

each hemisphere, for prominences there are two zones. Each point in the curves represents the mean latitude of each zone throughout the year. It will be noticed that in each hemisphere the zone in lower latitudes gradually approaches the equator, dying out just before or at sunspot minimum, while the zone further away from the equator increases its latitude rapidly and dies out at or a little after sunspot maximum. The data up to 1914 are published in the *Memoirs of the Kodaikanal Observatory* (vol. 1, part ii.) by Mr. John Evershed, and the remainder have been extracted from that Observatory's *Bulletins* published half-yearly, from which the mean yearly latitudes of the zones have been provisionally determined by Dr. Lockyer.

THE FORMS OF THE CORONA.—The last curve shows the condition of activity of the sun as indicated by the form which the corona takes when seen at total eclipses.

When the corona (polar form) exhibits streamers all around the solar disc, *i.e.* in all solar latitudes, this indicates a very turbulent state of the solar atmosphere and a time therefore of maximum activity. At this time the prominences reach their highest latitudes. When the streamers are confined to the equatorial regions and the poles are quite clear and void of streamers, the corona takes an "equatorial" or "wind-vane" form, and the solar activity is at a minimum. Intermediate stages are indicated by the corona taking an "intermediate" or "square" shape. The various forms of the corona are indicated clearly in the curve by three different symbols. The curve also shows the forms expected in the two approaching eclipses, namely, of this and of next year. The form for the present year will be of the "intermediate" type, while that for 1923 should be typical of the "equatorial" type. The data for the various forms of the corona have to be obtained from the individual reports of eclipse expeditions, but those to which reference has here been made have been collected by Dr. Lockyer and published in the *Monthly Notices of the Royal Astronomical Society* (vol. 82, p. 326).

All the solar phenomena described above thus indicate clearly that the activity of the sun is decidedly on the wane, and that the epoch of minimum disturbance in the solar atmosphere is approaching and will be reached in the year 1924 or 1925.

University and Educational Intelligence.

BRISTOL.—The degree of Ph.D. has been awarded to Mr. Joseph Lineham for his dissertation on "The Concept of Activity."

LONDON.—The list of courses of University Extension Lectures for the session 1922-23 has recently been issued, containing particulars of some 90 courses and lectures which will be given in the University and locally. Of this number, 14 only are on scientific topics. Dr. W. B. Brierley is giving a course of 24 lectures at Gresham College on inter-racial problems of man, and a similar course at Morley College on the principles of evolutionary biology; F. Womack is giving 2 lectures on wireless telephony at Hatch End and at Hounslow, and 5 lectures on pioneers of science at Wood Green; and F. J. Chittenden, 3 lectures on horticulture at Hatch End. The remaining science lectures are related to psychology: Miss V. H. Hazlitt, 10 lectures on the psychology of character and conduct, at Croydon; Mr. Cyril Burt, 5 lectures on psycho-analysis, at Twickenham; S. E. Hooper, 24 lectures on psychology, at Wimbledon and also at Wood Green; and E. O. Lewis, 24 lectures on psychology, at the

Working Men's College, Crowndale Road, N.W. There are also four psychology courses, at Croydon, at the Mary Ward Settlement at Tavistock Place, W.C., at Wandsworth, and at Wood Green, for which lecturers' names are not yet given. Further particulars of the lectures can be obtained from the local secretaries whose addresses are given in the lecture list, application for which should be made to the Registrar, University Extension Board, University of London, South Kensington, S.W.7.

THE *Chemiker Zeitung* of August 29 reports that Dr. H. Lecher, of the University of Munich, has been appointed professor of organic chemistry at the University of Freiburg.

A SPECIAL committee of the World's Student Christian Federation has been appointed to co-operate with the Universities' Library for Central Europe in its work of securing British books, journals, and scientific papers for the universities of Central Europe. Donations of books, periodicals, and money should be forwarded to Mr. B. M. Headicar, Universities' Library and Student Relief for Europe, London School of Economics, Houghton Street, W.C.2.

ON several occasions recently the *Chemiker Zeitung* has reported the gifts of large sums granted by industrial concerns to universities and to associations of students, for the assistance of these bodies in teaching scientific subjects, particularly chemistry. Although the amounts, which run into millions of marks in individual grants, may seem modest when translated into English currency, they represent important contributions in Germany, and the attention of British manufacturers might well be invited to the matter. It is evident that Germany realises, as she did in former years after defeat, that the hope of the future lies in education, and one cannot help feeling that the victors in the recent war would do well to consider whether their future also does not lie in the same direction, and do a little more of a practical character in the furthering of the work of our educational institutions. The reduced grants made to the universities will be reflected in reduced facilities, and if the industries which have reaped so much benefit from research in pure science made in the universities, often associated with individual hardship on the part of the students, were to make some return, it would be repaid to them a hundred-fold.

THE draft Regulations for Secondary Schools recently issued by the Board of Education remedy the anomalous position which hitherto geography has occupied in advanced courses. As a school subject, geography has steadily gained ground, and in 1921 was offered by no less than 78 per cent. of the candidates taking the School Leaving Examination. Furthermore, Sir Richard Gregory, in his presidential address to the Education Section of the British Association this year at Hull, pointed out the still greater part this subject could, and should, play in economy of time-table and efficiency of teaching. At the other end of the scale, the Universities have steadily increased the facilities for graduation in geography. There remained, however, the hiatus of the advanced courses which cut off, in large measure, the supply of students of geography. The 1922 Regulations provide for a new group of studies, E, which is defined as "Geography, combined with two other subjects approved by the Board, of which one must be History or a Science." The way is now clear for a complete revision of the syllabuses in geography for the Higher School Certificate and for the provision of university scholarships in this subject.