

least the merit of being exhaustive, and differs so slightly from that in common use in America that its adoption does not involve a change in, but only an addition to, the system which in some form or other is destined to supersede the binomial system now rendered inadequate by the acceptance of the theory of evolution.

As an example of the compromise I propose, I add a list of the local races of the Dipper, with their geographical ranges:—

*Cinclus aquaticus melanogaster* (Scandinavia).

*Cinclus aquaticus melanogaster-albicollis* sive *Cinclus aquaticus* (West Europe, as far north as the Carpathian and as far south as the Pyrenees).

*Cinclus aquaticus albicollis* (South Spain, Algiers, Italy, Greece).

*Cinclus aquaticus albicollis-cashmiriensis* (Asia Minor, Caucasus, Persia).

*Cinclus aquaticus leucogaster* (East Siberia).

*Cinclus aquaticus leucogaster-cashmiriensis* (Central Siberia).

*Cinclus aquaticus cashmiriensis* (Cashmere, South Siberia, and Mongolia).

*Cinclus aquaticus cashmiriensis-sordidus* (Altai Mountains).

*Cinclus aquaticus sordidus* (Thibet).

In this system it must be observed that wherever there is a fourth name it is always connected by a hyphen to the third name, and comprises all the intermediate forms between the two. It is somewhat cumbersome, but it provides for the contingency of any intermediate links that may occur. To express it algebraically, it provides not only for A B and B C, but also for A C. It is perhaps the only system which is theoretically perfect, but the question whether its voluminousness renders it impracticable or undesirable is one requiring careful consideration.

(To be continued.)

#### UNIVERSITY AND EDUCATIONAL INTELLIGENCE

UNIVERSITY COLLEGE, BRISTOL.—A correspondent writes:—This session has been most successful, the numbers of students in attendance being considerably larger than in the two preceding years. Funds are wanted more seriously than ever to complete the building and provide additional accommodation. Nothing has yet been done towards an endowment fund. Mr. E. Buck, M.A., Lecturer in Mathematics, has resigned his position on the staff. The Demonstrator in Physics, Mr. Colman C. Starling, has also resigned his post in consequence of internal rearrangements. The Chair of Geology and Physiology, left vacant by the resignation of Prof. Sollas, has been filled by the appointment of Mr. Lloyd Morgan.

#### SOCIETIES AND ACADEMIES

##### SYDNEY

Linnean Society of New South Wales, April 30.—Dr. James C. Cox, F.L.S., vice-president, in the chair.—The Hydromedusæ of Australia, part 2, by R. von Lendenfeld, Ph.D. According to the principles set forth in part 1 of this paper, the Hydromedusæ are classified in a new manner, and the Australian representatives of the first four families in this system are described or referred to. The paper contains descriptions of several new and interesting forms, and in every case an abstract of everything known on the histology of every species is given with references. The most interesting of the new forms is *Eudendrium generale*, the male polypastyles of which show a great similarity to Medusæ. They possess four aboral tentacles in the principal radii, and on these the spermatozoa reach maturity. These tentacular appendages are therefore homologous to the radial canals of the Craspedote Medusæ. Some deductions are drawn herefrom, and the homology of the parts in Medusæ and Polytypes described differently to the views expressed by Allman and others. The Umbrella is not homologous to a web between the tentacles of the mouth, but between the generative tentacular processes at the aboral pole.—Revision of the recent Rhipidoglossate and Docoglossate Mollusca of New Zealand, by Prof. F. W. Hutton, F.G.S. The synonymy of all the species is fully given, with, in many instances, revised descriptions and notes on the dentition where known.—Notes on hybridism in the genus *Brachychiton*, by Baron Ferd. von Mueller, K.C.M.G., M.D., Ph.D., F.R.S., &c. The plant which is the subject of this paper is a beautiful tree of forty feet

in height and a stem diameter of one foot, grown at Fern Hill, near Penrith, New South Wales, and is an undoubted hybrid between *Brachychiton populneum* and *Brachychiton acerifolium*. Like most hybrids, the flowers never perfect their seed.—Mr. Macleay read a letter from the Rev. J. E. Tenison-Woods, vice-president of the Society, dated from Perak, February 27 last, giving a long and interesting account of his proceedings and experiences in the Malacca Peninsula. He had examined and reported on the rich tin mines of the settlement, and the geological features of the whole territory; and he had spent some time in the investigation of its zoological and botanical productions.

Royal Society of New South Wales, May 7.—Annual Meeting.—Hon. Prof. Smith, C.M.G., president, in the chair.—The Report of the Council stated that thirty new members had been elected during the year, and the total number on the roll, April 30, was 494. M. Louis Pasteur, M.D., of the French Academy of Sciences, had been elected an honorary member in the place of the late Dr. Charles Darwin, and Ottokar Feistmantel, M.D., Palæontologist to the Geological Survey of India, had been elected a corresponding member.—The Clarke Medal for the year 1884 had been awarded to Alfred R. C. Selwyn, LL.D., F.R.S., in recognition of his scientific labours in Great Britain and as Director of the Geological Surveys of Canada and of Victoria.—During the year the Society held nine meetings, at which the following papers were read, viz.:—Presidential Address by Chr. Rolleston, C.M.G.—On the aborigines inhabiting the great lacustrine and riverine depression of the Lower Murray, Lower Murrumbidgee, Lower Lachlan, and Lower Darling, by P. Beveridge.—On the Waranamatta shales, by the Rev. J. E. Tenison-Woods, F.G.S., F.L.S.—Further remarks on Australian Strophalosia, and description of a new species of Aucella from the Cretaceous rocks of North-East Australia, by R. Etheridge, jun., F.G.S.—On plants used by the natives of North Queensland, Flinders, and Mitchell Rivers, for food, medicine, &c., by E. Palmer (M.L.A. Queensland).—Notes on the genus *Macrozamia*, with descriptions of some new species, by Charles Moore, F.L.S., V.P.—A list of double-stars, by H. C. Russell, B.A., F.R.A.S.—Some facts connected with irrigation, by the same.—On the discoloration of white bricks made from certain clays in the neighbourhood of Sydney, by E. H. Rennie, M.A.—On the roots of the sugar-cane, by Henry Ling Roth, F.M.S.—On irrigation in Upper India, by H. G. McKinney, A.M.I.C.E.—On tanks and wells of New South Wales; water-supply and irrigation, by A. Peypys Wood.—Additions to the census of the genera of plants hitherto known as indigenous to Australia, by Baron F. von Mueller, K.C.M.G., F.R.S., &c.—The Medical and Microscopical Sections held regular monthly meetings. At the preliminary meeting of the Medical Section this year, the Chairman stated that never during the history of the Section had its meetings been so numerous attended, and that the value of the papers read before it was attested by the fact that so many of them had been reprinted in the Home journals.—The Council has issued the following list of subjects, with the offer of the Society's bronze medal and a prize of 25*l.* for each of the best researches, if of sufficient merit:—Series III. To be sent in not later than September 30, 1884. No. 9. Origin and mode of occurrence of gold-bearing veins and of the associated minerals. No. 10. Influence of the Australian climate in producing modifications of diseases. No. 11. On the Infusoria peculiar to Australia. No. 12. On water-supply in the interior of New South Wales. Series IV. To be sent in not later than May 1, 1885. No. 13. Anatomy and life history of the Echidna and Platypus. No. 14. Anatomy and life-history of Mollusca peculiar to Australia. No. 15. The chemical composition of the products from the so-called kerosene shale of New South Wales. Series V. To be sent in not later than May 1, 1886. No. 16. On the chemistry of the Australian gums and resins.—The Chairman read the Presidential Address, and the officers and Council were elected for the ensuing year.

##### PARIS

Academy of Sciences, June 30.—M. Rolland, President, in the chair.—Remarks on the hygrometric reports from nearly a hundred French stations, yearly published by M. Mascart in the *Annales du Bureau météorologique de France*, by M. J. Jamin.—On the use of formene in the production of very low temperatures, by M. L. Cailletet. The author finds that, when slightly condensed and cooled in boiling ethylene under atmospheric