

was -0.08 , and was practically zero for Class 40. A curve shows the results of the photographic and visual determinations of magnitudes, the photographic magnitudes being represented by circles which lie close to the visual magnitude curve.

Similar work was done with Nova Hercules 1934, the observations extending from December 16, 1934, to April 30, 1935, and the light curve of the nova between these dates is given, circles representing the photographic magnitudes as in the case of Nova Lacertæ. A maximum difference occurred about the middle of January, this difference (photographic—visual) being 0.5 mag. It was found impossible to deduce the value of the colour-index, but it is hoped that this will be done when further data are available from various scientific journals, thus enabling comparisons to be made with the work at the Observatory of Madrid.

Bulletin 10 from the Observatory deals chiefly with solar prominences observed at the University of Valencia during 1938, and is a continuation of the 1937 observations recorded in a previous issue of the bulletin (see NATURE, 151, 405; 1943). In addition to a description of the solar spots observed in 1938, the issue contains the positions of Comets van Gent, Whipple-Bernasconi-Kulin and Whipple-Fedtke, determined from photographic observations.

Aeroplane Compass

IN *Sky and Telescope* of January 1944 there is a description of the Gyro Flux Gate Compass System, which has overcome many difficulties for air navigators. It combines the action of the flux of the earth's magnetic field with a gyroscope designed to keep it horizontal in spite of the movements of the aeroplane. It is very much more sensitive than the ordinary compass, and it can be operated close to the earth's magnetic poles, if necessary. The existence of the instrument has been revealed recently, because it is believed that some of the compasses have fallen into the hands of the enemy, though it seems certain that he cannot produce it in great quantity during the present War. A description of the instrument is given; but the technical details are too complicated to be dealt with here. Its practical utility can be judged from the fact that its reading of true compass directions and its reliability under varying conditions have contributed to reduce the number of accidents due to uncertainties in navigation.

Transmission Line Supports

IN a paper on reinforced concrete supports read recently in London by Messrs. E. C. Neate and W. F. Bowling before the Institution of Electrical Engineers, consideration is first given to previous work done in Great Britain, and this is followed by a discussion of the requirements of a reinforced-concrete transmission-line pole. Details of experimental poles are given with an analysis of the results of tests to destruction. A graphical method of design is developed, and sufficient information is provided to enable future work to be undertaken on the bases established. An expression is obtained for the deflexion of a pole under load, and it is shown that deflexion cannot be taken as a criterion for proof-test purposes. The authors discuss fabrication and erection methods, and the paper concludes with a survey of the advantages and disadvantages of the concrete pole, reference being made to a *questionnaire* issued to a number of users in Great Britain.

St. Louis Chapter of the Society of the Sigma Xi

THE St. Louis Chapter of the Society of the Sigma Xi was installed at St. Louis University on March 16 by Prof. Harlow Shapley and Prof. George A. Baitsell. Forty members and three associate members formed the petitioning group. Prof. Shapley spoke on "Co-operation in Research", and later, Prof. Peter Debye gave the Sigma Xi Lecture, "The Magnetic Approach to Absolute Zero". Chapter officers elected for the following year were Kermit Christensen (president), Charles H. Neilson (vice-president), Arthur G. Rouse (secretary) and Alfred H. Weber (treasurer).

Announcements

THE Albert Gold Medal of the Royal Society of Arts has been awarded to Sir Henry Tizard, president of Magdalen College, Oxford, and formerly rector of the Imperial College of Science and Technology, distinguished for his scientific work in the development of aircraft (see NATURE, Aug. 1, 1942, p. 148).

THE first award of a gold medal founded in memory of Dr. Bimala Churn Law by the Indian Association for the Cultivation of Science has been made to Sir Henry Dale, president of the Royal Society. The award is given for important contributions to science including medicine.

PROF. JOHN MACMURRAY, Grote professor of the philosophy of mind and logic in the University of London, has been appointed professor of moral philosophy in the University of Edinburgh in succession to Prof. A. E. Taylor.

DR. S. W. WOOLDRIDGE, reader in geography in the University of London (King's College), has been appointed to the chair of geography in the University tenable at Birkbeck College, in succession to Prof. E. G. R. Taylor.

AT the anniversary meeting of the Linnean Society of London held on May 24 the president, Mr. A. D. Cotton, delivered a presidential address, "The Megaphytic Habit in the African Tree *Senecios* and other Genera". The following were elected officers for the year 1944-45: *President*, Mr. A. D. Cotton; *Treasurer*, Colonel F. C. Stern; *Deputy Treasurer*, Dr. B. Barnes; *Secretaries*, Dr. B. Barnes (botany) and Dr. Malcolm A. Smith (zoology); *Members of Council*, Prof. A. J. E. Cave, Captain Cyril Diver, Dr. Edward Hindle, Mr. A. A. Pearson, Lieut.-Colonel R. B. Seymour Sewell.

LORD KEMSLEY has made a gift to the University of Sheffield to provide, during a period of seven years from its first coming into operation, an annual travelling fellowship of £400 a year. The fellowship will come into operation as soon as circumstances allow its conditions to be fulfilled. Candidates must be unmarried men and British subjects by birth holding the degree of bachelor of the University of Sheffield and who since graduation have not taken up other full-time work than study or research in a university in the United Kingdom. The main condition of tenure is that the Fellow shall actively study at first hand the ways of a good life and of thought in the country selected, and shall become efficient in speaking and reading its language. Candidates will generally be selected from the Faculty of Arts. No applications will be accepted before a date to be announced in due course by the University of Sheffield.