

## Current Topics and Events.

AN announcement was made in the Press on October 10 by the British Broadcasting Company concerning the conditions which, in order to obtain Post Office approval, must be fulfilled by receiving apparatus intended for use in connexion with the broadcasting services. The conditions have been framed with the view of preventing the use, in such sets, of circuits which may "regenerate" oscillations and thus cause disturbances at receiving stations within their re-radiation range. Experience has indicated the need, in the case of receiving apparatus handled by an unskilful user, for some form of control in the type and design of the apparatus of the nature which is aimed at in the specification in question; the specification accordingly should serve a useful purpose. Exception has been taken in some quarters to the provisions contained in clause 10 of the conditions above referred to, on the ground that these particular conditions conflict with the promise made by the Postmaster-General in the House of Commons on July 27 last, to the effect that the owners of "home-made" receiving apparatus and the existing licencees of imported receiving sets would be allowed to use their apparatus for listening-in to broadcasted news, music, etc. This clause provides, *inter alia*, that "All sets sold under the broadcast licence shall bear the registered trade mark of the broadcasting company and the Post Office registered number." It has consequently been assumed that the issue of licences for receiving broadcasted matter will be confined to those who procure listening sets from the broadcasting company. It appears to have been overlooked, however, that the announcement to which attention is directed above has been issued by the British Broadcasting Company and relates alone to the conditions to be fulfilled by the receiving sets which are to be offered for sale to the public by members of that corporation. No declaration has so far been made by the Post Office which in any way indicates that the Postmaster-General contemplates the adoption of a policy at variance with that which he informed Parliament it was his intention to pursue in this matter; nevertheless, it is distinctly unfortunate that, in all the circumstances of the case, an official statement has not been issued by the Post Office setting out fully and frankly what course it is intended to pursue in relation to the grant of licences generally.

THE assignment to science of the proceeds of the first performance of a great play by a leading dramatist is an act which we record with much satisfaction. The play was the remarkable tragedy "Judith," by M. Henri Bernstein, produced at the Gymnase Théâtre, Paris, on October 12, before a brilliant and distinguished assembly, which comprised ministers of State and the chief social and intellectual leaders of the city. The Paris correspondent of the *Daily Mail* states that the receipts were for the benefit of the French Confederation of Scientific Societies, and the *Times* correspondent announces

that more than 1000*l.* was raised by the performance. M. Bernstein gave his royalty as author, and Mme. Simone, who took the title part and obtained the greatest triumph of her career, devoted her fee to the same beneficent purpose. We cannot recall any like association of drama with science in Great Britain, and it is difficult to conceive of the proceeds from a first night being devoted to a scientific institution in this country. If, however, Sir James Barrie, Mr. Bernard Shaw, Mr. Oscar Asche, or any other of our leading dramatists or theatre managers should be inclined to follow the example which Paris has given us, we commend to their attention as eminently worthy of support such confederations as the British Association, British Science Guild, and the Conjoint Board of Scientific Societies.

THE August number of the *Journal of Indian Industries and Labour* contains two articles on State control in the field of industrial enterprise. Mr. C. Y. Chintamani, Minister of Education and Industries in the United Provinces, deals with the subject in an article entitled "The Limits of State Aid to Industry," with special reference to the work of the department of which he is in charge, while Mr. A. Y. G. Campbell contributes the first part of an article on the functions of provincial departments of industries in which the whole question of State assistance is reviewed. Mr. Campbell speaks from experience, as he himself held for some years the post of Director of Industries in Madras. Another feature is an extract from the presidential address delivered to the Mining and Geological Institute of India in January 1922 by Dr. Leigh Fermor, officiating director of the Geological Survey of India, in which is described the practical utility of a State geological department. Dr. Fermor declares that in royalties alone the receipts accruing annually to the Provincial Governments and other owners of mineral rights in India in respect of the eight most important minerals, excluding salt and saltpetre, amount to at least 560,000*l.* The *Journal* also contains the usual summarised accounts of the activities of the Provincial Departments of Industries during the preceding quarter.

THE council of the Institution of Mining and Metallurgy has awarded the Gold Medal of the Institution to Sir Alfred Keogh, "on the occasion of his retirement from the Rectorship of the Imperial College of Science and Technology, in recognition of his great services in the advancement of technological education and as a mark of admiration and respect." The council of the Institution of Mining Engineers has awarded the Medal of the Institution to Sir George Beilby, "in recognition of his valuable contributions to science, with special reference to his researches on fuel." The medals will be presented at the combined dinner of the two institutions to be held at Guildhall, London, on November 16, at which the Prince of Wales and several ministers of State will be present.

DR. M. O. FORSTER was entertained at dinner by a number of his chemical friends on October 6 on the eve of his departure to India to take up the duties of his new appointment as director of the Indian Institute of Science at Bangalore. He left England on October 13 by the P. and O. steamship *Morea*.

It is stated in the *Chemiker Zeitung* of September 14 that Prof. Wieland has been appointed to the editorial board of *Liebig's Annalen* in place of the late Prof. Wislicenus. The board consists, in addition, of Profs. Wallach, Graebe, Zincke, and Willstätter. In the issue of September 26 it is announced that Dr. Noddack has been appointed director of the Physikalisch-Technische Reichsanstalt.

At the inaugural meeting of the eighty-first session of the Pharmaceutical Society's School of Pharmacy, Bloomsbury Square, on October 4, the Hanbury medal, awarded every two years for the promotion of research in the chemistry and natural history of drugs, was presented to Prof. Emile Perrot, professor of materia medica in the University of Paris.

THE fifth annual Streatfeild Memorial Lecture will be delivered by Prof. C. H. Desch in the Chemical Lecture Theatre of the Finsbury Technical College, Leonard Street, E.C.2, on Thursday, November 2, at 4 o'clock. The subject will be "The Metallurgical Chemist."

THE forty-fifth anniversary of the Institute of Chemistry will be celebrated by a dinner to be held at the Hotel Victoria, Northumberland Avenue, W.C.2, on Friday, November 17.

ON Tuesday, October 10, members of the Circle of Scientific, Technical, and Trade Journalists accepted the invitation of Holophane Ltd. to visit the new showrooms and laboratories, where an address was delivered by Captain Stroud, and a demonstration of the latest scientific devices for distributing artificial light was arranged. In addition to standard types of reflectors for use in streets, factories, shops, etc., several interesting novelties were shown, including the new unit equipped with Chance's daylight glass to produce "artificial daylight." The appearance of coloured surfaces under this light, as compared with that of ordinary electric lamps, was demonstrated in the laboratory, where apparatus for obtaining polar curves of light distribution was also shown in operation. Mr. Leon Gaster, in returning thanks on behalf of the visitors, remarked that the scientific application of light was a subject of general interest to the technical press. Its importance was illustrated by the appointment, in 1913, of a Home Office Committee on Lighting in Factories and Workshops. It was hoped that in future each scientific advance would be brought to the notice of the technical press, which acted as an educational link between the expert and the general public.

THE seventy-sixth annual meeting of the Birmingham and Edgbaston Debating Society was held on October 4. The visitors included Alderman David

Davis (Lord Mayor of Birmingham), Dr. R. Wakefield (Bishop of Birmingham), Dr. McIntyre (Archbishop of Birmingham), Mr. C. Grant Robertson (principal of Birmingham University), Mr. C. A. Vince (president of Birmingham Central Literary Association), and Mr. Arthur Brampton (president of Birmingham Liberal Association). Mr. G. Austin Baker was elected president for the ensuing session. Mr. Harry Jackson, the retiring president, delivered an address on "The Trend of Human Development." He showed that whereas in the past the environment and progress of man was limited to tangible things, to-day it extends more and more to regions outside the immediate perceptions of the senses. The views of Einstein, as contrasted with those of Newton, are a typical example and represent a great and intrinsic mental advance. The individual with the super-sensitive faculty in some particular direction must be given the scope and opportunity for the full expression of his genius. Humanity cannot afford to let clever men wear out their genius in providing themselves with the necessities of life. The most advantageous application of national wealth will be the maintenance of those who are able to work in the higher environment of the intellect.

MR. A. RADCLIFFE BROWN has sent us a long letter complaining of the review of his book—"The Andaman Islanders"—in *NATURE* of July 22, p. 106. The gist of the reviewer's criticism was that Mr. Brown spoils a good plan—namely, of stating his own observations and where they differed from those of his chief predecessor, Mr. E. H. Man—by so carrying it out as to lead the reader to suppose that Mr. Man's work was not worth much. Mr. Brown's defence is that in adopting his plan of procedure he was obeying the instructions of the Anthony Wilkins Studentship, under whose auspices his work was undertaken. The reviewer did not complain of the plan but of the method of carrying it out. Next, with regard to the reviewer's criticism of the unwisdom of adopting the *Anthropos* Alphabet of Pater Schmidt for his work in supersession of the long-established alphabet compiled by so competent an authority as Mr. A. J. Ellis, Mr. Brown writes that he has "no hesitation in accepting the *Anthropos* Alphabet as the nearest approach possible at the present time to a scientific universal alphabet." But at the same time he quotes the fact that Sir Richard Temple published a universal grammar which has not been adopted to any extent by other writers, "doubtless because of the objection they feel to giving up the system of grammar to which they are accustomed." Mr. Brown, having thus the fate of Sir Richard Temple's grammar before him and appreciating the reason for it, might have been warned of the fate awaiting the *Anthropos* Alphabet, and that the only result in the circumstances of partially adopting it in a work, which he himself says "does not deal with the languages of the Andamans," would be to puzzle, and not enlighten, the student. To the reviewer's criticism of use being made without acknowledgment of information gathered by living predecessors, Mr. Brown raises the defence that any passages bearing such an interpre-

tation must have occurred in the introduction "which was meant as such and nothing more." It certainly does not justify the "correction" of the work of highly experienced local officials with not only the people and the country before them, but also the possession of the official technical works and some of the other general books, on which Mr. Brown relies for his facts.

In a book entitled "Science and Human Affairs," which Messrs. George Bell and Sons, Ltd., will shortly publish, the author, Dr. W. C. Curtis, will recount how the conveniences of daily life and the safeguards to health have been discovered, and the possible bearing of science on human affairs in the future.

THE following catalogues, which should be useful to readers of NATURE, have just reached us: No. 95 (of Botanical and Zoological Works) from Messrs. Dulau and Co., Ltd., 34 Margaret Street, W.1; No. 216 (of Periodicals, Collections, Transactions, and Publications of Learned Societies, etc.) from Messrs. W. Heffer and Sons, Ltd., Cambridge; and No. 372 (miscellaneous, including Natural and Physical Sciences) from Messrs. Bernard Quaritch, Ltd., 11 Grafton Street, W.1.

MESSRS. LONGMANS AND CO. have in preparation, in four volumes, "A Natural History of the Ducks," by Dr. J. C. Phillips, of the Museum of Comparative Zoology, Cambridge, Mass., U.S.A., which will aim at giving an exact and detailed description of all known species of ducks, mapping their breeding and migration ranges. It will also contain full life-histories of the European and American species. The work will be illustrated in colour and in black and white by F. W. Benson, A. Brooks, and L. A. Fuertes. Vol. 1 is nearly ready for publication.

SIR RONALD ROSS is bringing out, through Mr. John Murray, a work entitled "The Great Malaria Problem and its Solution: an Autobiographical Account," which will give a complete history of the discovery of the relation between malaria and mosquitoes, showing how malaria is carried from man to man. Another book in the same publisher's announcement list is "Gardening for the XXth Century," by C. Eley, in which attention is chiefly directed to the more permanent features in gardens. The work will contain a list of selected trees and shrubs, with descriptive and cultural notes, and brief chapters upon botany and nomenclature.

Our Astronomical Column.

MERCURY VISIBLE AS A MORNING STAR.—Mercury will reach its greatest elongation, 18° 38' west, in the early morning of October 31, and will be visible before sunrise during the period from about October 22 to November 10. The planet will rise about 1¼ hours before the sun, and should be easily visible about an hour before the times of sunrise. Its position will be near the horizon in E. by S., and it will shine with a rosy, fluctuating light about equal to that of a first magnitude star.

The planet Saturn will be very near Mercury on about October 23, when the distance separating the two orbs will be a little more than 2°.

Telescopic observations of Mercury are much required, the exact time of the planet's rotation being doubtful. It is a good plan for those observers who do not possess equatorial telescopes to pick up the planet when it is visible to the naked eye, and to get and retain the disc in the field of view of the instrument until some time after sunrise, when it will have risen sufficiently high above the vapours near the horizon to permit the image to be well defined. Mercury certainly presents dusky markings which are capable of being followed when clear weather allows, and the planet offers a much better prospect for successful scrutiny than Venus.

COMETS.—Perrine's periodic comet, 1896 VII. and 1909 III., should now be looked for in the moon's absence. The following ephemerides are on two assumptions of the time of perihelion:

Date.	Assumed T., Oct. 3.		Assumed T., Oct. 11.	
	Greenwich Noon.	Decl.	R.A.	Decl.
	h. m.		h. m.	
Oct. 19.0	7 45	19° 0' N.	7 19	24° 0' N.
27.0	8 5	14° 3'	7 40	18° 7'
Nov. 4.0	8 21	9° 6'	7 56	13° 4'
12.0	8 33	5° 1' N.	8 9	8° 1' N.

Search should be made near the line joining the two positions for each date.

Mr. Wood sends the following elliptical orbit of comet 1922 a:

EPOCH 1922, JAN. 1.0.			
M	.	.	0° 2' 1"
$\omega$	.	.	183° 37' 32"
$\Omega$	.	.	274° 30' 13"
$i$	.	.	32° 30' 16"
log e	.	.	9.9953713
log a	.	.	2.1874524
$\mu$	.	.	1".857

Period about 1900 years.

Mr. Wood is at work on a more exact orbit, using photographic positions that extend to April 25 last.

THE MASSES OF VISUAL BINARY STARS.—The *Astronomical Journal*, No. 807, contains measures of the parallaxes of several binary stars made photographically at the Sproul Observatory by Messrs. J. A. Miller and J. H. Pitman. Investigation was made as to how far the irregularity of the combined image and the change in relative positions due to orbital motion between the exposures might introduce error. The probable errors seem to be quite as small as for single stars. The parallaxes deduced by other observers are tabulated as well as their own, and masses are deduced and classified according to spectral type with the following results for average mass: B 14.91; A 3.49; F 3.92; G 1.77; K 1.57; M 0.65. Only two M stars were available.

In conclusion, the advisability is pointed out of obtaining absolute parallaxes of as many binaries as possible by the relative shift of spectral lines due to different motion of the components in the line of sight. The method has already been applied to Alpha Centauri and to Castor, also to Sirius (bright star only). A list is given of 18 stars to which the method might be applied, with the amount of present and maximum differential motion. It is necessary either that both spectra should be visible or that the relative masses should be known.