machined inside and outside, while the solid-drawn steel tubes are 1½ in. in diameter. Superheaters and pre-airheaters are fitted. In an exhaustive series of trials, the oil consumption at full power was 0.608 lb. per shaft horse power per hour, while the water consumption was 7.77 lb. per shaft horse power per hour. At ten per cent full power, the oil consumption per shaft horse power per hour was 0.92 lb. and the water consumption 12.87 lb.

THANKS to the generosity of S. and H. Behn, the house in which A. M. Ampère, the great French physicist, spent his boyhood and youth has been presented to the French Society of Electricians. The house is situated at Polémieux-les-Mont-d'Or, about nine miles north of Lyons. The society has published an account of the ceremonies that took place on the occasion when they took possession of the house and fixed a plaque at the entrance commemorating the name of Ampère. Speeches were made by well-known physicists and engineers, and Paul Janet gave an interesting account of the life and work of the great physicist. Born in 1775, his youth was spent in troublous times. In 1793, when he was only eighteen years of age, his father was executed on the scaffold—a victim of the Revolution. Ampère's work on the mathematical theory of electricity has been of the greatest help to physicists and engineers. He died at Marseilles in 1836, but in 1869 his remains were transferred to Montmartre Cemetery. The name of ampere has been universally adopted for the practical unit of electric current.

THE fifth triennial meeting of the General Assembly of the International Research Council was held at Brussels on Saturday, July 11, when the new statutes were approved and adopted. By these the name of the organisation is changed to that of the 'International Council of Scientific Unions', and full liberty is left to the International Unions to develop their activities in the way best suited to each. Dr. George Hale was elected president in succession to M. Picard, who has retired. The other members of the new executive committee are: General G. Ferrié and Prof. U. E. Nörlund, vice-presidents; Dr. P. Pelsener and Prof. F. A. F. C. Went, members; and Sir Henry Lyons, general secretary.

THE Human Betterment Foundation (Pasadena, California) has issued a pamphlet on "Human Sterilisation". It is pointed out that eugenic sterilisation, by means of vasectomy in the male and



salpingectomy in the female, carries no stigma or humiliation and does not unsex the individual in any way except in making parenthood impossible. Twenty-five States in the Union now have sterilisation laws on their statute books, and some six thousand operations of this nature have been performed. Following up the cases, it was found that six patients out of seven were satisfied with the operations. Many feeble-minded girls have married after sterilisation and these marriages have been reasonably successful in the great majority of cases. Whereas three-fourths of these girls were sex delinquents before sterilisation, only one in twelve has been a sex offender since. This is good evidence that sterilisation will not increase delinquency when it is made part of a well-organised system of probation and parole. The conditions and safeguards under which sterilisation is performed in Californian institutions are described.

THE following appointments have recently been made by the Secretary of State for the Colonies: Mr. J. De Verteuil, agricultural chemist, Trinidad, to be agronomist, Trinidad; Mr. A. J. W. Hornby, agricultural chemist, Nyasaland, to be assistant director of agriculture, Nyasaland; Mr. W. T. O. Maidment, assistant superintendent of agriculture, Gold Coast, to be agricultural officer, Uganda.

DR. E. C. S. DICKSON, of the Department of Physics, University of Manchester, has written pointing out that the demonstration of the Thomson effect described by Mr. W. Band in *NATURE* of June 27, p. 975, will also be found in Geiger and Scheel's "Handbuch der Physik", vol. 1, p. 330 (1926), in a large collection of lecture experiments that does not appear to be so well known as it deserves.

THE Swiss Society of Natural Sciences will hold its 112th annual session at La Chaux-de-Fonds and Le Locle on Sept. 24-27, under the presidency of Dr. C. Borel. On the first day, Prof. A. Piccard will give a lecture on his recent ascent into the upper atmosphere in a sealed car attached to a balloon, and Dr. C. Perret will exhibit a film on the life of bees. On Sept. 27, there will be two lectures. The first will be given by Prof. P. Arbenz on the geological history of South Africa and its camp sites, and the second by Prof. Pérez on rhizocephalods parasitic on hermit crabs. Several excursions to places of interest have been arranged in connexion with the meeting. The secretary of the meeting is M. A. Vuille, Numa Droz, La Chaux-de-Fonds.

A DETAILED programme has now been issued for the International Illumination Congress, which is to be held in Great Britain on Sept. 1-19. Provision is made for visits to London, Glasgow, Edinburgh, Sheffield, Buxton, and Birmingham, following which the sessions of the International Commission on Illumination will be held at Cambridge. An item of outstanding interest in the London programme is the proposed trip to the Port of London, returning to the Tower of London and Westminster by river, so that the illuminated buildings on the riverside may be seen. Throughout the visits to the cities named, the technical

sessions, at which more than a hundred papers will be presented, will alternate with agreeable trips and social events. During the proceedings at Cambridge a lecture will be given by Sir Arthur Eddington. Membership of the Congress is open to anyone interested in illumination on payment of a registration fee of £2. Those desiring to take part in the Congress should communicate with the honorary general secretary (Col. C. H. S. Evans, 32 Victoria Street, London, S.W.1) without delay.

THE Medical Supply Association, Gray's Inn Road, W.C.1, has issued a catalogue (T.L. 20) of new models of X-ray apparatus and appliances, and electric wax-baths. Ultra-violet light fluorescence cabinets are listed. These consist of a chamber housing a quartz mercury vapour lamp, the rays from which pass through a window of 'filter' glass which screens off the visible or luminous part of the radiation and allows only the ultra-violet or invisible radiation to pass. By this means the fluorescence of various substances may be observed, such as fats, drugs, papers, precious stones, chemicals. It may also be employed for the detection of forged notes, fraudulent erasures, etc., as well as for the examination of certain skin diseases.

THE Ministerio de Agricultura of the Argentine Republic has published a well-illustrated and instructive pamphlet on the commercial breeding of rabbits for the market—"Explotación del Conejo en la Argentina" (1931, 75 pp.). It deals fully with the best methods of housing, feeding, and tending generally the breeds of chinchilla, angora, castorrex, and others, which have become popular in recent years. But, as a furrier expressed it recently to the present writer, you may catch the fur what fine name you will, it remains rabbits' fur none the less, with all the weaknesses to which rabbits' fur is heir, from the furrier's point of view.

IN view of the rarity of the book and of its importance to students of the Mollusca, a facsimile reprint of those parts of the "Beschreibung der Naturalien-Sammlung der Universität zu Rostock" by H. F. Link, 1806-8, which refer to Mollusca, is being prepared for issue on Oct. 1. The edition is limited to 150. Copies may be obtained on application to Mr. J. R. le B. Tomlin, 23 Boscobel Road, St. Leonards-by-Sea, Sussex, or to Mr. R. Winckworth, 71 Whitworth Road, London, S.E.25, who are preparing the reprint. The price will be £1 or 5 dollars, post free. Advance subscribers may receive a copy at 15s. or 3.75 dollars, post free.

PART 6, fascicle 2, of "Diptera of Patagonia and South Chile", has been published by the British Museum (Natural History). It comprises the families Phoridae (supplement), by A. Schmitz; Platypezidae and Pipunculidae, by J. E. Collin; Sphaeroceridae, by O. W. Richards; and Eplydridae, by E. T. Cresson, jun. Four new genera and a number of new species are described in detail, the descriptions being accompanied by ten text-figures and a half-tone plate.

THE co-operation of the school child in the matter of personal and general hygiene can only be positively



achieved by a simple communication of the outstanding facts about health and disease. For classwork, the series of thirteen coloured health and hygiene charts recently produced by Messrs. G. Philip and Son, Ltd., will be found a help; they have been produced with the aid of Dr. Winslow, of Yale University. A descriptive booklet for the teacher is appropriately written by Prof. V. H. Mottram.

Two 43-page pamphlets record additions made to the Hull Museums. The additions are of many kinds, but records of ancient forms of travel and of the slave trade, and relics of the old-time whaling, for which Hull was famous, predominate. Many of the specimens are illustrated, and are described or commented upon in readable paragraphs, which have been reprinted from the *Hull Daily Mail*. The descriptive paragraphs are to be commended as affording more matter of interest to the general reader, and therefore better museum publicity, than the bare lists of the names of objects which some museums serve up in the daily newspapers.

THE Director of the Peabody Museum of Natural History, Yale University, Dr. R. S. Lull, and the Trustees are to be congratulated upon the excellence of the "Special Guides" to the collections which have just been issued. The first two numbers, the forerunners, we trust, of a longer series, have been written by Dr. Lull to explain "The Evolution of the Horse Family" and "The Evolution of the Elephants and Mastodons". They are simply written, clearly paragraphed, well illustrated, and sell at the modest price of 15 cents (31 and 40 pages respectively). Such pamphlets should do more than blatant propaganda for the spread of knowledge of evolution in the United States.

AN exhibition of publications of the League of Nations opened on July 14 at the Old Court House of Messrs. J. and E. Bumpus, 350 Oxford Street, W.1. The publications of the League, the International Labour Office, and the World Court will be simultaneously on view. During the ten years of its existence the League has already published some 3000 documents and periodicals, and last year alone more than 1,500,000 copies were printed, numbering over 61,000 pages. More than six hundred publications will be exhibited, with historical documents, maps, photographs, etc., and also the latest and most important books relating to the origin, work, and history of the League. During the exhibition, which will be open for a month, short lectures will be given by experts at 3.30 P.M. on Mondays, Wednesdays, and Fridays.

MESSRS. Baillière, Tindall and Cox are publishing shortly for the Bentham Trustees the "International Address Book of Botanists" which has resulted from the resolution of the fifth International Botanical Congress, 1930. This will be on lines somewhat similar to Dorfler's "Botaniker Adressbuch", and will contain the names of 13,000-14,000 botanists and botanical institutions, etc., in all parts of the world. These will be arranged alphabetically by countries, printed in the

majority of cases in the language of the country, and provided with an index of personal entries and geographical indices. The low price of 12s. 6d., or 13s. post free, is rendered possible owing to the assistance the International Committee has received from the Bentham Trustees and the Carnegie Corporation of New York.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—An assistant pathologist at the Swansea General and Eye Hospital—The Secretary-Superintendent, General and Eye Hospital, Swansea (July 20). Teachers of science and technical subjects and of woodwork, metalwork, and technical drawing, at the Chelmsford Mining and Technical Institute, Dinnington, Yorkshire—A. Rayner, 151 Cross-hill, Ecclesfield, near Sheffield (July 21). A laboratory attendant and storekeeper in the chemistry department of the University of Leeds—The Registrar, University, Leeds (July 24). A demonstrator in the engineering test laboratory and the physics laboratory of the Royal Naval Engineering College, Keyham—The Adviser on Education, Admiralty, Whitehall, S.W.1 (July 27). A full-time lecturer in zoology at the Chelsea Polytechnic—The Principal, Chelsea Polytechnic, Manresa Road, S.W.3 (July 29). A lecturer in architecture at Armstrong College—The Registrar, Armstrong College, Newcastle-upon-Tyne (July 31). A demonstrator in chemistry in the University of Aberdeen—The Secretary, University, Aberdeen (Aug. 15). A head of the Department of Entomology of the Rothamsted Experimental Station—The Secretary, Rothamsted Experimental Station, Harpenden (Sept. 11). Assistant keepers in some or all of the departments of zoology, entomology, geology, mineralogy, and botany of the British Museum (Natural History)—The Director, British Museum (Natural History), Cromwell Road, S.W.7. A technical assistant for calculation and experimental work in connexion with aero engine investigations under the Directorate of Technical Development of the Air Ministry—The Chief Superintendent, Royal Aircraft Establishment, South Farnborough, Hants. A technical assistant for experimental metallurgical work under the Directorate of Technical Development of the Air Ministry—No. A. 502, The Chief Superintendent, Royal Aircraft Establishment, South Farnborough, Hants. A lecturer on elementary electrical engineering, for evening classes at the Borough Polytechnic—The Principal, Borough Polytechnic, S.E.1. An assistant master for mathematics and elementary science at the Cambridge and County School of Arts, Crafts, and Technology—The Education Secretary, County Hall, Cambridge. A junior demonstrator in physiology at the University of Durham College of Medicine—The Registrar, College of Medicine, Newcastle-upon-Tyne. A Clothworkers scholar for research in the physical properties of wool and other fibres in the University of Leeds—The Clerk to the Senate, University, Leeds.

ERRATUM.—In the article entitled "Modern Whaling" in NATURE of July 11, p. 56, line 17, for "1925" read "1905".