

microlithic industries in quartz found in Ceylon. Dr. Sankalia ("The Second Gujarat Prehistoric Expedition: A Preliminary Account of the Search of 'Microlithic Man in Gujarat'," by H. D. Sankalia and I. Karve, *New Indian Antiquity*, 7, No. 1; April 1944) has described the unearthing of some skeletons, believed to belong to the folk who made the pigmy objects described. Physical anthropologists will naturally await with interest a complete account of these finds when the final study of them has been made.

### Community Centres

THE report on community centres recently prepared by the Ministry of Education (Pp. 40. London: H.M. Stationery Office. 9d. net) is a document of much importance. The Government has decided that the provision of such centres to promote the social and physical training and recreation of the community should be regarded as coming within the scope of the education service administered by local education authorities, such provision being covered by Section 53 of the Education Act, 1944, without prejudice to the power of other local education authorities under Section 4 of the Physical Training and Recreation Act, 1937, to provide centres for athletic, social or educational objects. Arising out of that decision, this report has been prepared at the instance of the Minister of Education by some of his officers, and is now published for general information. The first chapter of the report goes at once to the root of the matter. "During the present century, the day-to-day life of the British people has been profoundly affected by two parallel and closely related developments—the mechanisation of industry and a progressive reduction in working hours. The reduction in working hours may have been largely due to the growing demand for more leisure, but it was mechanisation which made it possible to meet the demand". That is the point of departure taken in this searching and comprehensive report; that, and another fact plain to be seen, that it is one thing to have spare time and another to know how to use it wisely. Though the report does not expressly say so, it means that we have reached a position in which the twofold distinction between work and leisure should be replaced by a threefold distinction between (1) work, done for a living, whether one likes it or not, (2) relaxation, play, recreation, for the recovery of poise, and (3) true leisure, spent upon pursuits which may make it in one way or another "the growing time of the spirit". In subsequent chapters the report goes into detail about the organization, staffing, provision and maintenance, and ownership, control and management of community centres. A valuable appendix sets forth the suggested accommodation required for neighbourhood units in varying situations.

### Control of Rabies

In an interesting leading article, the *Lancet* (628, Nov. 11, 1944) directed attention to the need for the existing regulations designed to prevent the reintroduction of rabies into Great Britain. The law requires that all dogs imported, by air or otherwise, shall be quarantined for six months; strict insistence on this regulation would prevent the reappearance in Britain of this serious disease. Rabies is primarily a disease of dogs, cats and allied species; but it is communicable to man and to domesticated animals by the bite of a 'mad' dog. It was first recorded in Great Britain in

A.D. 1000; but it probably existed here before that date. In the middle of the eighteenth century it raged among dogs in London and elsewhere. In the nineteenth century it broke out among several packs of fox-hounds, and some thirty-six persons a year died of rabies. By 1902 rabies had been eradicated from Great Britain by stringent control measures, and it did not reappear for sixteen years. By then (see Stockman, S., *Vet. Record*, 32, 135; 1929, quoted by the *Lancet*, *loc. cit.*) the public was so unfamiliar with the disease that some sections of it failed to realize the dangers of its reintroduction, and the abnormal conditions of that time doubtless helped its spread.

Rabies was found among dogs in Great Britain in September 1918, the infection having been brought in by smuggling dogs into the country by air. The Ministry of Agriculture took energetic measures against it, and these measures were helped by the fact that most of the dogs were affected by the dumb or paralytic form of the disease, which greatly restricts their wanderings and ability to bite, and also by the fact that the disease broke out in Cornwall, which is isolated to some extent from the rest of England; most of the affected dogs wandered west to the sea. Nevertheless, some seventeen counties became involved, 327 dogs died of the disease and 368 human beings were bitten and had to be treated. The outbreak was not controlled until December 1921 (see *Lancet*, ii, 719; 1926). In the United States, during the last ten years, there has been an average of fifty-seven cases a year, and some States have recorded more than a thousand cases a year among animals. Rabies vaccines are available, and the *Lancet* (628, Nov. 11, 1944) discusses the value of these, which has been questioned. Meanwhile it cannot be too widely known that rabies will, if it comes again to Great Britain, cause much suffering among men and animals. The quarantine regulations, which can keep rabies out of the country, should therefore be vigorously supported.

### Stars or Planets ?

PETER VAN DE KAMP has an article with this title in *Sky and Telescope* of December 1944, in which he deals with the question of the criterion for stars and planets—a matter of considerable importance in view of the fact that recent discoveries have shown the existence of 'planets' fifteen or twenty times the mass of Jupiter. He accepts Russell's critical value of  $1/20$  of the sun's mass as a conventional borderline between visible stars and the invisible bodies which can be designated as 'planets'. This criterion defines a planet or star, therefore, by its mass, not by its size. Among the methods for detecting unseen companions of low mass is the photographic method applied to nearby stars, and if the determination of the orientation of the perturbation orbit were sufficiently accurate, good results would be obtained. Difficulties arise from the fact that photographic star images are  $1''-3''$  in diameter, and most of the recently discovered perturbations have a total amplitude of less than  $0.1''$ . The gravitational method for discovering faint companions of low mass, while it is more powerful than the direct visual approach, has decided limitations for very low masses, and it would be extremely difficult by this method to find companion masses less than  $1/100$  times the sun's mass, even for the nearest stars. The star which seems unattended by dark companions may be the exception, and it is possible that the stars attended by massive companions, rather than by small planets,

are in the decided majority. Our solar system may prove to be an extreme type of system, rather than an average type. Though generously endowed with planets, the sun is the only star known that has no close companion star.

### Optical Phenomena in the Atmosphere

L/CPL. V. S. TAYLOR, 6 Field Park Coy., R.E., C.M.F., writes: "The discussion on optical phenomena in the atmosphere in *Nature* of December 9, 1944, brings to mind an occurrence frequently witnessed at Anzio while it was a beachhead. During, and immediately after, intense A.A. fire under conditions of virtually clear sky, with the sun behind the observer, concentrically disposed wave ripple arcs could be seen passing away from the barrage zone, in the portion of the sky about 45° forward of the observer. The acute compression of the atmosphere peripheral to the bursting shells caused the compression zones to be sufficiently altered in refractive index to produce an optically visible phenomenon when refracting undiffused sunlight." This phenomena would seem to be similar to the concentric waves observed by Dr. A. H. Goldie following a bomb burst (*Nature*, 154, 738; 1944).

### Post-War Bread in Britain

THE Ministry of Food, in collaboration with the Health and other Departments interested, has arranged a conference with the industrial and trade organizations principally concerned with post-war bread. It is hoped that the discussions of the conference will assist the Departments in advising Ministers on post-war flour and bread policy and in particular on any regulations which may have to be made after war-time control ends. The milling and baking industries, the flour importing trade and the co-operative movement have been asked to nominate representatives to the conference; invitations will be addressed to other interests later as may be necessary. The conference will be attended by the Lord Horder (personal adviser to the Minister of Food on medical aspects of food problems), Sir Jack Drummond (scientific adviser to the Ministry of Food), Sir Wilson Jameson (chief medical officer of the Ministry of Health), Dr. Andrew Davidson (chief medical officer for the Department of Health for Scotland) and Sir Edward Mellanby (secretary of the Medical Research Council). In addition, there will be present administrative officers representing the Ministry of Food, the Ministry of Agriculture and Fisheries and the Ministry of Health. Sir Henry French, the permanent secretary of the Ministry of Food, will be the chairman of the conference.

### Agricultural Scholarships

THE Ministry of Agriculture and Fisheries invites applications for ten senior scholarships, tenable at university departments of agriculture, or agricultural colleges, for degree or diploma courses in an agricultural subject; or at veterinary colleges for courses in veterinary science; and for six extended junior scholarships (for those who have already held junior awards), and sixty junior scholarships, tenable at farm institutes or similar institutions, for courses not exceeding a year, in agriculture, horticulture, dairying or poultry husbandry. The scholarships are open to the sons and daughters of agricultural workmen or of working bailiffs, smallholders and other rural workers, and to persons who are themselves *bona fide* workers in agriculture. The value of the awards

is such that neither the recipients nor their parents are normally required to make any contribution towards the cost of the training provided. The usual method of selection is by interview. Full information concerning the scheme and forms of application may be obtained from the Secretary of the Ministry, Block 4, Bickenhall Mansions, Baker Street, London, W.1, or from the offices of County Councils. The latest date for submitting applications is April 30, 1945.

### The Night Sky in April

NEW moon occurs on April 12d. 12h. 29m. U.T., and full moon on April 27d. 10h. 33m. The following conjunctions with the moon take place: April 9d. 19h., Mars 3° N.; April 17d. 13h., Saturn 0.1° N.; April 23d. 06h., Jupiter 3° S.; April 26d. 18h., Mercury 6.3° S. Only one occultation of a star brighter than magnitude 6 takes place in April, namely, 8 Leon., which disappears on April 21d. 1h. 29.7m. Mercury sets at 20h. 11m. at the beginning of April and rises at 4h. 10m. at the end of the month, about 25 minutes before sunrise. The planet is in inferior conjunction on April 13 and is stationary on April 3 and 25. Venus is a conspicuous object in the western sky in the early portion of the month, setting at 21h. on April 1. On April 30 the planet rises at 3h. 35m., an hour before sunrise. Venus is in inferior conjunction on April 15. Jupiter is visible throughout most of the night, setting at 5h. 13m. and 3h. 14m. at the beginning and end of the month, respectively. Saturn can be seen in the early portion of the night, setting at 1h. 49m. and just after midnight at the beginning and end of the month, respectively. The Lyrid meteors are active during April 18-22, but moonlight will interfere with the observation of the shower.

### Announcements

WE regret to record the death on March 23 of Sir Napier Shaw, F.R.S., the doyen of British meteorologists, aged ninety-one.

BOTANISTS will be pleased to learn that Mr. E. J. H. Corner, assistant director of the Botanical Gardens, Singapore, who has been in the hands of the Japanese since the fall of Malaya is, according to a cable received from him, "well, happy, working as a botanist".

DR. THOMAS A. JAGGAR, the well-known volcanologist, has been awarded the Franklin L. Burr Prize of 1,000 dollars by the National Geographic Society. The Prize, established under a bequest of the late Mary C. Burr of Hartford, Connecticut, provides for cash prizes to members of the Society's expeditions considered to have done especially meritorious work in the field of geographical science. The award was made to Dr. Jaggar for his part in the development of an amphibian mobile boat in 1927, which was used by a National Geographic Society expedition headed by Dr. Jaggar to carry on researches in Alaska in the region of Pavlof Volcano during 1927-28.

A COURSE of twelve lectures in special librarianship has been arranged by the Association of Special Libraries and Information Bureaux, and will be held at the London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, London, W.C.1, at weekly intervals starting on April 18, at 4.30 p.m. Applications to attend should be sent to the General Secretary, ASLIB, 52 Bloomsbury Street, W.C.1, as soon as possible; the fee is £5 5s. for the course.