

the roots of different shrubs and trees. The species which forms the subject of this paper, viz. *Hydnora africana*, uses the common milkbush of the karroo and karroid regions of the interior, viz. *Euphorbia mauritanica*, as its host. It is in the structure of the flower that the author has observed some organ which has hitherto escaped the attention of botanists. Each of the three segments of the perianth bears a large snow-white body on its inner side, while the remainder of the inner surface of the flower is of a bright flesh colour. These three white bodies are not mentioned in any existing description of *Hydnora*.—Examination of the validity of an approximate solution of a certain velocity equation: Prof. A. Brown. The question here considered is the part played by the initial value of $y(\lambda)$ in the solution of the equation

$$\frac{dy}{dt} = a_1 y + a_2 y^2 + a_3 y^3 + \dots$$

It is commonly assumed that, for a small initial value of y , the method of successive approximation is applicable, the proviso being sometimes made that the value of v , so obtained, be also small. This assumption is shown in the paper to be not necessarily correct, or in certain cases to lead to a rapid approximation when correct.—List of Natal plants: J. Medley Wood.

DIARY OF SOCIETIES.

THURSDAY, JANUARY 17.

ROYAL SOCIETY, at 4.30.—The Natural and Induced Resistance of Mice to the Growth of Cancer: Dr. E. F. Bashford, J. A. Murray, and Dr. W. Cramer.—On the Pathology of the Dropsy produced by Obstruction of the Superior and Inferior Venæ Cavæ and the Portal Vein; Preliminary Communication: Dr. C. Bolton.—Observations on the Life-history of *Adelea ovata*, Aimé Schneider; with a Note on a New Gregarine from the Gut of *Lithobius forficatus*: C. C. Dobell.

CHEMICAL SOCIETY, at 8.30.—The Relation between Absorption Spectra and Optical Rotatory Power, Part i., The Effect of Unsaturation and Stereo-isomerism: A. W. Stewart.—Organic Derivatives of Silicon, Part ii., The Synthesis of Di-ethyl, Propyl Benzyl Silicic, its Sulphonation, and the Resolution of the Sulphonic Derivatives into Optically Active Compounds: F. S. Kipping.—The Association of Phenols in the Liquid Condition: J. T. Hewitt and T. F. Winmill.—A New Mercuric Oxochloride: J. T. Hewitt.—Aromatic Selenium Bases: S. Smiles and T. P. Hilditch.—The Relation of Colour and Fluorescence to Constitution: A. G. Green.—The Constitution of Silver Nitrite, a Correction: E. Divers.—Preparation of Chromyl Chloride: F. D. Law and F. M. Perkin.—Tetraketopiperazine: A. T. de Moulpied and A. Rule.

ROYAL INSTITUTION, at 3.—Recent Advances in the Exploration of the Atmosphere: Dr. W. N. Shaw, F.R.S.

LINNEAN SOCIETY, at 8.—*Platanthera chlorantha*, Custor, var. *tricalcarata*: W. Botting Hemsley, F.R.S.—*Acanthaceae* of Insular Malaya: the late Mr. C. B. Clarke, F.R.S.—A Freshwater Isopod from Calcutta: Rev. T. R. R. Stebbing, F.R.S.

INSTITUTION OF MINING AND METALLURGY, at 8.—Some Sampling Results: E. H. Garthwaite.—The Assay of Silver Bullion by Volhard's Method: E. A. Smith.—Water Skip with Automatic Discharge: W. R. Francis.—Breaking Piece for a Swinging-Jaw Rockbreaker: G. E. Brown.—A Visit to the De Beers Consolidated Diamond Mines: E. P. Rathbone.

FRIDAY, JANUARY 18.

ROYAL INSTITUTION, at 9.—Fifty Years of Explosives: Sir Andrew Noble, Bart., K.C.B., F.R.S.

INSTITUTION OF MECHANICAL ENGINEERS, at 8.—Adjourned Discussion on Lighting of Railway Premises, Indoor and Outdoor: H. Fowler.—Eighth Report to the Alloys Research Committee: On the Properties of the Alloys of Aluminium and Copper: Prof. H. C. H. Carpenter and C. A. Edwards.

MONDAY, JANUARY 21.

VICTORIA INSTITUTE, at 4.30.—The Scriptural Idea of Miracles: Rev. Canon Girdlestone.

TUESDAY, JANUARY 22.

ROYAL INSTITUTION, at 3.—The Sculpture of Aegina in Relation to Recent Discovery: Prof. Percy Gardner.

ANTHROPOLOGICAL INSTITUTE, at 8.30.—Annual General Meeting.—Presidential Address: The Burial Mounds and Dolmens of the Early Emperors of Japan: Prof. W. Gowland.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Internal-Combustion Engines for Marine Purposes: J. T. Milton.

WEDNESDAY, JANUARY 23.

SOCIETY OF ARTS, at 8.—The Isthmus of Panama: Philippe Bunan-Varilla.

ENTOMOLOGICAL SOCIETY, at 8.—Annual Meeting.
GEOLOGICAL SOCIETY, at 8.—The Geology of the Zambezi Basin around the Batoka Gorge (Rhodesia): G. W. Lamplugh, F.R.S. With Petrographical Notes by H. H. Thomas.

THURSDAY, JANUARY 24.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: Experiments on the Dark Space in Vacuum Tubes: Sir William Crookes, F.R.S.—On a New Iron

Carbonyl, and on the Action of Light and of Heat on the Iron Carbonyls: Sir James Dewar, F.R.S., and Dr. H. O. Jones.—Note on the Application of Van der Waals's Equation to Solutions: The Earl of Berkeley.—On the Presence of Europium in Stars: J. Lunt.

ROYAL INSTITUTION, at 3.—Recent Advances in the Exploration of the Atmosphere: Dr. W. N. Shaw, F.R.S.

SOCIETY OF ARTS, at 4.30.—The Hills of Western India: Captain E. Barnes.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Investigations on Light Standards and the Present Condition of the High Voltage Glow Lamp: C. C. Paterson.

FRIDAY, JANUARY 25.

ROYAL INSTITUTION, at 9.

PHYSICAL SOCIETY, at 5.—The Strength and Behaviour of Brittle Materials under Combined Stress: W. A. Scooble.—A Spectrophotometer: F. Twyman.—Photographs of Electric Sparks: K. J. Tarrant.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Alternating-Current Commutator Motors: C. A. Ablett.

CONTENTS.

	PAGE
Social Problems in America. By Prof. John Perry, F.R.S.	265
Naval Chemistry	266
Formation of Ice on the St. Lawrence	267
Romantic India	268
Our Book Shelf:—	
De Vries: "Species and Varieties: Their Origin by Mutation."—A. D. D.	268
Cunynghame: "Time and Clocks: a Description of Ancient and Modern Methods of Measuring Time."—W. E. R.	269
Thomson: "Conduction of Electricity through Gases"	269
Shenstone: "The New Physics and Chemistry: a Series of Popular Essays on Physical and Chemical Subjects"	269
Thompson: "The Manufacture of Light"	269
Högner: "Lichtstrahlung und Beleuchtung"	269
Kirby: "A Synonymic Catalogue of Orthoptera, vol. ii."	269
Letters to the Editor:—	
Production of Radium from Actinium.—Prof. E. Rutherford, F.R.S.	270
Helium and Argon in Common Rocks.—Hon. R. J. Strutt, F.R.S.	271
Ionisation and Absorption and Anomalous Dispersion.—Dr. G. A. Schott	271
The Millais British Mammals. (Illustrated.) By R. L.	271
The Mathematical Tripos at Cambridge. By Prof. John Perry, F.R.S.	273
The International Seismological Association	274
Science in Higher Education	275
Cornelius O'Sullivan, F.R.S.	277
Notes	277
Our Astronomical Column:—	
The Temperature of the Moon	281
The Helium Line, D ₃ , in the Solar Spectrum	281
A White Spot on Jupiter's Third Satellite	281
A Remarkable Nebula	281
Periodical Comet Due to Return in 1907	282
Orbits of Three Double Stars	282
The Duke of the Abruzzi's Ascents in the Ruwenzori Range. (Illustrated.)	282
Meteorology in Peru. (Illustrated.) By W. M.	283
The Association of Economic Biologists	284
The Public School Science Masters' Association	285
University and Educational Intelligence	286
Societies and Academies	286
Diary of Societies	288