FitzGerald was deeply interested in the question of the possibility of detecting the earth's motion through the æther, and Trouton eagerly took up a suggestion to investigate the mechanical effect of charging a condenser moving in the plane of its plates through the æther. The experiment, which is well known to all students of relativity, gave a negative result. It was in 1902, just after this research, that Trouton was appointed to the Quain professorship of physics at University College, London. He had at the time been for some years a Fellow of the Royal Society. His first work here was to repeat, with Noble, the condenser experiment in an improved form. Later he devised another experiment, designed to detect the FitzGerald shrinkage, which consisted in comparing the electrical resistance of a wire when moving in and across the æther stream. This was carried out in collaboration with Mr. (now Prof.) A. O. Rankine, and led to a negative result. The results of these experiments are in accord with the theory of relativity, for which they offer important evidence.

Trouton carried out researches in a variety of directions, including some on the viscosity of solids, and others on the condensation of water vapour on different surfaces, the latter of which led to the discovery of an interesting analogy to the James Thomson portion of an isothermal. His last work was on the adsorption of dye-stuffs on sand at various concentrations, and gave results of an intriguing nature which cannot be described here. It was while engaged on these investigations in 1912 that Trouton was attacked by a severe illness. He recovered from a prolonged prostration sufficiently for it to be hoped that he would be able to attend the meeting of the British Association in Australia in 1914, and he was elected president of Section A for that meeting. He prepared his presidential address, but was unable to travel, as an early operation was advised. It was held to be partly successful, but he never walked again. When he resigned his professorship at University College he received the title of emeritus professor.

The investigation of newly discovered or of neglected phenomena had a great fascination for Trouton; he was always breaking fresh ground, and had little inclination for working over subjects on which many investigations had been carried out—"pouring water on a drowned rat," as he characteristically expressed it. In daily life he was a man of great charm and sincerity; his wit, his buoyancy, and his whimsical and incisive phrases were a constant delight. He never lost an opportunity of helping a student or colleague, and his kindliness was evident in all his actions, a kindliness which had its roots in strength, and not weakness, of character. When in the prime of life he was struck down by a cruel and lingering illness he carried his cheerfulness to his couch, and would receive visitors with something like the old twinkle in his eye. Fate did not spare him; he lost two hopeful and beloved sons in the war, and saw all hope of recovery slowly pass from him. He died peacefully at his house at Downe on September 21, and, although his death was not unexpected, it brought to his friends a distress no less poignant for that.

E. N. DA C. A.

WE regret to see announcements of the following deaths:—Prof. Arthur Mayer, formerly director of the Botanic Garden at Marburg, at the age of seventy-two years; Dr. William Kellner, formerly chemist to the War Department, aged eighty-two; on September 25, Prof. J. P. Kuenen, of the University of Leyden, aged fifty-five; on September 27, Mr. C. Michie Smith, late director of the Kodaikanal and Madras Observatories; and on September 28, Major-General James Waterhouse, from 1866 to 1897 Assistant Surveyor-General in charge of photographic operations in the Surveyor-General's Office, Calcutta, at the age of eighty years.

Current Topics and Events.

THE hundreth anniversary of the birth of Mendel was celebrated in Brünn on September 23 last. The Government of Czecho-Slovakia placed generous funds at the disposal of a local committee, which arranged the centenary celebrations with the liberality and efficiency that we have learnt to expect from the new Czecho-Slovakian state. Credit is especially due to the committee for having made the centenary an occasion for bringing together, for the first time since the war, geneticists of all lands, the visitors comprising representatives of America, Austria, Denmark, England, Finland, Germany, Holland, India, Japan, Jugoslavia, Norway, Poland, Sweden, and Switzerland. The official proceedings opened with a visit to the monastery in which Mendel had lived, and to the adjoining garden in which he made his experiments. Wreaths were laid before the monument of Mendel which was erected in 1910, and speeches were made by the chairman of the local Naturwissenschaftlicher Verein, by the official representative of the Government, by the Burgomeister, by Prof. Erwin Baur (Berlin), Prof. Chodat (Geneva), Prof. Němec (Prague), Mr. S. Pease (Cambridge), and Prof. Iltis (Brünn). At the luncheon which followed, the principal speaker was Prof. Wettstein (Vienna), who emphasised particularly the international significance of the event. Prof. C. B. Davenport (Washington) replied, and the official proceedings terminated with a speech by Prof. Richard Hertwig (Munich). In the evening, a special performance was given at the opera, to which the guests were invited: it was the first occasion in Brünn on which the works of Czech and German composers had appeared on the same programme, a matter locally of much comment and great importance. The next day an expedition to recently discovered and very remarkable caves in the Moravian Karst was arranged. It is to be hoped that the success of this gathering will encourage others to organise congresses that are international and not merely inter-allied, in order that the friendships and intercourse which the war destroyed may be once more built up.

A KINDLY function was fulfilled at the London School of Tropical Medicine on Monday evening of last week, September 25, before a company of friends of the School and the family, when the first mint of the new medal instituted in memory of Sir Patrick Manson was presented to his widow. Major-General Sir William Leishman, who made the presentation, explained that the medal was the sub-issue of a project by friends of Sir Patrick Manson to present to the School a portrait of its illustrious originator. As the result of an appeal for this purpose, subscriptions in excess of the actual requirements quickly came in from many parts of the world, accompanied by numerous very cordial tributes of approval. The portrait had been presented, and when all expenses had been met there still remained a balance which the committee of subscribers thought would find its most happily inspired application in a medal commemorative of Sir Patrick Manson's unique position in the history of tropical medicine. In a graceful speech Sir William Leishman alluded to the many ways whereby, outside the laboratory, quite as effectively as within it, a wife can further her husband's work, and said that it was with a full appreciation of the circumstances from this point of view, and not as a mere compliment, that the committee desired to offer the first-minted medal to Lady Manson.

M. LE TROCQUER, Minister of Public Works, was present at tests on September 26, in connexion with the utilisation of tidal power at Aberwrach, near Brest. The scheme is to comprise a barrage 150 metres in length, which will permit of the storage in a tidal basin of from one to four million cubic metres of water, depending on the tidal range. Four turbines are to be installed, working both on the ebb and flow of the tide and capable of delivering 750-1200 h.p. These are coupled to alternators delivering current at 1500 volts. This station is to work in conjunction with a water-power station developing power from river-flow, and the latter is to be used to regularise the intermittent output from the tidal-power scheme. Should the results of this investigation prove satisfactory it is intended to develop a much larger scheme on the Rance, and, according to the *Times* of September 28, the minister expressed the opinion that this would enable electrical energy to be supplied to the whole of Western France.

WE learn from the *Chemical Age* that the chairman of the Allied Chemical and Dye Corporation of New York has offered, through the American Chemical Society, an annual prize of 25,000 dollars "to reward the chemist, residing in the United States, who in the opinion of a properly constituted jury has contributed most to the benefit of the science and of the world." In communicating the offer, the chairman of the Corporation writes: "Realising, as we do, the enormous influence which chemists working in all the fields of that science will have on the welfare of the world, we desire by this prize so to encourage the workers that even larger benefits should accrue than those which have already placed the world under such a debt of gratitude to the profession." Last week reference was made in our columns (p. 466) to numerous substantial gifts by industrial concerns in Germany to German universities to assist in the teaching of scientific subjects, particularly chemistry. Thus in both the United States and in Germany, commercial men and manufacturers are showing their appreciation of the value of what may be termed, research in pure science.

ACCORDING to *Science*, the American Medical Association has agreed to co-operate with the directors of the Gorgas Memorial Institute of Tropical and Preventive Medicine in establishing the institute, and a committee of the Association has issued an appeal for subscriptions. The committee is agreed that the most suitable memorial to Major-General William C. Gorgas would be such an institute, and considers that no more appropriate place than Panama City, where General Gorgas's great work in stemming tropical diseases was done, could have been selected. The Government of Panama has given the Santo Tomas Hospital, and also the land on which it is proposed to build the laboratories and departments for research, to constitute the memorial institute; Dr. R. P. Strong has been appointed scientific director. It is also intended that a Gorgas School of Sanitation shall be established in Tuscaloosa, Alabama, for training public health workers and sanitary engineers especially for work in the Southern States of America. An endowment of some 1,300,000*l.* will be necessary to carry out in full the proposed memorial.

PROF. SANTIAGO RAMÓN Y CAJAL has retired from the chair of histology and pathological anatomy in the University of Madrid. This distinguished man of science, who is a Foreign Member of the Royal Society, has been the recipient of numerous honours in Spain, including the Echegaray medal, presented to him in the Royal Academy of Sciences by the King of Spain. The Spanish Government has introduced a bill for the construction of a building for the Cajal Institute, constituted in 1920, which carries with it an appropriation of nearly 36,000*l.*, divided into four sums to be expended annually from 1922 to 1925 on the building designated as Cajal's Biological Institute; in addition, a grant of about 1700*l.* is to be provided for maintenance. The work of the institute will be directed by a board of trustees under the chairmanship of Cajal himself.

ABOUT a year ago the Chemical Society issued an appeal to its fellows to assist in the alleviation of distress among chemists and other scientific workers in Russia. Since then a sum of more than 210*l.* has been received, and about 170*l.* of it was devoted to the purchase of clothing, which has been distributed among men of science in Ekaterinburg, Moscow, and Petrograd. In addition, three cases containing clothing and books have been sent to the latter two cities. It is now known definitely that the packages have reached those for whom they were intended, so that the possibility of gifts going astray need no longer deter possible subscribers. There is every reason to fear that during the coming winter distress will be as acute as it was a year ago, and the Chemical

Society appeals to all British chemists to give assistance. Gifts of money, clothing, books, and recent chemical literature should be addressed to the Assistant Secretary, The Chemical Society, Burlington House, Piccadilly, W.1.

IN his presidential address delivered before the Royal Anthropological Institute (vol. lii. part i.) the late Dr. Rivers laid special stress on the difficulties which impede research by the excessive cost of printing and book production, and the rise in rent and taxes for accommodation used by scientific societies. He pointed out how closely all the branches of anthropological work—physical, sociological, archæological, psychological—are connected. Numerous societies, like the Royal Asiatic, African, and Japan societies, with the Hellenic and Roman societies and that specially devoted to folk-lore, should become more closely allied than is the case at present. The provision of a common building with adequate accommodation for a lecture room, library, and secretarial quarters would do much to reduce expenditure and promote efficiency. The leading society, the Royal Anthropological Institute, is most inadequately housed, while the Folk-lore Society has no headquarters of its own. It is quite time that an earnest effort was made to reorganise the work of these and similar societies. Individual jealousies and prejudices must be encountered, but the spirit of conciliation, reinforced by the difficulties of the present situation, should succeed in framing a scheme of co-operation.

IN accordance with arrangements followed for many years past there is to be a series of meetings, generally on alternate Mondays at 5 P.M., at the Meteorological Office, South Kensington, for the informal discussion of important contributions to meteorological literature, especially in foreign and Colonial journals. The meetings will commence on Monday, October 16, when, as customary at the first meeting, the discussion will be opened by Sir Napier Shaw. The subject is a paper by V. Bjerknes "On the dynamics of the circular vortex with application to the atmosphere and atmospheric vortex of wave motions."

THE third of the series of lectures, under the auspices of the Institute of Physics, on physics and the physicist in industry will be given by Mr. Clifford C. Paterson, who will take as his subject, "The Physicist in Electrical Engineering." The lecture will be delivered on Wednesday October 18 at 6 P.M. at the Institution of Electrical Engineers, Victoria Embankment, W.C.2.

ON the recommendation of the committee of management of *Science Abstracts*, the council of the Institution of Electrical Engineers has appointed Mr. W. R. Cooper to be editor of the publication in succession to the late Mr. L. H. Walter. Mr. Cooper was acting editor of *Science Abstracts* in the first year of its existence, 1898, and afterwards was editor from 1899 to 1901.

THE Home Secretary gives notice that summer time will cease this year at 3.0 A.M. (summer time) in the morning of Sunday, October 8, when clocks will be put back to 2 A.M. The shorter period of summer time prescribed by the Summer Time Act, 1922, does not operate this year

Our Astronomical Column.

OCTOBER METEOR SHOWERS.—The month of October is usually one of the best periods for observing meteors. The moon will interfere this year in the early part of the month, but during the last half, observations may be satisfactorily made. The chief shower generally visible falls in the third week of the month, and is directed from a radiant point at 91° +15° on the north-eastern borders of Orion. There is also a strong shower which supplies slow and often brilliant meteors at about the same time as the Orionids, but this radiant in the eastern region of Aries at 42° +21° appears to be visible for a long period, and is also seen in the months of November and December. The Taurids often form a conspicuous display towards the end of October, but they are generally more abundant in November than at any other time of the year. The latter shower yields meteors very similar to the Arietids, and fireballs are frequently intermingled with the smaller members of the stream. The chief radiant is at 64° +22°; it is difficult to define the date of maximum, but it usually occurs between November 20 and 23.

The meteoric activity of October is not confined to a few systems, for a very large number, certainly several hundreds, may be recognised. They are, however, for the most part feeble, like the majority of the systems which are distributed over the firmament.

PARALLAXES OF 22 CEPHEIDS.—Dr. Harlow Shapley's estimates of the distances of the globular clusters rest largely on the assumed absolute magnitudes of B stars and Cepheid variables. It is very desirable to have as many independent determinations as possible of the distances of the brighter Cepheids, in order to check their assumed absolute magnitudes. Dr. S. A. Mitchell has determined the trigonometrical parallaxes of 22 of them, and publishes the results in the *Observatory* for September. Perhaps the most doubtful point is the mean parallax of the comparison stars; they are of the 10th magnitude, assumed parallax 0″·005. The deduced absolute parallaxes for the Cepheids range from +0″·046 (ρ Cassiopeiae) to −0″·018 (41 Cygni). There are only 3 negative parallaxes. The mean parallax agrees very closely with the mean of the spectroscopic values; rejecting ρ Cassiopeiae, the mean difference, Mitchell *minus* spectroscopic, is only 0″·0003. It is concluded that the latter are very accurate.

NOVA T CORONAE (1866).—This Nova is exceptional in two ways. It is the only Nova that was a catalogued star before the outburst (BD +26° 2765), and it is much farther from the Galaxy than other Novae. Mr. K. Lundmark investigates its proper motion and parallax in Publ. Ast. Soc. Pacific, August 1922. The proper motion is given as 0″·012 annually, towards position angle 41°; from this the parallax is inferred to be 0″·0010, while the spectroscopic parallax is 0″·0014. Adopting 0″·0013, its present absolute magnitude is +0·2, while that at the outburst was −7·4, in good agreement with the maximum value for other Novae. The star is an M giant, and apparently is now in the same condition as before the outburst. If the above parallax is near the truth, the star is considerably more remote than Nova Persei (1901) or Nova Aquilae (1918).