

France.—M. Lippmann, member of the Institute and professor at the Sorbonne.

Germany.—Dr. Warburg, president of the Imperial Physico-technical Institute; Dr. Jaeger, member of the Imperial Physico-technical Institute; Dr. Lindeck, member of the Imperial Physico-technical Institute.

Great Britain.—The Right Hon. Lord Rayleigh, president of the Royal Society; Prof. J. J. Thomson, Cambridge; Sir John Gavey, C.B.; Dr. R. T. Glazebrook, director of the National Physical Laboratory; Major W. A. J. O'Meara, C.M.G., Engineer-in-Chief, General Post Office; Mr. A. P. Trotter, Electrical Adviser to the Board of Trade.

Guatemala.—Dr. Francisco de Arce, diplomatic representative, London and Paris.

Italy.—Prof. Antonio Roiti, of Florence.

Japan.—Mr. Osuke Asano, doctor of engineering, official expert of the Department of Communication, Tokyo; Mr. Shigeru Kondo, official expert of the Department of Communication, Tokyo.

Mexico.—Don Alfonso Castello; Don Jose Maria Perez.

Netherlands.—Dr. H. Haga, professor at the University of Groningen.

Paraguay.—M. Maximo Croskey.

Spain.—Don Jose Maria Madariaga, professor of electricity and physics at the School of Mines, Madrid.

Switzerland.—Dr. F. Weber, professor at the Swiss Polytechnic School at Zürich; Dr. Pierre Chappuis, of Bale; Dr. J. Laundry, professor of electricity in the School of Engineers, Lausanne.

British Colonies: Australia.—Mr. Cecil Darley; Prof. Threlfall.

Canada.—Mr. Ormond Higman, chief electrical engineer, Inland Revenue, Ottawa.

Crown Colonies.—Major P. Cardew, electrical adviser.

India.—Mr. M. G. Simpson, electrician of the Indian Telegraph Department.

MR. BENNETT H. BROUGH.

ALL members of the Iron and Steel Institute, and, in fact, all those engaged either directly or indirectly in the manufacture of steel, were shocked by the sudden and unexpected death of Mr. Bennett Brough, the general secretary of the Iron and Steel Institute at Newcastle-on-Tyne, on Saturday last, after an operation for peritonitis. He had been attending the autumn meeting of the Institute in Middlesbrough, and up to Thursday appeared to be in normal health, and was taking his usual active part in making the meeting a success.

Mr. Brough was born in 1860, and was educated at the City of London School, and after graduating at the Royal School of Mines was for some time a student at the Mining School at Clausthal. Some time after the completion of his student career at Clausthal, he was appointed instructor in mine surveying at the Royal School of Mines, and only resigned on his appointment as secretary to the Iron and Steel Institute in 1893.

As early as 1885 he acted as a juror at the Inventions Exhibition, was a member of the Mining and Metallurgical Committees of the British Section of the Paris Exhibition of 1889, and of the St. Louis Exhibition of 1904, and the success of the Iron and Steel Section at the Franco-British Exhibition is in no small degree due to his great organising ability and untiring efforts.

Mr. Brough was not only a sound technical man, but a brilliant linguist, and a man of very wide culture and extensive travel. His well-known book on mine surveying and numerous contributions to the various technical and learned societies are known all over the world, and he was an accepted authority on mining matters.

He acted as examiner in mining at the Royal School of Mines, the Glasgow University, and the University of Wales, and he was a member of the council of the Institution of Mining Engineers; he served on the

council of the Institute of Chemistry and the Chemical Society, and was also a Knight of the Swedish Order of Wasa.

As general secretary of the Iron and Steel Institute there were few men more widely known in the metallurgical world, and none more universally esteemed and respected. He was equally accessible to the youngest as to the oldest member of the institute, extending the same courtesy and consideration to all. He was a man of few words, but many kindly deeds, and not only those who were privileged to number him amongst their friends, but all who knew him, have suffered an irreparable loss.

NOTES.

A SPELL of exceptionally brilliant and hot weather for so late in the year occurred over the whole of the British Islands during the last three days of September and the first four days of October, and in nearly all parts of the country previous records fail to show any shade temperatures as high for the corresponding period. At Greenwich the maximum readings exceeded 70° each day, and on the six days from September 29 to October 4 it was 75° or above, the absolutely highest temperature being 79°·9, on September 30. An examination of the Greenwich records from 1841 shows a temperature of 79°·2, on October 4, 1886, but there is no other reading higher than 78° so late in the season. At Nottingham 78° occurred on October 3, whilst the previous highest temperature during the month in the last thirty-five years is 75°, in 1895. At Bath 77° was registered on October 1 and 2, and the highest previous record for the month is 73°, in 1873. At Shields the reading was 77° on October 3, and the previous highest reading in October is 69°, in 1898. All previous records were also broken by 77° at Aberdeen, 76° at Jersey, Nairn, and Valencia, 75° at Holyhead, and 73° at Leith, between October 1 and 4. A feature of especial interest during the hot spell was the exceptionally warm nights, the thermometer commonly not falling below 60°. The Weekly Weather Summary for the period ending October 3, issued by the Meteorological Office, shows that the mean temperature was more than 11° in excess of the average in the north-east and north-west of England and in the Midland counties, whilst the sheltered thermometer registered 80° in all these districts. Much fog or mist occurred at night, and the air throughout the hot spell was exceedingly humid, the ground remaining damp all day where screened from the sun's rays. The primary cause of the hot weather was a quiet drift of southerly air from off the heated land in Spain and France, due to the prevalence of a region of high barometer readings over Germany. At Rochefort and Biarritz the sheltered thermometer registered 86° on October 2.

WE learn from the observatory department of the National Physical Laboratory that highly disturbed magnetic conditions prevailed there on September 29–30. A magnetic storm commenced suddenly about 1.32 a.m. on September 29. After 7.30 a.m. the curves were only slightly disturbed during a period of fully six hours, when fresh disturbance appeared. Considering the length of the interval, it was probably a case of two distinct magnetic storms. On this view, the first storm lasted about six hours, during which time the declination showed a range of 54', while the ranges of horizontal force and vertical force were respectively about 225 γ and 160 γ (1 γ = 0.0001 C.G.S.). The second storm, commencing suddenly about 1.45 p.m. on September 29, continued until 7 a.m. or