the desire that this nomenclature may be gradually adopted for bodies already known; the prefix di- to be used as at present, to denote bodies formed by double substitution (proposed by M. Hanriot).

(8) The different carbon atoms of naphthalene anthracene, phenanthrene, fluorene, carbazol, acenaphthene,

acridine, shall be numbered as follows:-

(9) The proposition to denote the carbon atoms of quinolcine by a, β, γ for the pyridine ring, and o, m, p, a(ortho, meta, para, ana) in the benzine ring, which had been voted at the Sectional meeting, was adjourned by a vote of 42 against 26, and referred to the Permanent

After the carrying of the resolutions, M. Friedel made a short speech, in which he thanked especially the foreign members for their attendance and help. Some people might, he said, think that the Section had accomplished but little; that, however, was not his opinion: their aim had been to help workers in their work, and nothing could be more conducive to this aim than the use of the same language among the chemists of all countries. He felt sure that their efforts would prove fruitful in the future, and he hoped that by next year the International Committee would be able to report such serious progress as to justify the summoning of another Congress.

Thus terminated the formal proceedings of the Section and Congress, which had been marked throughout by the greatest good feeling among the *savants* of the various nations represented. On Sunday the Congress was brought to a final close by a banquet offered to the

foreign members at the Terminus Hotel.

THE REV. M. J. BERKELEY.

THE death of our great English mycologist has fol-I lowed very close upon that of our great English lichenologist. Both of them were country clergymen of the Church of England, both were over eighty, and the career of both as botanical authors has extended over half a century

The Rev. Myles Joseph Berkeley, M.A., F.R.S., was born at Biggin, in the parish of Oundle, in the year 1803. He was a descendant of the old historic family of that name. He was educated at Rugby, and at Christ's College, Cambridge, and graduated as fifth Senior Optime in the year 1825. After holding a curacy at Margate, he was appointed, in 1833, incumbent of two small parishes near Wansford, in his native county. Here he remained for thirty-five years, actively engaged in the performance

Lellmann's notation.

of his parochial work. His stipend was small and his family large, and he had to supplement his clerical income by taking private pupils. This of course abincome by taking private pupils. sorbed a great deal of his leisure, but his industry and force of character were so great that he got through, in addition, an enormous amount of scientific work. 1868 he was appointed to the more valuable living of Sibbertoft, near Market Harborough, which he held until his death, on July 30. During the last ten years his health has failed, and in 1879 he presented his botanical collections to Kew, and, since that time, has published scarcely anything.

His attachment to botany must have begun very early in life, for I remember him saying, when we were speaking about a certain botanical examination, that he had not set any questions that he could not have answered when he was six years old. His friends thought he would have taken a higher degree at Cambridge if he had not given so much attention to natural history. book, "Gleanings of British Algæ," appeared in 1833. It deals mainly with minute microscopic types. The book which made his reputation was his "Monograph of the British Fungi," which forms the third volume of Hooker's "British Flora," published in 1836 This was the only hand-book of the British species in existence up to 1871, so that for thirty-five years it was the indispensable companion of every worker. The "Systema Mycologicum" of Fries, which summarized most ably all that was then known about genera and species, came out -the three volumes from 1821 to 1829, its "Supplement" in 1830, and the "Elenchus" in 1828; so that these were just in time to serve Berkeley as a foundation to build upon. From 1836 to 1870 he was the universal referee for everyone in this country who wanted information about fungi. Collections poured in upon him from home and abroad, and he described many thousands of genera and species, a large proportion of which were new, in Hooker's "Antarctic Floras," Hooker's Journals of Botany, the Transactions and Journal of the Linnean Society, and in the Annals of Natural History. During the latter part of the time he worked a great deal in conjunction with the late Mr. C. E. Broome, of Bath, who had abundant leisure and industry, combined with an unconquerable disinclination to publish on his own account, and in every Fungus-list "Berk. et Broome" is an often-quoted authority. Beginning with Oidium Tuckeri, he gave special attention to the fungoid pests of agriculture and horticulture; and it was, more than anything else, his papers on the potato disease that obtained for him the small pension that was granted to him during the last twenty years of his life. In 1857 he published a general "Introduction to Cryptogamic Botany," which has had a wide circulation. been no other book of a similar scope in the English language till this present year. His "Outlines of British Fungology," published in 1860, contains twenty-four plates, illustrating a series of about 150 typical forms. The text deals specially with the Hymenomycetes, and, for the other orders, does not go much beyond a catalogue of the British genera and species. His "Hand-book of the British Mosses," published in 1863, contains descriptions and plates of all the species then known in Britain. In the same year he was awarded the Biological Gold Medal of the Royal Society, of which he was elected a Fellow in 1879. But by this time his working days were over, and in that year he presented to Kew his entire fungus herbarium, followed, not long after, by his books. His herbarium contains specimens of upwards of 10,000 species, duly named and classified; and it has been estimated by Mr. G. E. Massee that it contains type specimens of 4866 species described by himself, and that the full number of new species which he described will not fall far short of 6000. For many years he acted as one of the botanical exa-

miners of the University of London, generally in conjunction with Sir J. D. Hooker and the late Dr. Thomson; and he acted also in the same capacity for the University of Cambridge and the Apothecaries' Company.

From the commencement of the Gardener's Chronicle, in 1841, till his health failed, he was a regular contributor to its pages. His most important papers were a series of articles on vegetable pathology, commenced in 1854 and continued at intervals till 1857. He also contributed a series of articles on the diseases of plants to the "Cyclopædia of Agriculture." He was one of the first to lay special stress upon the need for studying the full life-history of a fungus in order to understand it properly, the carrying out of which in the last generation has so completely changed many of our old ideas.

After the death of Lindley he acted for many years as botanical referee and general counsellor to the Royal Horticultural Society, a post for which he was well fitted, from his thorough knowledge of vegetable physiology and his acquaintance with practical gardening. It was in the Journal of this Society that his papers on the potato disease appeared. He was an excellent classical scholar, and read through all the proof-sheets of Bentham and Hooker's "Genera Plantarum," specially as linguistic He was a man full of geniality, always willing to impart freely his wide store of information, and will be greatly missed by those that had the pleasure of his personal acquaintance. He had a commanding presence and a robust physique. His portrait, painted in oil by Peel in 1878, now hangs in the rooms of the Linnean Society, and a capital full-page engraving, by Mr. Worthington Smith, has twice appeared in the *Gardener's* Chronicle. J. G. B.

NOTES.

WE mentioned last week the fêtes in connection with the opening of the new Sorbonne, to which students from all the Universities of Europe had been invited. The following is a complete programme of the ten days' festivities-held under the auspices of the Association Générale des Étudiants de Paris-in which all the students of Paris, as well as their foreign guests, were invited to take part:--August 4, gala performance at the Opera. August 5, inauguration of the Sorbonne; reception by M. Fallières, Minister of Public Instruction. August 8, reception by the Municipality of Paris at the Hôtel de Ville. August 9, matinée at the Comédie Française; reception by M. Yves Guyot, Minister of Public Works; reception of the English and American students by M. Beljame, Professor of English at the Sorbonne. August 10, speeches by the chiefs of the foreign delegations; performance at the Gaîté Theatre. August 11, prcsentation of the chiefs of the foreign delegations to M. Carnot. August 12, ascent of the Eiffel Tower; excursion to Meudon; banquet on the terrace, under the presidency of M. Janssen. The fêtes have been throughout a magnificent success, and the students of all countries must carry away with them the most pleasant of remembrances of their French comrades. Government and the City of Paris had voted a sum of about £3500 to the Association Générale des Étudiants, and it is to the organizing powers of the President, M. Chaumeton, and his devoted lieutenants, that the success of the meeting is due. At the Meudon banquet, at which there were nearly 2000 covers, M. Lavisse, Professor of Modern History at the Sorbonne, in an eloquent speech, declared that the principle of the future must be, not cosmopolitanism, but "le respect de chaque patrie par toutes les patries."

THE Congress of Physiological Psychology was held in Paris last week, and the meeting is considered to have been very successful. It was decided that a second meeting should be held in 1892, either in London or in Cambridge, during the month of August.

THE Hygiene Congress at Paris brought its labours to a close on Saturday last. Among the subjects discussed during the week was that of the pollution of rivers. The Congress decided that the pollution of underground watercourses and of rivers by the residue of factories should in principle be forbidden, and that water from factories should not flow into a stream till it had been proved to be absolutely free from all injurious substances. The Congress was strongly of opinion that the most perfect method of purification was by irrigation. This, of course, must, in certain cases, be preceded by such mechanical and chemical processes as would render the water fit for agricultural purposes. It was related that many manufacturers had benefited by the application of the law, as in their efforts to prevent the pollution of watercourses they had made discoveries enabling them to utilize waste products. The difficulty was with the smaller manufacturers, who were not rich enough to take the necessary measures. The Congress decided that where persistent resistance was displayed the authorities should themselves execute the works prescribed for the purification of the water and compel the persons interested to pay the cost.

Arrangements are being made by the local committee of the American Association at Toronto for an excursion, starting September 3 or 4, to the Huronian district. Particulars will be given in a circular, which is to be issued by the American Geological Society. There will also be an excursion to the Pacific Coast.

Some time ago the Berlin Academy of Sciences received from Count Loubat, of New York, about £1150, with a request that a prize might be founded for the encouragement of North American studies. At the same time he sent £120, which was to be offered as a special prize. It has now been decided that a prize of £150 shall be awarded in July 1891, to the author of the best printed work on the settlement of civilized colonies in North America and their later history. The works to be submitted must have appeared between July 1, 1884, and July 1, 1889; and the authors must communicate to the Berlin Academy before July 1, 1890, their intention to compete. The language of the books may be German, English, French, or Dutch. In 1896 there will be another prize of similar amount for a work on the North American aborigines. Every five years a prize of £150 will be offered, the subjects being aboriginal and civilized history, chosen alternately. The money for the first of this series of prizes will be obtained by the addition of the special sum of £120 to the interest on the larger and permanent fund.

The Royal Danish Academy of Sciences invites research on the following among other subjects:—Compounds of alcohol radicals with copper, silver, or gold, and compounds of polyvalent alcohol radicals with metals (all unknown at present). Prize a gold medal. The fatty acids in the fat of butter; to be isolated and determined, and relations indicated especially between the quantities of oleic acid and those of palmitic acid and their higher homologues. Prize about £32. The Mycorhize of the beech. Are they different in different kinds of humus? Does the structure of the mycelium give a basis for classification? Is there a reciprocal symbiosis, the fungus preparing food for the plant, &c., &c. Prize about £32. Memoirs to be sent to Prof. Zeuthen, of Copenhagen, before October 31, 1890, except in the last case, for which the date is October 31, 1891.

The twelfth annual meeting of the Midland Union of Natural History Societies will be held at Oxford on the afternoon of Monday, September 23. An inaugural address, on heredity, will be delivered by the President, Mr. E. B. Poulton, F.R.S. This will be followed by a discussion, after which the meeting will transact all necessary business. In the evening there will be a conversazione in the Museum, and the Oxfordshire