

conditions have of course necessitated this departure from the original scope of the Institute, which, as we are expressly told by Tiraboschi, did not exclude the "humanities."¹ The scheme of the natural sciences itself has also been entirely recast, with a corresponding increase and redistribution of members among the various sections. As regards foreign membership the Lincei take the lead in an important innovation, which will doubtless be adopted in due course by the great scientific institutes of other countries. In a truly "international" spirit, they henceforth practically abolish the distinction between *Associates* (Soci, or home members) and *Correspondents* (Corrispondenti, or foreign members). The clause bearing on this point in the President's Circular of June 26, 1883, deserves to be here quoted in full:—

"Per ciò che concerne gli stranieri fu unanime il pensiero di togliere la distinzione fra i Soci ed i Corrispondenti: distinzione la quale riferendosi a pochi personaggi eminenti nelle scienze a cui attendono e disseminati in tutto il mondo civile, riesce difficilissima e di utilità molto dubbia. Per le scienze fisiche, matematiche, e naturali parve necessario un aumento nel numero degli stranieri aggregabili all' Accademia, non solo per dare una dimostrazione d'onore a personaggi così benemeriti, ma anche per agevolare le relazioni scientifiche le quali si fanno ogni giorno più frequenti, più necessarie, e più intime fra i cultori delle stesse scienze ed i direttori di analoghi stabilimenti scientifici, indipendentemente dai confini politici che li separano."²

Amongst the foreign *savants* who thus receive full membership, occur the names of Airy, Adams, Lockyer, and Huggins in Astronomy, Ramsay in Geology, Hooker in Botany, Huxley in Zoology, Cayley and Roberts in Mathematics, Whitney in Philology, Freeman in History and Geography, Gladstone in Social Science.

As reorganised under the new constitution, the Academy consists henceforth of two classes: (1) Physical, Mathematical, and Natural Sciences; (2) Moral Sciences,—distributed into a number of Categories and Sections as under:—

CLASS I.			
Categories	Sections		Members
1. ...	Mathematics ... ..	...	15
	Mechanics ... ..	...	11
	Astronomy ... ..	...	11
	Geography (Physical) ... ..	...	4
2. ...	Physics ... ..	...	17
	Chemistry ... ..	...	8
3. ...	Crystallography and Mineralogy ... ..	...	9
	Geology and Palæontology ... ..	...	11
4. ...	Botany ... ..	...	9
	Zoology and Morphology ... ..	...	8
5. ...	Agronomy ... ..	...	3
	Physiology ... ..	...	6
	Pathology ... ..	...	3

CLASS II.			
Categories			Members
1. Philology ... ..	...	...	17
2. Archæology ... ..	...	...	19
3. History and Historical Geography ... ..	...	...	16
4. Philosophy ... ..	...	...	15
5. Jurisprudence ... ..	...	...	10
6. Social Science ... ..	...	...	21

On May 14, 1881, an Act was passed granting a large sum for the purpose of erecting or purchasing a suitable edifice for the Lincei, henceforth officially recognised as the "Royal Academy of Sciences." After protracted negotiations, an arrangement was made with Prince Tommaso Corsini, in virtue of which for the sum of 95,400*l.* the Academy acquired the perpetual use of the magnificent Palazzo Corsini, situated in the Via della

¹ "E benchè il principal loro oggetto fosser le scienze matematiche e filosofiche, non trascuravano però l'amena letteratura e gli studi poetici" (viii. p. 73).

² As finally modified in the new articles, the clause affecting foreign members runs thus:—"I soci stranieri sono equiparati ai nazionali allorchando essi sono in Italia."

Longara, Trastevere. The purchase, which was effected in May 1883, included the furniture, fittings, gardens, and annexes, but not the Library and Pinakothek, which, being entailed, the prince had no power to alienate. To meet this difficulty a special Act was subsequently passed, which removed the entail, and enabled the prince to make a free gift of the Pinakothek to the nation, and of the Library to the Accademia dei Lincei. The Library, originally collected by Cardinal Neri Corsini, and bequeathed by him in 1774 to his nephew, Duca don Filippo Corsini, comprises the prints, drawings, books, and manuscripts occupying the nine rooms on the first floor of the north side of the building so well known to English visitors in Rome. It passes to the Lincei on the condition of being preserved by them for the public use under the name of the "Biblioteca Corsiniana." It is also to be kept for ever not only in Rome, but in Trastevere, as set forth in the disposition of its chief founder, Cardinal Neri Corsini. Some of our readers may possibly remember the two allegorical busts at the main entrance of the palace. These are now to be replaced by busts of the Cardinal and of Prince Tommaso Corsini, with inscriptions recording their services to the cause of the arts and sciences. The prince also receives from the Academy the gift of a complete copy of its *Atti* or *Proceedings*, of which there are three series: (1) under the Pontifical "dispensation," 23 vols.; (2) 1873-76, 8 vols.; (3) 1876-83, 7 vols. On the yellow wrapper of the present series the tiara gives place to the royal crown of Italy above the lynx, and the Lincei pass from the shadow of the now silent Sant' Uffizio to a right royal residence on the banks of yellow Tiber.

A. H. KEANE

NIELS HENRIK CORDULUS HOFFMEYER

WE have already (p. 387) briefly referred to the death of Capt. Hoffmeyer; the importance of his work in meteorology deserves more detailed notice.

Capt. Hoffmeyer was born at Copenhagen, June 3, 1836. His father was Col. A. B. Hoffmeyer. He commenced his studies with a view to a professional career, but the idea was soon abandoned, and he was entered as a pupil in the military academy. At the age of eighteen he became an officer, and on completing his studies he received an appointment in the artillery service.

He was engaged in the Schleswig-Holstein war of 1864, but as early as February he was compelled by illness to retire from active service. In early youth he had suffered from rheumatic fever, and the exposure and fatigues of the winter campaign soon laid him prostrate with another severe attack of the same fever. On the reduction of the army at the close of that year, Capt. Hoffmeyer was placed on the retired list.

He spent the early part of the summer of 1865 recruiting his health at Sophienbad, a watering-place near Hamburg, and in August he proceeded to Paris, where and at Nantes he remained a year studying the works carried on at the iron foundries there. On his return to Denmark he took an active part in establishing a similar foundry at Christiansholm, but in 1867 he was appointed to a post in the War Department, and became at the same time a captain of the militia of Copenhagen.

It was while residing in France that Hoffmeyer's attention began to be directed to meteorology. At that time, fortunately, the principles which distinguish modern meteorology were being developed and prosecuted by the genius and energy of Leverrier, in the daily publication in the *Bulletin International* of a weather map for all Europe, which had been begun only two years before. After his appointment to the War Department, he devoted his energies with characteristic ardour to the study of meteorology, and when the Danish Government established the Meteorological Institute in 1872, Capt. Hoffmeyer was appointed director.

He continued to suffer from occasional attacks of rheumatic fever, and during the last year of his life was never quite well; but in spite of the great weakness under which he laboured, his overmastering passion for hard work would not be controlled. His health again gave way at the end of January, and he finally succumbed at one o'clock on the afternoon of February 16.

It was from a singularly clear and firm apprehension of the characteristic principles of modern meteorology, and an unflinching application of them to the facts of observation, that Capt. Hoffmeyer has left his mark on the science,—these principles being the relations of winds, temperature, and rainfall to the distribution of atmospheric pressure. In working out the weather problem of Europe, no country occupies a more splendid position for the observation of the required data than does Denmark with its dependencies of Farö, Iceland, and Greenland. Denmark was slow to occupy the field, nothing being done in this direction by the Danish Government prior to Hoffmeyer's appointment as Director of the Meteorological Institute. In a short time these important regions were represented by stations in Greenland, Iceland, and Farö. The meteorology of Denmark proper was pushed forward with great vigour. In truth, the monthly meteorological *Bulletin* of Denmark is in several respects among the best that reach us. The number for January, 1884, just received, presents the monthly results of pressure for 13 stations, temperature for 109 stations, and rainfall and other forms of precipitation for 159 stations. These results are graphically shown on four maps, accompanied with a full descriptive letter-press—one map giving the isobars for the month, another the isothermals, and on the same map the mean temperature at each of the 109 stations; a third map, the minimum temperature at each of the stations; while the fourth gives isohyetal lines showing the rainfall, and here again the amount at each of the 159 rain stations is entered in plain figures on the map. The educative effect of these instructive monthly sheets on a people whose industries are so largely pastoral and agricultural must be very great.

It was, however, to the department of meteorology which is concerned with the preparation and study of synoptic weather charts that Hoffmeyer chiefly directed his attention. The great services he rendered in this direction may be indicated by a reference to his atlas of daily weather maps of the Atlantic, embracing a period of fully three years, the expense of which was almost wholly borne by himself, and his annual reports giving tri-daily observations for the Denmark, Farö, Iceland, and Greenland stations—a work which no working meteorologist can afford to be without. It was arranged last summer to resume the publication of the synoptic charts in conjunction with Neumayer, and the work was so far advanced that the first sheets were printed off on February 17, the day after his death.

Of the positive additions Hoffmeyer made to science, the most noteworthy are his papers on the Greenland foehn (*NATURE*, vol. xvi. p. 294), and on the distribution of atmospheric pressure in winter over the North Atlantic, and its influence on the climate of Europe (*NATURE*, vol. xviii. p. 680). The latter is an original and highly important contribution to science, whether regard be had to the method of investigation or to the results. He showed that the character of the weather, as regards mildness or severity of the winter of the regions surrounding the North Atlantic, is really determined by the position of the region of minimum pressure, according as it is localised to the south-west of Ireland, in Davis Straits, or midway between Jan Mayen and the Lofoden Islands.

It was but fitting that he should have occupied the honourable position of Secretary to the International Polar Commission, one of the principal objects of which

was to collect materials for a satisfactory discussion of the different questions raised by the weather maps of the northern hemisphere. For this office the sincerity of his convictions, his honesty of purpose, and his business habits, eminently fitted him. To all who knew him, the memory of his eager readiness to assist fellow-workers, the urbanity of his manner, his joyous nature, and the unusual warmth of his friendship, cannot but awaken the keenest feelings of regret for his early death.

NOTES

As the British Association meets this year—its fifty-fourth—on August 27, in Montreal, preparations for the meeting have had to be made unusually early. Already everything is ready, and we are able to announce the lists of officials. President: the Right Hon. Lord Rayleigh, D.C.L., F.R.S., Professor of Experimental Physics in the University of Cambridge. Vice-Presidents: His Excellency the Governor-General of Canada; the Right Hon. Sir John Alexander Macdonald, K.C.B., D.C.L.; the Right Hon. Sir Lyon Playfair, K.C.B., M.P., F.R.S.; the Hon. Sir Alexander Tilloch Galt, C.M.G.; the Hon. Sir Charles Tupper, K.C.M.G.; Sir Narcisse Dorion, C.M.G.; the Hon. Dr. Chauveau; Principal J. W. Dawson, C.M.G., F.R.S.; Prof. Edward Frankland, M.D., D.C.L., F.R.S.; W. H. Hingston, M.D.; Thomas Sterry Hunt, LL.D., F.R.S. General Treasurer: Prof. A. W. Williamson, LL.D., F.R.S. General Secretaries: Capt. Douglas Galton, C.B., D.C.L., F.R.S.; A. G. Vernon Harcourt, F.R.S. Secretary: Prof. T. G. Bonney, D.Sc., F.R.S., P.G.S. Local Secretaries for the meeting at Montreal: L. E. Dawson, R. A. Ramsay, S. Rivard, S. C. Stevenson, Thomas White, M.P. Local Treasurer for the meeting at Montreal, F. Wolferstan Thomas. The Sections are the following:—A.—Mathematical and Physical Science.—President: Prof. Sir William Thomson, M.A., LL.D., D.C.L., F.R.S.S.L. and E., F.R.A.S. Vice-Presidents: Prof. J. B. Cherriman, M.A.; J. W. L. Glaisher, M.A., F.R.S., F.R.A.S. Secretaries: Charles H. Carpmael, M.A.; Prof. A. Johnson, M.A., LL.D.; Prof. O. J. Lodge, D.Sc.; D. MacAlister, M.A., M.B., B.Sc. (Recorder). B.—Chemical Science.—President: Prof. H. E. Roscoe, Ph.D., LL.D., F.R.S., F.C.S. Vice-Presidents: Prof. Dewar, M.A., F.R.S., F.C.S.; Prof. B. J. Harrington, B.A., Ph.D. Secretaries: Prof. P. Phillips Bedson, D.Sc., F.C.S. (Recorder); H. B. Dixon, M.A., F.C.S.; T. McFarlane, Prof. W. W. Pike. C.—Geology.—President: W. T. Blanford, F.R.S., F.G.S., F.R.G.S. Vice-Presidents: Prof. Rupert Jones, F.R.S., F.G.S.; A. R. C. Selwyn, LL.D., F.R.S., F.G.S. Secretaries: F. Adams, B.Ap.Sc.; G. M. Dawson, D.Sc., F.G.S.; W. Topley, F.G.S. (Recorder); W. Whitaker, B.A., F.G.S. D.—Biology.—President: Prof. H. N. Moseley, M.A., F.R.S., F.L.S., F.R.G.S., F.Z.S. Vice-Presidents: W. B. Carpenter, C.B., M.D., LL.D., F.R.S., F.L.S., F.G.S.; Prof. R. G. Lawson, Ph.D., LL.D. Secretaries: Prof. W. Osler, M.D.; Howard Saunders, F.L.S., F.Z.S. (Recorder); A. Sedgwick, B.A.; Prof. R. Ramsay Wright, M.A., B.Sc. E.—Geography.—Vice-Presidents: Col. Rhodes; P. L. Sclater, M.A., Ph.D., F.R.S., F.L.S., F.G.S.; F.R.G.S. Secretaries: R. Bell, M.D., LL.D., F.G.S.; Rev. Abbé Laflamme; E. G. Ravenstein, F.R.G.S.; E. C. Rye, F.Z.S. (Recorder). F.—Economic Science and Statistics.—President: Sir R. Temple, G.C.S.I., C.I.E., D.C.L., F.R.G.S. Vice-Presidents, J. B. Martin, F.S.S.; Prof. J. Clark Murray, LL.D. Secretaries: Prof. H. S. Foxwell, M.A., F.S.S.; J. S. McLennan, B.A.; Constantine Molloy (Recorder); Prof. J. Watson, M.A., LL.D. G.—Mechanical Science.—President: Sir F. J. Bramwell, F.R.S., M.Inst.C.E. Vice-Presidents: Prof. H. T. Bovey,