

of Jalisco. This is an area of transition, of which very little is known to the anthropologist.

Dr. Beals has collected a mass of information on elements of culture which can be attributed definitely to tribal units or groups. From this evidence certain tentative inferences are drawn as to the cultural provinces of northern Mexico and an attempt is made to trace the influence of Middle America on the culture of the south-west and south-east of North America.

In the discussion of cultural provinces a large non-agricultural area in northern Mexico with a lack of pottery is defined. Further, it is shown that, at the time of the conquest, sub-Mexican cultures existed in Sinaloa (see above), while a culture of sub-Mexican or sub-Mayan type, utilising truncated stone-faced pyramids and stone or adobe architecture, was to be found about 200 miles from the Rio Grande in Tamaulipas. Continuous distributions for certain traits between Mexican cultures and the south-western States are established, including stone and adobe architecture, the use of turquoise, idols, pottery and architecture. It was also discovered that there are a number of traits of similar distribution in the south-eastern States, northern Mexico and Middle America, such as the religious complex of altars, priests, perpetual fires, temples, temple mounds, and ceremonial trees, which suggests a definite connexion of the south-east with the region of higher culture in the south.

While recognising the influence of one area on another, it must also not be overlooked that very real development was made locally; for example, cultivation, after introduction from the south, was adapted to the local environment and dry-farming methods were developed.

New Science Laboratories in Aligarh

ALTHOUGH Aligarh has been a centre of learning in India during the last sixty years, a new era has started with the erection of the new science laboratories for the Aligarh Muslim University. The laboratories are the fruits of the labours of Nawab Masood Jung Dr. S. R. Masood, the Vice-Chancellor of the University.

The laboratories for physics, chemistry, botany and zoology occupy separate blocks, each fitted with up-to-date appliances for research and advanced studies. To each of these laboratories is attached a library, having all the necessary and important scientific books and periodicals in English and other European languages.

Physical Laboratory: The Department of Physics is installed in a building consisting of about sixty rooms, in two blocks—one for teaching and the other for research and advanced studies. Prof. R. Samuel is the Nizam professor of physics and chairman of the Department; Dr. R. K. Asundi is reader in physics. The Department has been equipped with the following apparatus: Zeiss photometer, Zeiss three-prism glass spectrograph, Zeiss two-prism quartz spectrograph, two vacuum spectrographs, soft X-ray spectrograph, Zeiss comparator, Zeiss grating spectrograph, gratings, quartz spectrographs, quartz and glass monochromators, apparatus for electronic interference, etc.

At present there are some eighteen students working in the Laboratory on problems ranging from the study of absorption and emission spectra in the extreme ultra-violet, ultra-violet, visible and the

infra-red region to problems of electronic interference, electronic diffraction, soft X-rays, photochemical problems, etc.

Chemical Laboratory: Prof. R. F. Hunter is Nizam professor of chemistry and chairman of the Department of Chemistry; Dr. R. D. Desai and Lt. M. Haider Khan are readers in chemistry.

Research work on the unsaturation and tautomeric mobility of heterocyclic compounds, the electronic structure of organic perhalides and perhalide ions, and the lability of unshared electrons in organic compounds of different elements, is in progress. Arrangements have been made for the study of absorption spectra and dipole moments and polarisation of organic compounds as well.

Botanical Laboratory: The Department of Botany is under Dr. R. A. Khan, who has recently returned from Cambridge.

Special arrangements have been made for the study of problems in plant physiology. Facilities are given for research in every branch of botany and a botanical garden is attached to the Department. A museum containing tropical plants is attached to the Department.

Zoological Laboratory: Dr. M. B. Mirza, reader in zoology, is the chairman of the Department of Zoology.

A special feature of the Department is the museum attached to it. The museum contains all the necessary specimens for teaching work, and also a large number of rare specimens.

University and Educational Intelligence

BRISTOL.—Dr. H. Jones has been appointed lecturer in theoretical physics.

DUBLIN.—On July 6, the following honorary degrees were conferred, among others: Sc.D. on Prof. W. L. Bragg, Langworthy professor of physics in the University of Manchester, and Prof. J. S. Haldane, honorary professor of mining and director of the Mining Research Laboratory in the University of Birmingham; Litt.D. on Sir Percy Nunn, professor of education in the University of London, and Dr. Douglas Hyde, well known for his work in connexion with Irish university education and folk-lore.

EDINBURGH.—At the graduation ceremony on June 30, the honorary degree of doctor of laws was conferred on the Right Hon. Craigie Aitchison, M.P., Lord Advocate; Sir James Caw, formerly director of the National Galleries of Scotland; Sir Henry Dale; Prof. G. H. Hardy; Sir Alexander Houston; The Right Hon. Baron Meston, Chancellor of the University of Aberdeen; Sir Hugh Arthur Rose; Dr. J. C. Smith, formerly senior chief inspector of schools in Scotland; Dr. W. W. Tarn.

The degree of D.Litt. was conferred on Mr. G. G. Neill Wright for a thesis entitled "The Psychological Analysis of Social Structure"; and the degree of D.Sc. on Mr. J. A. Fraser Roberts for a thesis entitled "Studies on the Biology of the Sheep"; on Dr. B. P. Wiesner for a thesis entitled "Maternal Behaviour in the Rat"; and on Mr. G. B. Brook for a thesis entitled "Experimental and Clinical Studies of the Spine of the Dog".

GLASGOW.—By her will, Miss B. A. Gray has bequeathed a sum of £8,000 to the University to endow a "Matthew Gray Scholarship", as a travelling scholarship for students of engineering.

THE League of Nations publishes half-yearly an "Educational Survey" (L.N. Secretariat, Geneva, price 2s.) the latest issue of which is devoted wholly to the question of "Moral Disarmament". Contributions by English, French, German, Hungarian, Polish and Swiss writers exhibit various and conflicting attitudes. Most of them look to moral disarmament for stimulation of the will for material disarmament, and paving the way towards this end, but Prof. Hoelzsch of the University of Berlin shares the view of the Russian representative on the League's moral disarmament sub-committee that material disarmament must first be achieved, and if the national governments fail to carry disarmament to the point which the peoples now almost unanimously desire, the League itself must perish. Included in the survey are various reports of proceedings of the League's International Organisation for Intellectual Co-operation, which was created to serve purposes identical with those now in question. While the survey discloses a consensus of opinion favourable to all proposals calculated to promote knowledge of other lands, foreign languages, the exchange of professors and students and the scientific study of international problems, it was pointed out, in the course of the proceedings referred to, that scientific co-operation was very active before the War but had no real influence on the events of 1914, and that during the War there seemed to be sometimes a better feeling among the 'men in the street' than among intellectuals.

STUDENTS from abroad resort to Great Britain in very considerable numbers. Some indication of the extent to which they take advantage of the policy of the open door traditional with British institutions of learning is afforded by the fact that last year ten per cent of the students of the universities and university colleges of Great Britain were from homes outside the country. A committee has just been appointed by the Board of Trade and the Board of Education "to consider what further steps could usefully be taken to encourage suitable students to come to the United Kingdom for education and training—general, commercial, or technical; and to make recommendations". The committee consists of twelve members and includes representatives of five industrial and commercial undertakings, the heads of the University of Sheffield and the Heriot-Watt College, Edinburgh, the general manager of the *Daily Telegraph*, Mr. Pugh of the Trades Union Congress, and the chairman of the L.C.C. Education Committee. In a statement to the Press on July 5, the chairman of the new committee (Sir Eugene Ramsden, M.P., a member of the Overseas Trade Development Council) directed attention to the wide terms of reference and observed that the object in view was to attract preferentially students well equipped to take advantage of the opportunities available. The committee will examine the feasibility of a system of interchange, not only of students, but also of professors, between universities and technical colleges at home and abroad, and interchange between young people engaged in industrial and commercial undertakings. Evidence will be taken from representatives in Great Britain of the governments of the Empire and of foreign countries, representatives of educational associations and authorities, chambers of commerce, trade associations, professional institutions, etc. Reference will doubtless be made to the masses of evidence on the subject already collected at the Congresses of the Universities of the Empire.

Calendar of Nature Topics

Green-Flies on Potato Crops

With the coming of mid-July, green-fly infestation of potato crops, which shows a beginning in early June, reaches its maximum. Now, at a selected centre of observation, in North Wales, Dr. Maldwyn Davies found every plant attacked and 86 per cent of the leaves carrying aphides, so that the average worked out at 2.81 aphides per leaf, or about 2,000,000 per acre, notwithstanding that it was less severe than in the previous three years (*Bull. Ent. Res.*, 23, 535; 1932). Economic interest is attached to the observation not so much on account of the direct damage caused by the aphides, but because of the association of aphides with the spread of virus diseases such as leaf-roll. On this account, the movements of the aphides were observed, and weekly records showed that all the individuals moved their site and 84 per cent of each of the three species involved moved from leaf to leaf within the weekly period. Daily records showed further that a large proportion, more than 70 per cent, shifted position within 24 hours, and of these at least half were on other leaves. At beginning of the infestation of a crop in early June, solitary apterous viviparous females make their appearance, and this is explained by the overwintering of aphides on weeds and field plants, by the deposition of solitary nymphs by winged females which at once move elsewhere, and by infection from infested seed.

The Walrus as a Summer Visitor in British Waters

A notable appearance of a walrus in British waters in recent times fell early in July, 1920, when one was seen off the Skerries lighthouse in the Shetland Islands; and the most remarkable feature of the visit was that it lasted from early summer, at any rate until mid-October.

As a rule, the walrus is a wanderer and its stay at any place in the British Isles has been short. In the course of a little more than a century (since 1815) some 26 walruses have been seen in British waters, but the time of appearance of only thirteen is known, and of these, two were spring visitors to the Hebrides, seven appeared in summer from June onwards, the majority in the neighbourhood of the Shetland and Orkney Islands, three were seen in autumn, and one in winter. Summer is predominantly the season of visitation, and it is suggested that the visits are associated with the annual breaking-up of the winter's ice formed along the arctic coasts and in the narrower seas. In 1920 Mr. J. Mathieson met the close pack-ice sixty miles south-west of Spitsbergen in June, and followed the edge of the pack for eighty miles before attempting to force his vessel through. But the southern limit of drift ice lies off the eastern coast of the Faroe Islands, so that even if a walrus drifted part of the way on or with the ice, it must have completed the journey to Britain on its own account.

The appearance of so many individuals on the northern and north-western coasts, 24 in the Shetlands, Orkneys, and Hebrides, out of a total of 26, indicates that their presence there may be connected with an unusual development of the Greenland-Iceland-Faroe oceanic circulation, such as occurs in exceptional years when the cold northern current breaks through the warm North Atlantic drift, and flows by way of the Shetlands into the North Sea.