

News and Views

Aurora of January 25-26

A BRILLIANT auroral display was visible over most of England and from many places on the continent of Europe on the night of January 25-26. Dr. B. A. Keen, president of the Royal Meteorological Society, has sent the following account of the spectacle: "At Harpenden, Herts, the display was seen from 6.45 p.m. until well after midnight. The early stages appeared as a red glow in the north-west and later in the north-east, with a low broad green arc in between. The area of the luminous sky increased, and by 8.30 p.m. the green colour with areas of red extended well south of Orion. Up to 11 p.m. there seemed to be three periods of brilliant display: the first, and perhaps the best, at 7.45 p.m. when a bright red glow in the north-north-east was traversed by many sharply defined green and white shafts; at 8.30 p.m. especially in the east; and again at 9.45 p.m. when diffuse and rapidly fluctuating green streamers appeared between north-east and north-west, directed towards the zenith. Thereafter, the luminosity decreased, but as late as 11 p.m. a broad green arc stretching from north-west to north-east was still clearly visible. About midnight, a fourth display began with red streamers in the north-west, which extended until a broad red band was formed passing through the zenith to the north-east. At 1 a.m. faint red and green glows were still visible.

The Recent Sunspot and Magnetic Storms

THE large sunspot reported on p. 156 of last week's issue was easily seen with the naked eye at about the time of central meridian passage on January 18. The maximum area of the spot was more than 3,000 millionths of the sun's hemisphere; the spot is, therefore, one of the largest half-dozen spots recorded at Greenwich since 1875. As already reported, a magnetic storm was recorded at Abinger, beginning on January 16, 22½ hr. A second and larger disturbance developed rapidly on January 22 after 5 hr.; between 9 hr. and 10 hr. a range of 56' in declination occurred, while that in horizontal force was 600γ. This range in H.F. had not been exceeded at Greenwich since the magnetic storm of May 17, 1921, but the maximum of the present period of disturbance had not been reached. On January 25 (a day after the big sunspot had disappeared over the western edge of the sun) a sudden commencement began at about noon and developed to a remarkable degree. The great aurora which followed is described above. A telephoned account of a preliminary examination of the Abinger magnetic traces stated that large movements of the recording magnets began at 17 hr. and were particularly marked between 20 hr. and 21½ hr.; the disturbance died down about 3 hr. on January 26. The total ranges during the disturbance were approximately 2.1° in declination,

1,000 γ in *H* and 550 γ in *V*. The storm is probably unequalled in the Greenwich records since that of September 25, 1909. As already stated, the big sunspot had passed off the disk on January 24 and there is no other unusual spot at present visible.

Dr. G. M. B. Dobson, F.R.S.

AT the annual general meeting of the Royal Meteorological Society held on January 19, the Symons Memorial Gold Medal awarded for distinguished work in connexion with meteorological science was presented to Dr. G. M. B. Dobson, reader in meteorology in the University of Oxford. Dr. Dobson's earlier researches related to atmospheric electricity and to the structure of the atmosphere as revealed by pilot balloon observations. In 1922, in a paper on the theory of meteors contributed to the Royal Society, Dr. Dobson, in collaboration with Prof. A. Lindemann, adduced the first reasoned evidence of the existence of high temperatures in the atmosphere above 50 km. Since 1923 he has extended most fruitfully the method of Fabry and Buisson for the study of the absorption of ultra-violet radiation in the upper atmosphere and thence the determination of the ozone content of the atmosphere. A photographic method of observation was developed and instruments were distributed to suitable observers in many countries. Later, a photo-electric method was devised to facilitate the routine measurement of atmospheric ozone. Observations made by collaborators in many parts of the world have established the nature of the variation of ozone content with season and latitude, and have revealed close relationships between the amount of ozone, the development of atmospheric pressure at sea-level and certain meteorological characteristics of the atmosphere. Further advances are to be hoped for from an extension of international co-operation in prospect.

Emmanuel Swedenborg (1688-1772)

TO-DAY world-wide celebrations are being held to commemorate the 250th anniversary of the birth of the great Swedish man of science and theologian, Emmanuel Swedenborg, who was born in Stockholm on January 29, 1688, and died in London on March 29, 1772. His death took place at 26 Great Bath Street, Clerkenwell, and he was buried in the Swedish Church, Princes Square, Stepney, whence, however, his remains were taken to Sweden in 1908. He was the second child and eldest son of Jasper Swedberg (1653-1735) a preacher, poet and visionary, who became bishop of Skara. From an early age young Swedberg, a name he bore until he was ennobled in 1719, showed unusual talent, and after studying at the University of Uppsala in 1710 came to England. He also visited France and Holland and in 1716, two years after returning home, published his "Daedalus