Science News a Century Ago

New or Rare Plants in Edinburgh

ON December 10, 1838, Robert Graham, professor of botany, sent to the *Edinburgh Philosophical Journal* a "Description of several New or Rare Plants which have lately flowered in the Neighbourhood of Edinburgh". The *Chorizema Dicksonii*, he said, was raised by Dickson and Sons from seed sent from Swan River, Australia; the *Collinsia heterophylla*, the handsomest species of *Collinsia* yet known, was found by Nuttall on the Columbia and was raised at the experimental garden from seeds sent from America; the *Edwardsia Macnabiana* had been cultivated in Edinburgh for some years but it was not known whence it came, and the *Mirbelia augustifolia*, though apparently a distinct species, but without beauty, was raised from seed from New Holland.

Littrow's Observations of Meteors

THE *Athenæum* of December 15, 1838, reprinted from the *Vienna Official Gazette* a note by Karl von Littrow on "Falling Stars in August and November". "The phenomena," said von Littrow, "of an extraordinary abundance of falling stars, about the middle of November, has been again observed this year. . . . On the 10th of November when we watched from eight in the evening till one in the morning, we counted about nine such stars in an hour. . . . On the 11th of November . . . we counted about twenty in an hour. . . . On the 13th of November the sky suddenly cleared up an half an hour before midnight and remained perfectly serene till daybreak. During those six hours we noted 1002 falling stars." Von Littrow then went on to refer to the observations made in August.

Karl Ludwig von Littrow (1811–77) was the son of Joseph Johann von Littrow (1781–1840) who from 1821 until his death was professor of astronomy and director of the observatory at Vienna. In 1826–27, the latter erected an observatory in the middle of the city on the site of that founded by Father Maximilian Hell in 1753. Karl von Littrow became an assistant under his father in 1831, succeeded to the directorship in 1842, and it was during his period of office that in 1874–77 the modern observatory was built. Newcomb, in "The Reminiscences of an Astronomer" tells how through colour-blindness von Littrow had been led to wrong conclusions regarding alterations in the manuscript notes made by Father Hell of the transit of Venus of 1769.

Brickmaking by Machinery

THE *Mechanics' Magazine* of December 15, 1838, contained a note on Jones's "Machinery for Moulding Bricks". "The earth," it said, "in its descent, is forced into the moulds by great pressure as they pass under the Pug-Mill, and is delivered therefrom in perfect bricks upon pallet-boards ready to be removed, the whole of which is done by the horse attached in the usual way to the Pug-Mill producing from 1,000 to 2,000 bricks an hour. The earth also being moulded with only one half the usual quantity of water will take considerably less time to dry. A machine was at work last week on three successive days at Messrs. Webb's brickfield, near Ball's Pond Church, Islington, and performed the work admirably."

Societies and Academies

London

Royal Society (*Proc.*, A, 168, 441–589; 1938).

R. M. LEWIS and C. N. HINSHELWOOD: The thermal decomposition of nitrous oxide.

B. F. J. SCHONLAND, D. J. MALAN and H. COLLENS: Progressive lightning (6).

H. A. JAHN: A new Coriolis perturbation in the methane spectrum. (1) Vibrational-rotational Hamiltonian and wave functions. (2) Energy levels.

N. ARLEY: On the theory of coincidence experiments on cosmic rays.

R. EISENSCHITZ: The specific heat of β-brass.

N. FEATHER and J. V. DUNWORTH: A further study of the problem of nuclear isomerism: the application of the method of coincidence counting to the investigation of the γ-rays emitted by uranium Z and the radioactive silver Ag^{106}.

Paris

Academy of Sciences (*C.R.*, 207, 881–948, Nov. 14, 1938).

L. CAYEUX: The problem of the ancient port of Tyre, studied in the light of petrography. Petrographic examination of material brought up from the roadstead confirms the results of air- and other photographs that the ancients were able to undertake submarine construction.

A. CHEVALIER: Improvement in the production and quality of French colonial coffees.

G. CALUGARÉANO: Invariants of extension of regular *fonctions analytiques à l'infini*.

L. HIBBERT: Curves of equal modulus of *fonctions entières*.

L. REINGOLD: Calculation of the theoretical mean combustion temperature and the corresponding pressure.

D. BARBIER, D. CHALONGE, F. SCHAHMANÈCHE and MLLE. N. MORGULEFF: The Balmer discontinuity in the spectrum of supergiant stars of types *B*, *A*, *F*.

V. FROLOW: Mareographs of the United States: facts and hypotheses.

R. LUCAS: Thermal expansion of liquids.

L. QUEVRON: An integrator of radiant energy.

P. BARCHEWITZ and M. PARODI: Absorption spectra of mono-substituents of benzene in the distant infra-red, from 180 to 600 $cm.^{-1}$ (17–55 μ).

M. SERVIGNE: Infra-red emission in the luminescence of some rare elements. Substances in solid solution in calcium tungstate have been examined.

P. AUGER: Study of large cosmic ray showers at an altitude of 3,500 m. They behave as showers caused after their entry into the atmosphere by electrons of energy exceeding 10^{13} ev. and containing a component capable of traversing more than 10 cm. of lead.

J. SOLOMON: Statistical theory of nuclei.

V. DOLEJŠEK, J. BAČKOVSKÝ and J. FAUS: Hyperfine structure of X-rays.

R. AUDUBERT: Application of the Debye-Hückel theory to the estimation of a solution of mastic.

H. MOUREU and G. WETROFF: Formation and polymerization of the radical phosphonitrile, PN.

M. TIFFENEAU and MLLE. B. TCHOUBAR: Action of magnesium halides in the state of etherates on aliphatic, aromatic and cyclic 'oxides'.