

## News and Views

Sir Gilbert Walker, C.S.I., F.R.S.

THE Royal Meteorological Society has awarded the Symons Gold medal for 1934 to Sir Gilbert T. Walker. The medal is awarded biennially for distinguished work in connexion with meteorological science and will be presented at the annual general meeting of the Society on January 17, 1934. Sir Gilbert was senior wrangler (1889), fellow and lecturer in mathematics at Trinity College, Cambridge, and Adams prizeman in 1900. He is author of many works on dynamical aspects of physics, including problems relating to the electromagnetic field and similar subjects, and meteorology. He has published numerous pioneer papers through many years on correlation as a means of dealing with seasonal variations of weather, and for forecasting the Indian rains. These papers have culminated with contributions on "World Weather" in *Memoirs of the Royal Meteorological Society*. Extracts from his presidential address before Section A (Mathematical and Physical Sciences) of the British Association meeting at Leicester on September 8, appears in this issue of NATURE (p. 805).

FOR twenty-one years, Sir Gilbert Walker was director of one of the chief meteorological services of the world, and in difficult circumstances. Although cut off from ready communication with meteorologists in other parts of the world, the India Meteorological Department, under his direction, made important contributions to the furtherance of weather science. The functional success of a large weather department depends so much upon cordial relations between staff and administrative head, and especially upon a sense of efficient direction, that it may be relevant to quote from a Government of India Report relating to Sir Gilbert's retirement from India:—"... For him personally the whole department retains the liveliest affection and regard; his kindly sympathy tided over many a period of depression in work, and his enthusiasm, strong sense of reason, and grasp of the true bearings of emerging results were responsible for the noteworthy advances which marked his regime". Sir Gilbert has been president of the Royal Meteorological Society, and since retirement from India has, as professor of meteorology in the Imperial College, actively carried on his weather researches.

Prof. Emile Borel

PROF. EMILE BOREL, who has just delivered a course of three lectures on applications of statistics to economic and meteorological forecasting at the London School of Economics, is a man of many talents and of distinguished achievements in the fields of mathematics and politics. To mathematicians he is known as a master of the theory of probability and the theory of functions, on which he has written many books, while politicians acknowledge him as one of the prominent deputies of the French Chamber and an enlightened Minister of Marine. Prof. Borel's mathematical genius revealed

itself very early. Born in 1871 at Saint-Affrique, a village in the Aveyron of which he is mayor, he studied at the Ecole Normale Supérieure, Paris, taking his degree of doctor of mathematics in 1894. A few years later, he won successively the four much coveted prizes offered by the Academy of Sciences (Grand Prix des Sciences Mathématiques, Prix Vailland, Prix Poncelet and Prix Petit d'Ormoy). He was not forty years of age when he entered the Paris Academy of Sciences, of which he will be installed as president in January next. An honorary doctor of Trinity College, Dublin, he has a large number of distinctions from various universities and scientific institutions. He is honorary director of the Ecole Normale Supérieure, and professor of the calculus of probability and mathematical physics in the University of Paris.

Proposed New Ascent into the Stratosphere

DR. M. COSYNS is actively preparing for a new ascent to the stratosphere. He has just completed a short visit to England when he visited Prof. P. M. S. Blackett of Birkbeck College, Prof. W. Wilson of Bedford College and the laboratory of Lord Rutherford in Cambridge for the purpose of discussing some technical details of his venture. Dr. Cosyns went up with Prof. Piccard on the second ascent last year of the latter. A former pupil of the eminent Belgian scholar, Dr. Cosyns is a qualified engineer and is attached to the research laboratory of the "Fondation Medicale Reine Elisabeth" in Brussels. During the twelve hours he spent with Prof. Piccard in the stratosphere, he was in charge of the instruments fixed in the gondola for observational purposes. The results obtained have confirmed those obtained by other methods by Millikan and Regener. The three important conclusions reached were: (1) variation of ionisation with atmospheric pressure has been established with precision up to an altitude of 16,500 metres; (2) the equivalent (in mgm. Ra. m.<sup>-2</sup>) of cosmic radiation is about three times as great when measured by the counter method as that observed when the ionisation method is used; and (3) the counters indicate that the cosmic rays do not come from any specific direction. Incidentally, Prof. Piccard and M. Cosyns carried out some interesting observations in other fields. An account of the main results obtained during Prof. Piccard's two ascents is given in the *Bulletin de l'Académie Royale de Belgique (Classe des Sciences)* under the title "Etude du rayonnement cosmique faite à bord du F.N.R.S. par M. Cosyns, P. Kipfer et A. Piccard" (19, No. 2, 214-240; 1933).

MANY anticipated results, however, were not obtained, so Dr. Cosyns proposes going up again next April. He will be accompanied by an assistant, as Prof. Piccard will not take part in the expedition. The two principal problems will be: (1) to examine the direction and intensity of the cosmic rays and (2) to get some good records of the effects of cosmic