

mountain pastures were systematically grazed. These ancient laws of job combination and co-operation probably still apply even in the different economic world of to-day. New settlements should be representative of all the labour force and not confined to one type of worker, for example, forestry employees. Moreover, they should be attached to, or be within easy reach of, existing settlements and amenities. Improvement of communications, achieved by the Forestry Commission, for example, should go hand in hand with other forms of planning land use, making the economy more efficient and attracting a bigger and more versatile tourist trade.

These anticipated plans imply change in one form or another. The view that rural cultures (for example, Welsh culture) should not tolerate contamination should be weighed against the inevitability of the economic decay that must accompany their continued isolation.

This commentary owes much to a symposium on "Hill Climates and Land Usage, with special reference to the Highland Zone of Britain", convened by the author in Aberystwyth in March 1960. A memorandum including ten papers was compiled, based on the discussion, and circulated as *Mem. No. 3, Aberystwyth*. Grateful acknowledgment is also made to Prof. Gordon Manley for many valuable criticisms.

¹ Manley, G., *Geog. Rev.*, **35**, 408 (1945).

² Manley, G., *Geog. J.*, **103**, 241 (1944).

³ Gloyne, R. W., in *Hill Climates and Land Usage with Special Reference to Highland Britain*, edit. Taylor, J. A., *Mem. No. 3, Aberystwyth*, 23 (1960).

⁴ Taylor, J. A., *Geography*, **145**, 65 (1960).

⁵ Taylor, J. A., *Hill Climates and Land Usage, etc., Mem. No. 3, Aberystwyth*, 65 (1960).

⁶ Davies, R. I., Department of Agricultural Chemistry, University College, Bangor (private communication).

⁷ Report by the Natural Resources Technical Committee. Forestry, Agriculture and Marginal Land (H.M. Stationery Office, 1957).

NEWS and VIEWS

The Royal Society of Edinburgh : Awards

THE following awards have been made: *Makdougall-Brisbane Prize* (1958-60), to Mr. Albert G. Long, Duns, Berwickshire, for several papers on palaeobotany published in the *Transactions* of the Society during the period of the award. *Dr. W. S. Bruce Memorial Prize* (1960), to Mr. J. MacDowall, Meteorological Office, London, for his work in the fields of Antarctic meteorology and geomagnetism and as leader of the Royal Society of London Expedition to Halley Bay, 1958 (this Award is made jointly with the Royal Physical Society and the Royal Scottish Geographical Society). *Bruce-Preller Lecture* (1961): Dr. V. A. Eyles, formerly H.M. Geological Survey, London and Edinburgh, has been invited to deliver the Bruce-Preller Lecture, 1961, at the ordinary meeting of the Society on June 5.

New Fellows

THE following have been elected Fellows of the Royal Society of Edinburgh: Dr. F. Alexander, reader in veterinary pharmacology, University of Edinburgh; M. Campbell, secretary, Department of Agriculture and Fisheries for Scotland; Dr. A. J. O. Cruickshank, reader in electrical engineering, University of St. Andrews; Prof. R. B. Dingle, professor of theoretical physics, St. Salvador's College, University of St. Andrews; Dr. P. S. Farago, senior lecturer in natural philosophy, University of Edinburgh; Dr. P. B. Fellgett, principal scientific officer, Royal Observatory, Edinburgh; K. B. Fraser, senior lecturer in botany, University of Aberdeen; Prof. A. Haddow, professor of experimental pathology in the University of London, and director of the Chester Beatty Research Institute, London; W. T. Harry, lecturer in geology, University of St. Andrews; Prof. A. W. Hendry, professor of building science, University of Liverpool; Prof. J. S. S. Inglis, professor of animal husbandry and preventive medicine, University of Glasgow; Dr. H. Lister, lecturer in polar studies, University of Durham, Department of Geography, King's College, Newcastle upon Tyne; D. Lowe, horticulturist, Elvingston, Gladsmuir, East Lothian; Dr. R. C. Mackenzie, head of the Department of Pedology, Macaulay Institute for Soil

Research, Craigiebuckler, Aberdeen; B. Noble, senior lecturer in mathematics, Royal College of Science and Technology, Glasgow; B. B. Parrish, Department of Agriculture and Fisheries for Scotland, Marine Laboratory, Aberdeen; Prof. P. L. Pauson, Freeland professor of chemistry, Royal College of Science and Technology, Glasgow; Dr. R. J. T. Pennington, research fellow to the Neurological Unit, Medical School, King's College, Newcastle upon Tyne; Dr. B. B. Rae, assistant to the Director of Fisheries Research, Scotland, Department of Agriculture and Fisheries for Scotland, Marine Laboratory, Aberdeen; Prof. J. R. Raeburn, Strathcona-Fordyce professor of agriculture in the University of Aberdeen; R. M. Sillitto, lecturer in natural philosophy, University of Edinburgh; Dr. F. Smithies, lecturer in mathematics, University of Cambridge; Dr. D. W. N. Stibbs, Napier professor of astronomy in the University of St. Andrews, and director of the Observatory; Dr. A. B. Taylor, Registrar General for Scotland.

Physics at Manchester : Prof. E. B. Paul

DR. E. B. PAUL, who has been appointed to a chair in the Department of Physics of the University of Manchester, was educated at Mallorytown and Brockville Schools and at Queen's University, Kingston, Ontario. From 1942 until 1946 he held an appointment with the National Research Council of Canada at Ottawa and took part in the work on nuclear reactions sponsored by that body in connexion with the development of the Chalk River Laboratories. During 1946-48 Paul studied at Cambridge, where he worked with the 1-MV. high-tension generator of the Cavendish Laboratory and took his Ph.D. degree. He then returned to the Physics Division of the Chalk River Laboratories and undertook an extensive investigation of neutron activation cross-sections which has been widely quoted. Following this, he turned his attention to proton-induced reactions and was for the next few years a leading member of a group which has published many papers on resonant processes in the light nuclei. The high standard of this work both in experimental technique and in theoretical analysis has contributed greatly