

is more than double that of countries with low birth-rate.—E. Esclangon: The sound of gunfire and zones of silence. The detonations arising from the sudden expansion of gas at the mouth of the gun and from the explosion of the shell, even of the largest calibre, are inaudible at about 30 kilometres, and the author concludes that the sounds heard at distances of 50 to 200 kilometres from the front are due to the waves set up in the air by projectiles moving with initial velocities greater than the velocity of sound.—L. Bouchet: The electric expansion of solid insulators in the sense normal to an electrostatic field. The changes of length were observed by an interferential method for glass, ebonite, and paraffin. Calculations based on Maxwell's equation for the pressures normal to the field agree well with the experimental figures for paraffin wax, but are not in accord with the results for ebonite and glass.—R. Ledoux-Lebard and A. Dauvillier: Theoretical and experimental researches on the bases of radiological dosimetry.—Ed. Lesné and M. Phocas: The presence of living and virulent micro-organisms at the surface of projectiles enclosed in cicatrised tissues. Experiments with bullets extracted from healed wounds demonstrate the reality of latent microbism.

#### NEW SOUTH WALES.

**Linnean Society**, May 31.—Mr. A. G. Hamilton, president, in the chair.—T. G. Sloane: Carabidæ from the Upper Williams River, N.S.W. In December, 1915, a party of naturalists, organised by Mr. W. J. Enright, of West Maitland, visited the part of the Mount Royal Range known as the Barrington Tops—a basalt-capped plateau, 5000 ft. above sea-level, from which the Barrington, Allyn, Paterson, and other rivers take their rise. The route followed was north-west from Dungog, along the Williams River; after the level of 3500 ft. is reached, the track keeps to the summit of the narrow ridge dividing the valleys of the Williams and Allyn Rivers, until, beyond the source of the Williams, Barrington Tops are reached, distant about 37 miles from Dungog. *Fagus moorei* is the predominant tree in the brushes at 4100 ft. and upwards. In one locality, near the southern source of the Barrington, at about 4800 ft., *Eucalyptus coriacea* was plentiful. Collecting was carried on in six localities, four of them above 4000 ft., and two much below. Representatives of forty-six species of Carabidæ were obtained, and have been identified, of which nine, and two varieties, are described as new. Eighteen species, all of which are known from the coastal districts between Sydney and the Clarence River, were found to occur below the level of 4000 ft. Specimens of twenty-eight species were collected above this level, mostly members of typical eastern Australian genera. The most striking is a remarkable species, doubtfully referred to *Trichosternus*, which appears to be more closely allied to certain New Zealand species than to any known Australian species. Another notable species is *Agonochila ruficollis*, Sl., hitherto known only from the forests of south-western Australia; but this is closely allied to a Tasmanian species, and to *A. binotata*, White, from New Zealand.—H. J. Carter: Description of a new genus and three new species of Tenebrionidæ from Barrington Tops, N.S.W. A genus, with the facies of *Cryptodus*, and presenting some resemblance to *Asphalus*, Pasc., with one species, and two species of *Cardiothorax*, are described as new.—The late Dr. A. Rutherford, with notes by E. Jarvis: A new scale-insect affecting sugar-cane in New Guinea. A new species of *Aulacaspis*, different from either of the two known Australian species, is described.

NO. 2444, VOL. 97]

#### BOOKS RECEIVED.

- Highways and Byways in Galloway and Carrick. By the Rev. C. H. Dick. Pp. xxix+536. (London: Macmillan and Co., Ltd.) 6s. net.
- Bacon's Large-Scale Map of the British Battle Front. (London: G. W. Bacon and Co., Ltd.) 6d. net.
- Smithsonian Institution Bureau of American Ethnology. Bulletin 62. Physical Anthropology of the Lenape or Delawares, and of the Eastern Indians in General. By A. Hrdlička. Pp. 130. (Washington: Smithsonian Institution.)
- Domestic Science. By C. W. Hale. Part ii. Pp. x+300. (Cambridge: At the University Press.) 4s. net.
- Field and Laboratory Studies of Crops. By Prof. A. G. McCall. Pp. viii+133. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 3s. 6d. net.
- American Civil Engineers' Pocket Book. By M. Merriman and others. Third edition. Pp. ix+1571. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 21s. net.
- Parks and Park Engineering. By Prof. W. T. Lyle. Pp. viii+130. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 5s. 6d. net.
- Earth Pressure, Retaining Walls, and Bins. By Prof. W. Cain. Pp. x+287. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 10s. 6d. net.

#### CONTENTS.

	PAGE
<b>A Surgical Book from the Front</b> . . . . .	537
<b>The Worth of Chemistry.</b> By Sir T. Edward Thorpe, C.B., F.R.S. . . . .	538
<b>Economic Geography.</b> By G. G. C. . . . .	539
<b>Our Bookshelf</b> . . . . .	539
<b>Letters to the Editor:—</b>	
On Fizeau's Experiment.—Prof. P. Zeeman . . . . .	540
<b>The Newcastle Meeting of the British Association</b>	541
<b>Scholarships and their Relation to Higher Education</b> . . . . .	544
<b>Prof. W. Esson, F.R.S.</b> . . . . .	547
<b>Prof. S. B. McLaren.</b> By W. G. D. . . . .	547
<b>Notes</b> . . . . .	547
<b>Our Astronomical Column:—</b>	
Bright Display of Aurora Borealis on August 27 . . . . .	551
Distribution of the Poles of Planetary Orbits . . . . .	551
Solar Variability . . . . .	551
<b>Mineral Production of Canada</b> . . . . .	552
<b>New Aspects in the Study of Jungle Life.</b> By W. P. P. . . . .	552
<b>Eyesight and the War.</b> ( <i>With Diagram.</i> ) By Dr. Ernest Clarke . . . . .	552
<b>University and Educational Intelligence</b> . . . . .	555
<b>Societies and Academies</b> . . . . .	555
<b>Books Received</b> . . . . .	556

Editorial and Publishing Offices:

MACMILLAN & CO., LTD.,  
ST. MARTIN'S STREET, LONDON, W.C.

Advertisements and business letters to be addressed to the Publishers.

Editorial Communications to the Editor.

Telegraphic Address: PHUSIS, LONDON.  
Telephone Number: GERRARD 8830.