

floras both point to the three islands never having had any land connexions with each other or with the continent. The islands have been visited many times by botanists and their flora is fairly well known, but Mr. Exell was able, during a three months visit in 1932-33, to add thirty-one new species, and considers that the mountain forest region in St. Thomas and Principe is still by no means exhausted.

The vegetation of St. Thomas, the largest and most diversified of the three islands, is divisible into four regions. The littoral region consists of sand dunes or mangrove swamps. The lower-lying ground up to 800 m., originally occupied by rain forest, is now almost entirely under cultivation. The plantations are mainly devoted to cocoa, coffee, bananas, oil-palms and coco-nut palms. The mountain rain-forest region between 800 m. and 1,400 m. is remarkable for its richness in Rubiaceae and Euphorbiaceae, and for an equally striking absence of Leguminosae. Epiphytes and lianes are well developed, and the profusion of ferns both as to species and individuals is probably unsurpassed in any other part of Africa. At still higher elevations up to the summit of Mt. Pico (2,024 m.), there is developed a mist-forest region, determined by the cool climate, very heavy rainfall and almost constant mist. Here the trees are less lofty and the canopy less dense than in the mountain forest region, and epiphytes and ferns are even more abundant.

In the much smaller island of Principe, what little virgin forest remains seems to resemble that of the lower rain-forest of St. Thomas, with Rubiaceae, Euphorbiaceae, Orchidaceae and Filicinae particularly abundant.

The total number of indigenous species on the three islands is 682, of which 171 are endemic; this is a high degree of endemism having regard to the nearness of the continent. Only eleven of these endemic species occur on more than one island and this, together with the fact that each island has a comparatively large number of species found on the mainland but not on the other islands, affords strong evidence that the islands were never connected with each other, but that each received its independent quota from the rich mainland flora.

The information given under each species includes synonymy, distribution within the islands and beyond, and citation of all known specimens in herbaria. Most of the newly described species are figured.

FORTHCOMING EVENTS

Monday, June 11

GAS RESEARCH BOARD (at 1 Grosvenor Place, London, S.W.1), at 2 p.m. Annual General Meeting.

ROYAL COLLEGE OF SURGEONS (Lincoln's Inn Fields, London, W.C.2), at 4 p.m.—Prof. F. Davies: "The Early Development of the Human Embryo" (Arris and Gale Lecture).

WOMEN'S ENGINEERING SOCIETY, Manchester Branch (at the Engineers' Club, Albert Square, Manchester), at 6.30 p.m.—Miss V. Holmes: "Women and Workshop Skill".

ROYAL GEOGRAPHICAL SOCIETY (Kensington Gore, London, S.W.7), at 8 p.m.—Dr. J. V. Harrison: "Journeys in Luristan".

Tuesday, June 12

ROYAL SOCIETY OF ARTS (John Adam Street, Adelphi, London, W.C.2), at 1.45 p.m.—Dr. F. M. R. Walshe, O.B.E.: "Infantile Paralysis" (postponed from May 9).

CHEMICAL ENGINEERING GROUP OF THE SOCIETY OF CHEMICAL INDUSTRY and the **INSTITUTION OF CHEMICAL ENGINEERS** (at the Geological Society, Burlington House, Piccadilly, London, W.1), at 2.30 p.m.—Mr. L. W. Needham and Mr. S. Lynch: "The Use of Suspensions as Heavy Liquids" (postponed from May 8).

QUEKETT MICROSCOPICAL CLUB (at the Royal Society, Burlington House, Piccadilly, London, W.1), at 7.30 p.m.—Mr. E. Mackie: "A Consideration of the Requirements for Cinemicrographic Apparatus".

Wednesday, June 13

INSTITUTE OF PETROLEUM (26 Portland Place, London, W.1), at 5.30 p.m.—Chairman of the Heavy Duty Engine Oils Panel of the Standardization Committee of the Institute: "Engine Testing of Heavy Duty Oils".

Thursday, June 14

ROYAL SOCIETY (at Burlington House, Piccadilly, London, W.1), at 4.30 p.m.—Dr. G. M. B. Dobson, F.R.S., in collaboration with Mr. A. W. Brewer and Mr. B. Cwilong: "The Meteorology of the Lower Stratosphere" (Bakerian Lecture).

Tuesday, June 12—Wednesday, June 13

INSTITUTION OF GAS ENGINEERS (1, Grosvenor Place, London, S.W.1). Annual General Meeting.

Friday, June 15—Saturday, June 16

INSTITUTE OF BRITISH FOUNDRYMEN (at the Waldorf Hotel, Aldwych, London, W.C.2).—Annual meeting. Members of the Iron and Steel Institute are also invited to attend.

APPOINTMENTS VACANT

APPLICATIONS are invited for the following appointments on or before the dates mentioned:

LECTURER IN MATHEMATICS at Battersea Polytechnic, London, S.W.11—The Clerk to the Governing Body (June 11).

SENIOR EXECUTIVE OFFICER responsible primarily for Research and Public Relations, Institute of the Motor Trade—General Secretary, marking envelope "Executive Officer" (June 16).

A LECTURER IN MECHANICAL ENGINEERING, and a **LECTURER IN ELECTRICAL ENGINEERING**, at West Ham Municipal College—The Education Officer, Education Offices, 95 The Grove, Stratford, London, E.15 (June 16).

LECTURER IN CHEMISTRY at the Royal Technical College, Salford—The Principal (June 18).

LECTURER IN PHYSICAL AND INORGANIC CHEMISTRY, Royal Holloway College, Englefield Green, Surrey—The Principal (June 18).

TWO TECHNICAL OFFICERS FOR THE MINISTRY OF FOOD, to supervise factory production of dehydrated food—Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia House, Kingsway, London, W.C.2, quoting F.3854.A (June 20).

TWO CHEMISTS (Technical Officers) in the Infestation Division of the Ministry of Food—Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia House, Kingsway, London, W.C.2, quoting F.3374.A (June 20).

INSTRUCTOR AND LECTURER ON INDUSTRIAL CHEMISTRY at the National Fire Service College, near Brighton—Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia House, Kingsway, London, W.C.2, quoting F.4165.A (June 20).

LECTURER IN CHARGE OF THE DEPARTMENT OF ZOOLOGY, University College, Leicester—The Registrar (June 20).

ASSISTANT LECTURER IN PHYSICAL AND INORGANIC CHEMISTRY at Queen Mary College, University of London—Acting Registrar of the College, c/o King's College, Cambridge (June 20).

LECTURER IN AGRICULTURE AND FARM MANAGER at Harper Adams Agricultural College, Newport, Shropshire—The Principal (June 20).

LECTURER IN BIOCHEMISTRY for the Yaba School of Medicine, Nigeria—Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, London, W.C.2, quoting F.4082.A (June 21).

LECTURER IN CIVIL ENGINEERING in the University of Birmingham—The Secretary (June 23).

PRINCIPAL OF NEWTON HEATH TECHNICAL SCHOOL—The Director of Education, Education Offices, Deansgate, Manchester, 3 (June 23).

LECTURER IN BUILDING SCIENCE at the Huddersfield Technical College—The Director of Education (June 25).

PROFESSOR OF PHYSIOLOGY at King's College of Household and Social Science—The Academic Registrar, University of London, Richmond College, Richmond, Surrey (June 26).

CO-ORDINATOR OF RESEARCH AND PRINCIPAL OF THE PUNJAB AGRICULTURAL COLLEGE, LYALLPUR—Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, London, W.C.2, quoting F.4220.A (June 26).

READERSHIP OF ENTOMOLOGY in the University of Durham, tenable at King's College, Newcastle-upon-Tyne—The Registrar of King's College (June 30).

INSTRUCTOR-ORGANIZER FOR MINING EDUCATION under the Shropshire Education Committee—The Secretary for Education, County Buildings, Shrewsbury (June 30).

LECTURER-IN-CHARGE (female) OF THE HOME SCIENCE DEPARTMENT, Technical Education Branch, Education Department, Sydney—Acting Official Secretary, New South Wales Government Offices, 125 Strand, London, W.C.2 (June 30).

UNIVERSITY DEMONSTRATOR IN ENGINEERING, University of Cambridge—The Secretary of the Appointments Committee, Engineering Laboratory, Cambridge (July 2).

ASSISTANT EDUCATION OFFICER FOR TECHNICAL EDUCATION to the Hertfordshire County Council—The County Education Officer, County Hall, Hertford (July 3).

TWO LECTURERS IN THE DEPARTMENT OF PHYSIOLOGY, one with special knowledge of Experimental and Human Physiology, and the other with experience in Biochemistry, University of Aberdeen—The Secretary (July 7).

ASSISTANT with special knowledge of PHYSICAL or INORGANIC CHEMISTRY in the Department of Chemistry, University of Aberdeen—The Secretary.

LECTURER IN HYGIENE at Derby Training College for Women Teachers, 93 Uttoxeter New Road, Derby—The Principal.

LECTURER IN MECHANICAL ENGINEERING, and a **LECTURER IN MATHEMATICS OR SCIENCE**, at Erith Technical College, Belvedere, Kent—The Principal.

A SENIOR OFFICIAL OF THE INSTITUTION OF STRUCTURAL ENGINEERS—The Secretary, 11 Upper Belgrave Street, London, S.W.1, marking the envelope "Science".