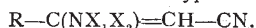


textiles are deprived of basic functions, and possess feebly acid functions comparable to those of the alcohols. Porous substances, such as animal charcoal, are inert from the chemical point of view.—The condensation of acetylenic nitriles with the amines. A general method of synthesis of β -substituted β -amino-acrylic nitriles: Ch. **Moureu** and I. **Lazennec**. Acetylenic nitriles of the type $R-C\equiv C-CN$ unite directly with primary and secondary amines, giving substituted acrylic nitriles of the type



These are neutral bodies, easily hydrolysable by acids, regenerating the amines, and forming ketones of the general formula $R-CO-CH_2-CN$. Examples are given showing the generality of the reaction.—Helicoidal arrangement in crystallised bodies: Fred. **Wallerant**.—A third mandibular canal in the infant: R. **Robinson**. This third dental duct, which has not hitherto been noted, is always found in young children. From about eight years of age it appears to atrophy, and leaves as the only trace of its existence a more or less marked depression, corresponding to its outlet. This depression has been noted by other anatomists, and has been regarded as a rudimentary alveole.—The penetration of *Treponema pallidum* in the ovule: MM. **Levaditi** and **Sauvage**. A contribution to the study of the hereditary transmission of syphilis.

NEW SOUTH WALES.

Linnean Society, August 29.—Mr. Thos. Steel, president, in the chair.—Notes on the native flora of New South Wales, part v., Bowral to the Wombeyan Caves: R. H. **Cabbage**. This paper deals with the vegetation over a distance of about fifty miles westerly from Bowral, special reference being made to the changes which take place on the different geological formations. The flora of the basaltic area is shown to differ from that of the sandstone, while that of the syenite hill known as The Gib comprises species common to both.—The Mollusca of Masthead Reef, Capricorn Group, Queensland, part i.: C. **Hedley**. On the east coast of Australia the best-known points, from the view of a marine zoologist, are Torres Strait and the neighbourhood of Sydney. To investigate an intermediate station, the author organised an expedition to the south end of the Barrier Reef. Masthead Island, just outside the tropic of Capricorn, was selected for examination. The island and surrounding reef are described and compared with the coral islands of the Central Pacific. The zonal distribution of coral-haunting mollusca is reviewed.—New Australian species of the family Libellulidae (Neuroptera: Odonata): R. J. **Tillyard**. In this paper eleven new species are added to the list of Australian Libellulidae, bringing the total up from fifty to sixty-one. All the new species were taken in the Cairns district of North Queensland during the summer of 1904-5. Of these, three only are new to science. The remainder are species already known in other parts of the world, but so far unobserved in Australia.—Note on the cerebral localisation in the bandicoot (*Perameles*): H. G. **Chapman**. The positions of the cortical motor centres in the brains of marsupials have been described in the opossum (*Didelphys virginiana*) by Ziehen, and by R. Cunningham, and in the native cat (*Dasyurus viverrinus*) by Flashman. The results of an investigation of the motor areas observed in *Perameles nasuta* and *P. obesula* are communicated in the present paper. The centres described have been found regularly in each animal and on both sides of the brain.

DIARY OF SOCIETIES.

FRIDAY, OCTOBER 26.

PHYSICAL SOCIETY, at 5.—The Strength and Behaviour of Ductile Materials under Combined Stress: W. A. Scoble.—The Behaviour of Iron under Small Periodic Magnetising Forces: J. M. Baldwin.—Fluorescence and Magnetic Rotation Spectra of Sodium Vapour, and their Analysis: Prof. R. W. Wood.

SATURDAY, OCTOBER 27.

ESSEX FIELD CLUB (at the Essex Museum of Natural History, Stratford), at 6.30.—On the Salinity of the Sea-water along the Coast of Essex: Dr. H. C. Sorby, F.R.S.—Sponges: their Life-history and Development: M. Y. Wolfe.

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THURSDAY, NOVEMBER 1.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: Nitrication of Sewage: Dr. G. Reid.—A General Consideration of the Subaerial and Freshwater Algal Flora of Ceylon: Dr. F. E. Fritsch.—The Anaesthetic and Lethal Quantity of Chloroform in the Blood of Animals: Dr. G. A. Buckmaster and Dr. J. A. Gardner.

CHEMICAL SOCIETY, at 8.30.—A Development of the Atomic Theory which correlates Chemical and Crystalline Structure and leads to a Demonstration of the Nature of Valency: W. Barlow and W. J. Pope.—The Explosive Combustion of Hydrocarbons, ii.: W. A. Bone, J. Drugman and G. W. Andrew.—Contributions to the Theory of Solutions: (1) The Nature of the Molecular Arrangement in Aqueous Mixtures of the Lower Alcohols and Acids of the Paraffin Series; (2) Molecular Complexity in the Liquid State; (3) Theory of the Intermiscibility of Liquids: J. Holmes.—The Hydrolysis of Nitro-cellulose and Nitro-glycerol: O. Silberrad and R. C. Farmer.—The Determination of the Rate of Chemical Change by Measurement of Gases Evolved: F. E. E. Lamplough.—Experiments on the Synthesis of the Terpenes Part IX., The Preparation of δ -Ketohexahydrobenzoic Acid (δ -Ketocyclohexanecarboxylic Acid) and of γ -Ketocyclopentanecarboxylic Acid: F. W. Kay and W. H. Perkin, jun.—Experiments on the Synthesis of the Terpenes, Part X., Synthesis of Δ^1 -Menthonol (8) and of Carvestrene: W. H. Perkin, jun., and G. Tattersall.—Some Derivatives of Catechol, Pyrogallol, Benzophenone and of Other Substances allied to the Natural Colouring Matters: W. H. Perkin, jun., and C. Weizmann.

LINNEAN SOCIETY, at 8.—The Structure of Bamboo Leaves: Sir Dietrich Brandis, K.C.I.E., F.R.S.—On a Collection of Crustacea Decapoda and Stomatopoda, chiefly from the Inland Sea of Japan, with Descriptions of New Species: Dr. J. G. de Man.—On *Hectorella caespitosa*, Hook. f., with Remarks on its Systematic Position: Prof. A. J. Ewart.—*Exhibitions*: Young Plaice Hatched and Reared in Captivity: the President.—Abnormal Specimens of *Equisetum Telmateia*, Ehrh.: George Talbot.
CIVIL AND MECHANICAL ENGINEERS' SOCIETY, at 8.—Bridge Work Design: P. J. Waldram.

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