

lecture-demonstration on gold films and their applications. Section C, among other subjects, will deal with the water supply of the county of London. Sections D and K will meet jointly to discuss the mechanism of evolution. Section G will consider problems of road and air transport, and will devote a special period to papers by junior workers. Section J will co-operate with Section D on questions of sense perception and the evolution of colour and pattern, and with Section L on the effect of the cinema and wireless on the life of the school child. Section L will discuss "Education for a Changing Society" in various aspects. Section M will consider agriculture in relation to national employment, soil conservation and enhancement of fertility, and crop and animal production.

The Conference of Delegates of Corresponding Societies will meet under the presidency of the Earl of Onslow, who in his address will discuss national parks, a subject to which the Association has properly given much attention. The evening discourses will be given by Dr. H. Godwin on the "History of the Fens", and by Prof. M. L. Oliphant on the "Contribution of the Electrical Engineer to Modern Physics". Of these, Dr. Godwin's discourse will be given on the Friday, thus appropriately

preceding the Saturday excursions which will no doubt give many members a sight of the Fenland.

For the rest, full advantage will be taken of the exceptional opportunities offered by the various laboratories for exhibits and demonstrations, and certain special exhibits also are announced. Old scientific instruments will be shown under the auspices of the Cambridge Philosophical Society. There will be an exhibition illustrating the genetics of colour. It is proposed to have an exhibition of works of art by members of the Association—a feature, so far as records go, quite new to the programme. Members who would be willing to exhibit are asked to communicate with Mr. E. N. Willmer, St. John's College, Cambridge. Photographs taken by members of the recent scientific delegation in India will be shown. It is intended also that two lectures shall be given on the work of the delegation, of which it is hoped that one will be by Sir James Jeans, who led the delegation as president of the Indian Science Congress.

Provision for excursions is as ample as ever: the range extends from Sandringham on one hand to the Gliding Club at Dunstable and Tring Museum on the other, and opportunity will be afforded for visits to points of beauty and interest in Cambridge itself.

News and Views

Prof. Max Planck, For. Mem. R.S.

PROF. MAX PLANCK, originator of the quantum theory and emeritus professor of theoretical physics in the University of Berlin, will celebrate his eightieth birthday on April 23. Planck's work had a singularly direct influence on the development of modern physical theory. Beginning with purely thermodynamical studies—which have been embodied in his well-known text-book on thermodynamics—he soon applied both the descriptive and the statistical methods of thermodynamics to radiation, and was successful in finding a formula for the spectral energy distribution of black-body radiation which fitted the measurements and which could be deduced on the assumption that radiation is transferred from matter in quanta of energy proportional to the frequency ν . Successive editions of Planck's book "Wärmestrahlung" show the development and variation of the original theory, of which the underlying physical idea remained for many years a mystery to physicists, although Planck's constant h was found to enter into various relations between radiation and matter, for example, in the photo-effect. It was not until Bohr explained the laws of spectral emission of atoms by a two-fold application of Planck's constant that this

latter was recognized as fundamental for all kinds of atomic action.

In all this rapid development, Planck took a prominent, if cautious, part, with the result that his publications have long been considered as classics of German physical literature. His judgment largely influenced the development of contemporary physics. When Einstein's principle of relativity showed the way out of the axiomatic and other difficulties of electrodynamics, it was Planck who took up the idea and carried it through for mechanics and thermodynamics. Although many honours have been conferred on Planck, including the Nobel Prize in Physics in 1918 and the Copley Medal of the Royal Society in 1929, they have failed to spoil his simple and unpretentious ways. Confronted with the difficulties of the monetary inflation in Germany, Planck did not mind travelling a whole night on the railway in the old fourth class, in order to get to the Alps which he loved from his youth and in which a dolomite peak bears his name as the first to have climbed it. The German Physical Society is giving a banquet in the Harnackhaus on April 22 to celebrate Planck's birthday.