An Elementary Text-book of Coal Mining. By R. Peel. Sixteenth edition. Pp. 386. (London: Blackie and Son,

Ltd.) 3s.
A New Geometry. By W. M. Baker and A. A. Bourne.
(London: G. Bell and Books i.-iii. Pp. xxii+122+iii. (London: G. Bell and Sons, Ltd.) 1s. 6d.

Heat and the Principles of Thermodynamics. By Dr. C. H. Draper. New and revised edition. Pp. xv+428. (London: Blackie and Son, Ltd.) 5s. net.
The Prescribing of Spectacles. By A. S. Percival. Second edition. Pp. v+168. (Bristol: J. Wright and Sons Ltd.) 7s. 6d. net.

Sons, Ltd.) 5s. 6d. net.

The Problems of Philosophy. By the Hon. B. Russell, F.R.S. Pp. 255. (London: Williams and Norgate.) 1s.

Anthropology. By R. R. Marett. Pp. 256. (London: Williams and Norgate.) 1s. net.
Our Weather. By J. S. Fowler and W. Marriott. Pp. xi+131. (London: J. M. Dent and Sons, Ltd.) 1s. net.
Modern Theories of Diet and their bearing upon Practical Dietetics. By Dr. A. Bryce. Pp. xv+368. (London:

E. Arnold.) 7s. 6d. net. Tables of Logarithms and Anti-logarithms (Four Figures), 1 to 10,000. Arranged by Major-General J. C. Hannyngton. Pp. iv+41. (London: C. and E. Layton.) 1s. 6d.

net.

Tables of Logarithms and Anti-logarithms to Five Places. By E. Erskine Scott. Students' edition. Pp. iii+383. (London: C. and E. Layton.) 5s. net.

A Nature Calendar. By Gilbert White. Edited, and with an Introduction, by W. M. Webb. Pp. xii+62+xiii-

xx. (London: The Selborne Society.) 25s. net.

DIARY OF SOCIETIES.

THURSDAY, FEBRUARY 8.

THURSDAY, FEBRUARY 8.

ROYAL SOCIETY, at 4.30.—The Spectrum of Comet Brooks (1911c): Sir Norman Lockyer, K.C.B., F.R.S.—A Chemically-active Modification of Nitrogen produced by the Electric Discharge. III.: Hon. R. J. Strutt, F.R.S.—The Atomic Weight of Radium: R. Whytlaw-Gray and Sir W. Ramsay, K.C.B., F.R.S.—The Emission of Electricity from Carbon at High Temperatures: Dr. J. A. Harker, F.R.S., and Dr. G. W. C. Kaye.—The So-called Thermoid Effect and the Question of Superheating of a Platinum-silver Resistance used in Continuous-flow (Calorimetry: Prof. H. T. Barnes, F.R.S.—An Optical Determination of the Variation of Stress in a Thin Rectangular Plate subjected to Shear: Prof. E. G. Coker.—Spectroscopic Observations. Lithium and Caesium: Dr.-P. V. Bevan.—A Metrical Analysis of Chromosome Complexes, showing Correlation between Evolutionary Development and Chromatin Thread-widths throughout the Animal Kingdom: Capt. C. F. U. Meek.

ROYAL INSTITUTION, at 3.—The Phenomena of Splashes: Prof. A. M. Worthington, C.B., F.R.S.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—High Voltage Tests and Energy Losses in Insulating Materials: E. H. Rayner.

ROYAL SOCIETY OF ARTS, at 4.30—The North-East Frontier of India: Sir Thomas H. Holdich, K.C.M.G., F.R.S.

Concrete Institute, at 8.—Discussion on Prof. B. Pite's paper: The Æsthetic Treatment of Concrete.

MATHEMATICAL SOCIETY, at 5.30.—On Exceptions to a Generalisation of a Theorem of Jacobi's: A. C. Dixon.—On some Properties of Groups whose orders are Primes: Prof. W. Burnside.—Some results concerning Diophantine approximations: G. H. Hardy and J. E. Littlewood.

FRIDAY, FEBRUARY 9.

ROYAL INSTITUTION, at 9.-Very High Temperatures: Dr. J. A. Harker,

F.R.S.
PHYSICAL SOCIETY, at 8.—Annual General Meeting.
ROYAL ASTRONOMICAL SOCIETY, at 5.—Anniversary Meeting.
ROYAL GEOGRAPHICAL SOCIETY, at 5.30.—Desert of North Africa: Captain H. G. Lyons, F.R.S.
INSTITUTION OF CIVIL ENGINEERS, at 8.—Steam-turbines: Some Practical Applications of Theory: Captain H. Riall Sankey, R.E.
PHYSICAL SOCIETY, at 8.—Annual Meeting.—Presidential Address: Prof. A. Schuster, F.R.S.
MALACOLOGICAL SOCIETY, at 8.—Annual Meeting.—Presidential Address: On the Lower Tertiary Mollusca of the Fayum province of Egypt: R. Bullen Newton.
ASSOCIATION OF CHEMICAL TECHNOLOGISTS (at Battersea, Polymechnic).

Association of Chemical Technologists (at Battersea Polytechnic), at 8.—The Structure of Metals: Dr. J. C. Humfrey.

MONDAY, FEBRUARY 12.

ROYAL SOCIETY OF ARTS, at 8.—The Meat Industry. The Sheep and its Products: Loudon M. Douglas.
ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Explorations in Papua: Hon. Miles S. Smith.

TUESDAY, FEBRUARY 13. ROYAL INSTITUTION, at 3.—The Study of Genetics: Prof. W. Bateson, F.R.S.

R.R.S. ROYAL GEOGRAPHICAL SOCIETY, at 5.—Desert of North Africa: Captain H. G. Lyons, F.R.S. SOCIETY OF DYERS AND COLOURISTS, at 8.—New Apparatus for the Control of Water Purification and take purposes: Hon. R. C. Parsons.—Water Treatment by means of the Permutit Process: Dr. L. H. Harrison.

Institution of Civil Engineers, at 8.— Further discussion: The Water-supply of the Witwatersrand: D. C. Leitch.—Investigations Relating to the Yield of a Catchment-area in Cape Colony: E. C.

WEDNESDAY, FEBRUARY 14.

ROYAL SOCIETY OF ARTS, at 8.—Gem Engraving: Cecil Thomas.

ROYAL GEOGRAPHICAL SOCIETY, at 5.—Research Meeting.—Distribution

of Early Bronze Age Settlements in Britain: O. G. S. Crawford.

THURSDAY, FEBRUARY 15.

ROYAL SOCIETY, at 4-30.—Probable Papers: A Specific Instance of the Transmission of acquired Characters—Investigation and Criticism: Dr. T. G. Brown.—Further Experiments on the Cross-breeding of two Races of the Moth Acidalia virguplaria: W. B. Alexander.—On the Effects of Castration and Ovariotony upon Sheep: F. H. A. Marshall.—The Causes and Prevention of Miners' Nystagmus: Dr. T. L. Llewellyn.—The Stomatograph: W. L. Balls.—Composition of the Blood Gases during the Respiration of Oxygen: G. A. Buckmaster and J. A. Gardner. Royal Geographical Society, at 5-30.—Desert of North Africa: Captain H. G. Lyons, F. R.S.

Institution of Mining and Metallurgy 22.

INSTITUTION OF MINING AND METALLURGY, at 8.

FRIDAY, FEBRUARY 16.
ROYAL INSTITUTION, at 9.—The Road: Past, Present and Future: Sir John H. A. Macdonald, K.C.B., F.R.S.
INSTITUTION OF MECHANICAL ENGINEERS, at 8.—Annual General Meeting.
INSTITUTION OF CIVIL ENGINEERS, at 8.—Works for the Prevention of Coast-erosion: W. T. Douglass.

	AGE
Paracelsus	473
F.R.S. Early Egyptians and Ancient Civilisation. By	474
	475
Nature-Books By A F. Crawley	476
Food and Dietetics. By Prof. J. S. Macdonald The Constants of Nature. By Dr. J. A. Harker,	476
F.R.S. Practical and Theoretical Physics	477
Our Book Shelf	478 479
Letters to the Editor:—	7//
Microscope Stands.—Conrad Beck; J. W. Ogilvy	480
The Mnemic Theory of Heredity.—Dr. J. Beard;	.0.
Prof. Arthur Dendy, F.R.S	482 483
Are Eyes Ever Autophanous?—E. M. Anderson .	484
Chalk and Ice. (With Diagram.)—R. M. Deeley:	т-т
D. Deeley Glazed Frost.—E. R. Marle	484
The Thawing of Frozen Water Pipes. — C. E.	484
The Names of Fossil Plants. — Prof. T. D. A.	484
Cockerell	484
trated.) By Sir H. H. Johnston, G.C. M.G., K.C.B.	485
The Effect of Grass on Fruit Trees. By E. I. R.	486
The Birds of Homer	487
Sir John Dalrymple-Hay, Bart., G.C.B., F.R.S.	487
Dr. A. H. Keane. By Dr. A. C. Haddon, F.R.S.	488 488
Notes	400
Doubling of Martian "Canals"	494
Doubling of Martian "Canals"	494
A Bright Meteor	494
Ephemeris for Schaumasse's Comet, 1911h	494
Observations of Comets	494 494
Observations at the Moscow Observatory	494
Internal and Cloud Velocities of Groups of Stars in	.,,
Relation to Spectral Type	494
Silk-culture in the Philipines. (Illustrated.) By W. F. K.	.05
The Recent Frost	495 495
Skulls and Physiognomy	495
Skulls and Physiognomy	
Applied Chemistry and Physics	496
Relation between Height and Length of the Waves Finally Produced at Sea by Winds of any Given	
Speed. By Dr. Vaughan Cornish	497
	407
National Systems of Education	497 498
University and Educational Intelligence	500
Societies and Academies	502
Books Received	505
Diary of Societies	506