operation. It is only fair to point out that such untoward accidents did occur from time to time when Jena glassware was used, but, broadly speaking, they were rare. It is, of course, too early in their career to pronounce upon the British manufacturers of these goods in this respect, and the matter is only mentioned here in the desire to impress upon them the extreme importance of this factor of uniformity and trustworthiness. Beautiful samples sent for exhibition and specimens sent for trial or test which behave extremely well may serve to initiate trade and to introduce the products, but only complete regularity and dependence will ever succeed in building up a permanent industry and trade in these goods.

## PROF. H. H. W. PEARSON, F.R.S.

BY the death of Prof. H. H. W. Pearson, which occurred on November 3 at the Mount Royal Hospital, Wynberg, Cape Colony, South Africa is deprived of one of the ablest and most popular of her scientific men, and botanists have lost a colleague richly endowed with the qualities which go to make an ideal student of Nature.

Harold Henry Welch Pearson was born at Long Sutton, Lincolnshire, in 1870; he was privately educated; after holding a teaching post in an Eastbourne school he entered the University of Cambridge as a non-collegiate student, and later became a member of Christ's College, where he remained until his election to the Frank Smart studentship, which necessitated migration to Gonville and Caius College. His Cambridge career was a series of successes. in 1899 he was awarded the Walsingham medal for work in Ceylon on the vegetation of the Patanas. 1898 he was appointed curator of the Cambridge Herbarium, and in 1899 he joined the staff of the Kew Herbarium. In 1902 he was appointed professor of botany at the South African College, Cape Town, where he laboured with conspicuous success up to the time of his death. He was elected into the Royal Society in the present year. Though the double responsibilities of the professorship and the Botanic Garden were no light burden, Pearson enlisted as a trooper in a Local Defence corps.

Full advantage was taken of the splendid opportunities of exploration afforded by South Africa, and Pearson proved himself to be an explorer of the best type; he visited Damaraland four times, and in January of this year he wrote home from Windhoek after a particularly arduous journey undertaken with the fullest approval and support of General Botha. He also explored Namaqualand, Bushmanland, Angola, and other regions, always returning with valuable booty, of which he made the best use both by his own researches and by generous gifts to institutions and other Pearson's expeditions were readily botanists. assisted by scientific bodies, and especially by the Percy Sladen Trustees, whose liberal contributions were well earned and thoroughly appreciated. His first paper (1898) dealt with the

anatomy of the seedling of the Cycad Bowenia, and in 1899 the Linnean Society published the results of his field-work in Ceylon. In 1902 he wrote on the double pitchers of a Dischidia.

Pearson's most important work is on Welwitschia and Gnetum; he not only greatly extended our knowledge of these Gymnosperms, but with conspicuous ability demonstrated the nature of the "endosperm," for which he proposed the term trophophyte. Pearson's more recent contributions have strengthened his position on the vexed question of the degree of affinity of the Gnetales to the Angiosperms. In one of his most recent letters Pearson referred to the MS. of a promised volume on the Gnetales as almost complete. Observations on South African Cycads, investigations on the common maize disease caused by the root-parasite Striga lutea, an account of the Thymeleaceæ in the Flora of Tropical Africa, a paper on the internal temperature of Euphorbia and Aloe, and well-written descriptions of travels illustrate the wide range of his activities.

The greatest service rendered by Pearson to South Africa was the part he played in the foundation of the National Botanic Garden, and it was his tactful and untiring efforts which led the Government to set apart about 400 acres on the Kirstenbosch estate, on the east side of Table Mountain, for a National Garden, of which he was appointed honorary director in 1913.

Pearson was a botanist of many parts, and a man who inspired affection in an unusual degree by his geniality, honesty of purpose, and boyish enthusiasm. He recognised the almost unlimited possibilities of botanical and economic developments through the Kirstenbosch Garden, and it is for his successors to do their part in carrying out the broadly conceived scheme of the first director. In a letter dated July, 1913, he wrote: "It will be a great burden, but it is worth carrying, even if it never falls to me to exploit its contents."

A. C. Seward.

## PROF. HENRIK MOHN.

THE death of Henrik Mohn, on September 12 at Christiania, removes from the meteorological world a very well known and popular figure. Born at Bergen on May 15, 1835, he had completed his eighty-first year. He took part in all international assemblies of meteorologists from the commencement of the series of 1873 until the meeting of the International Meteorological Committee at Rome in 1913, when he excused nimself on account of the long journey. Shortly afterwards he retired from his appointment as director of the Norwegian Meteorological Service and professor in the University of Christiania, which he had held since 1866. He maintained his scientific activity to the end of his life. His most recent work was the discussion of the meteorological observations of Amundsen's expedition to the South Pole, which was published in 1915. It displays remarkable ingenuity in giving a con-

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nected meteorological account of the conditions near the Pole based upon a very limited number of

data, but with true insight.

Mohn's best-known work is a text-book of the principles of meteorology, which passed through many editions and was translated into almost all European languages except English. By the series of papers on the movement of the atmosphere, written in collaboration with C. M. Guldberg, and published in Christiania in 1876 (revised 1883), he became one of the most successful exponents of dynamical meteorology. His institute was prominent among its fellows for the excellence of its regular publications and the promptitude with which they were issued. He was a strenuous advocate of the use of the hypsometer for absolute determinations of pressure; and on the occasion of a visit to England he took the opportunity of making a comparison between barometric standards by that method, which agreed with direct comparisons within a thousandth of an inch.

Mohn's published papers are very numerous and cover all sections of meteorological science. He was the author of the article on the geography of Norway in the ninth edition of the "Encyclopædia Britannica" and a number of articles on the climate of Norway. He had a remarkably close grip of the conditions and limitations of meteorological observations and observers, and on that account was a most valued member of the International Meteorological Committee and of the various conferences and congresses at which the principles and the programmes of international cooperation were discussed. His personal qualities secured for him universal esteem as the doyen of international meteorologists. He was generally chosen by the Norwegian Academy as one of its representatives at international celebrations. The regret called forth by his retirement on account of his advancing years was revived and heightened by the news of his death. NAPIER SHAW.

## NOTES.

WE learn with much regret of the death, on November 12, at sixty-one years of age, of Prof. Percival Lowell, director of the Lowell Observatory, Flagstaff, Arizona, where his notable work on Mars and other planets has been carried on since 1894.

His Majesty the King has been pleased to approve of the following awards this year by the president and council of the Royal Society: -A Royal medal to Dr. J. S. Haldane, for his services to chemical physiology, more especially in reference to the chemical changes of respiration; a Royal medal to Prof. H. M. Macdonald, for his contributions to mathematical physics. The following awards have also been made by the president and council:-Copley medal to Sir James Dewar, for his investigations in physical chemistry, and more especially his researches on the liquefaction of gases; Rumford medal to Prof. W. H. Bragg, for his researches in X-ray radiation; Davy medal to M. le Prof. H. L. le Chatelier, for his researches in chemistry; Darwin medal to Prof. Yves Delage, for his researches in zoology and botany; Sylvester medal to M. J. Gaston Darboux, for his contributions to mathe-

1 An English translation is given in Abbé's "Mechanics of the Earth's Atmosphere." Third Collection. (Smithsonian Institution, 1910.)

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matical science; Hughes medal to Prof. Elihu Thomson, for his researches in experimental electricity.

The following is a list of those who have been recommended by the president and council of the Royal Society for election into the council at the anniversary meeting on November 30:—President, Sir J. J. Thomson; Treasurer, Sir A. B. Kempe; Secretaries, Prof. A. Schuster and Mr. W. B. Hardy; Foreign Secretary, Prof. W. A. Herdman; Other Members of the Council, Prof. J. G. Adami, Dr. H. T. Brown, Dr. Dugald Clerk, Prof. A. R. Cushny, Prof. A. Dendy, Prof. P. F. Frankland, Prof. J. W. Gregory, Dr. H. Head, Mr. J. H. Jeans, Major H. G. Lyons, Major P. A. McMahon, Prof. F. W. Oliver, Prof. C. S. Sherrington, Prof. A. Smithells, Hon. R. J. Strutt, and Mr. Richard Threlfall.

ELEVEN members of Sir Ernest Shackleton's Antarctic expedition arrived in London last week, including Mr. Frank Wild (second in command), Messrs. J. Wordie, R. S. Clark, R. James, L. Hussey, and G. Marston (of the scientific staff), Major Orde Lees (motor engineer), and Messrs. A. Macklin and I. McIlroy (surgeons). The remaining members of the Weddell Sea party will arrive shortly, with the exception of Sir Ernest Shackleton, who is on his way to New Zealand to join the Aurora. In an interview in the Daily Chronicle Mr. Wild gives some account of the experiences. The Endurance was nipped in the ice four months before she eventually sank, and the explorers fortunately had ample time even at the end to remove stores and equipment to the ice. With these stores, and meat provided by shooting the dogs, as well as a few seals and penguins, they managed to survive. On Elephant Island, with its scanty resources, the food problem caused grave anxiety, for the stores were running low. We have not heard any details as yet about the scientific results, but they must be considerable, at least in oceanography and meteorology. A number of kinematograph films have been brought back, including views of the crushing of the *Endurance*, the abandoning of the ship and her foundering, as well as of the explorers' life on the drifting ice-floe and on Elephant Island.

THE Women's National Land Service Corps has just issued an interim report on the work of the last eight months. This organisation is recognised by the Board of Agriculture and has received a Government grant. It has endeavoured to create a favourable opinion as to the value of women's work in agriculture by supplying a body of workers capable of making a good impression, and so break down the prejudice of those farmers who are opposed to the employment of women. From the start the selection committee has spared no pains to prevent unsuitable women from going on the land, with the result that, considering the difficulties involved, the number of failures has been extraordinarily The corps has several training centres in different parts of the country, where women are given short courses of instruction in farm work. Besides supplying labour units to farmers, another, and perhaps more important, branch of the work has been directed against the view, widely held in the rural districts, that work on the land is derogatory. The interesting letters appended to the report give a very clear idea of this difficulty. The corps is urgently in need of more recruits to meet the demand from farmers which cannot now be met, and is certain to become greater after January 1, 1917, when exemptions of agricultural labourers are to be reconsidered. secretary of the corps is Miss A. C. Franklin, and the headquarters are at 50 Upper Baker Street, London,