

WRITING on April 19, Dr. A. H. R. Goldie, superintendent (Scotland) Meteorological Office, says: "The storm commenced at 5 h. 48 m. G.M.T. on April 16, and from the very disturbed traces of the magnetographs at the observatories of Lerwick and Eskdalemuir the following ranges in the magnetic elements on that day have been measured:

Lerwick Horizontal Force, 2980 γ ($1 \gamma = 10^{-5}$ c.g.s. units).

Vertical Force, 1386 γ .

Declination, $5^{\circ} 47'$, equivalent to 1450 γ in the component of force perpendicular to the magnetic meridian.

Eskdalemuir Horizontal Force, 1672 γ .

Vertical Force, 1165 γ .

Declination, $6^{\circ} 25'$, equivalent to 1850 γ in the component of force perpendicular to the magnetic meridian."

The storm was probably a sequel to the solar disturbance represented by the large sunspot group which crossed the sun's meridian on April 14.1 U.T. (see NATURE, April 16, p. 683).

Aurora Australis on January 22

A COMMUNICATION from the Commonwealth Solar Observatory, Canberra, published on p. 746, refers to an auroral display observed in Australia on January 22, and the solar eruptions and magnetic storms associated with it and with the brilliant display in Europe on January 25-26. Mr. John Gregory, writing from 11 Bennett Street, Perth, Western Australia, describes the aurora of January 22 as seen by him between 8.45 p.m. and 10 p.m. from Busselton, situated on the west coast of Western Australia, a few miles north of latitude 34° S. Throughout the display, short-wave reception from London was perfect and there was little interference in the broadcast from Perth. Referring to the suggestion that auroræ are sometimes accompanied by audible sounds, Mr. Gregory remarks: "I have witnessed many dazzling displays of Aurora Borealis on the Canadian prairies, in the stillness of remote farming areas, but was never able to detect sounds that could confidently be associated with the lights. The slight mysterious crackling sounds one might hear during a display could be heard on almost any cold night, even when the aurora was entirely quiescent."

Curious Effects of Globular Lightning

ON December 6 about 4.30 p.m., a ball of lightning was seen falling at an angle of about 30° to the horizon near Ardglass, Co. Down. It was accompanied by a glare and a loud noise, and on striking the ground there was a burst of flame from the point of impact, followed by a loud explosion. The spot where it fell was examined by Mr. J. A. S. Stendall, of the Belfast Municipal Museum, Miss M. Gaffikin, and Mr. F. Addey, who has kindly supplied all information collected from those who saw the phenomenon. The stem of a hawthorn tree ten inches in diameter had been cut through, and branches

had been scattered around, one being thrown 100 yards away from the tree. The bank of a dry ditch had been struck, the point of impact showing clearly from the crushed soil, and fragments of clay were found forty yards away. Excavations were made, as it was believed at first that a meteorite had fallen, but no trace of such could be found at a depth of five feet. At the time of the appearance of the lightning a similar phenomenon was seen at a place six miles away in a north-north-west direction. People described this as accompanied by "a shattering blast which shook the whole countryside". A large crater was found in the mud of a river bank near the scene, but this was quickly covered by the tide and could not be seen when the spot was visited later. The portion covered by the impact could not have been localized to the area of the crater because one person, hearing the explosion, went out and saw sparks jumping off the macadam of the roadway. Mr. Addey suspected a meteorite which had disintegrated, as two balls of globular lightning, separated by six miles, occurring at the same instant, would be rather a rare phenomenon. The fact that a thunderstorm was in progress at the time near Belfast and Lisburn, combined with the fact that there was a partial failure of the electric light in the district, is almost conclusive evidence that the phenomenon was globular lightning.

Tring Museum

THE bequest of the zoological collections at Tring by the late Lord Rothschild is the largest single benefaction both in quantity of specimens and in scientific importance that the British Museum has ever received. The collection may be considered as in two parts, one open to the public and the other reserved for study. In the first section, a general zoological series, are many notable specimens such as the long series of giant tortoises or the superb set of Struthious birds, probably the finest in existence and containing many types. The gorillas and other primates are of equal importance and, in addition, there are specimens of rare or recently extinct animals such as the quagga and fine series of rare marsupials and monotremes. The condition of all these specimens and their taxidermy is of the best. The most important section of the study collections is undoubtedly the enormous series, some two millions, of Lepidoptera. The long series of individual species has yielded, and will continue to yield, much information of scientific value. These Lepidoptera include about six thousand type specimens, a fact which by itself would make this bequest one of outstanding importance to the British Museum. There is likewise an extensive library of zoological, entomological and botanical books comprising about thirty thousand volumes in all. Many of these books are of great rarity. This addition of the Tring Museum will lead, no doubt, to important extensions in the scope of systematic research. Hitherto systematists have too often been hampered by having to work with too short series of specimens. The late Lord Rothschild was alive to this weakness in the founda-

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