

Power on May 27, 1957. Opposition to the new station is based not only on the despoliation of natural beauty but also because "the influx of workmen from outside, the rapidly changing levels of employment and its insecure basis, will upset agriculture and other stable industries by the uneven pattern of employment and create great disturbance". The Society's arguments have been set out in a specially prepared booklet, which can be obtained from W. Twiston Davies, Plas Hebog, Beddgelert, North Wales.

Curator

ALTHOUGH the museum profession is now attracting to its ranks more people than ever before, there are very few publications devoted to museology. For this reason alone the appearance of the quarterly periodical, *Curator* (1, No. 1, January 1958. Pp. 96. Annual subscription: 5 dollars), issued by the American Museum of Natural History, New York, is a welcome addition to the scanty literature. The days when a museum curator was a recluse, generally non-academic, are past, and the present-day official is relatively young, a specialist in a cognate subject and fully alive to the new demands of the public. There is thus no need for the editors to apologize for this new journal, and indeed the profession should be grateful to them for the initiative shown. A high standard of production was insisted upon for the first issue and this has been fully maintained throughout the year in the course of which ninety-four articles have been published, all of them of use to the curator who, unlike many of his academic colleagues, has to be proficient in a great variety of directions. *Curator* gives a general account of his activities, summarizes and reduces to print many of the thoughts in the mind of curators to-day and offers much information regarding new materials and techniques.

Maser Observations in Radio Astronomy

In a paper presented at the one-hundredth meeting of the American Astronomical Society (and reported briefly in *Astron. J.*, 63, 301; 1958), L. E. Alsop, J. A. Giordmaine, C. H. Mayer and C. H. Townes report what is possibly the first attempt to use maser techniques in radio astronomy. The maser amplifier is a three-level Bloembergen type, with a 0.1 per cent concentration of Cr³⁺ in ruby serving as the paramagnetic medium. The ruby crystal is mounted in a double resonant microwave cavity in liquid helium at 1.4° K. and in a magnetic field of 3,500 oersteds. The optimum signal-to-noise ratio for the system is obtained with a gain of about 20 decibels. The maser is used as a pre-amplifier and is mounted near the focal point of the 50-ft. reflector of the U.S. Naval Research Laboratory. The results obtained show an improvement factor of about ten in signal-to-noise ratio over the same installation without the maser pre-amplifier, in accordance with the expected low noise characteristics of maser amplifiers. Observations were made of Venus, Jupiter and the nebula NGC 4486, and they demonstrate the feasibility of applying maser techniques to radio-astronomical observations.

Permanent Graticules

WORK at the Reference Standards Laboratories of the Australian Commonwealth Department of Supply has culminated in the introduction of a new method for the production of graticules, known as the 'interstitial graticule' process. The method employed is of

considerable interest, and the product will undoubtedly find a number of applications, particularly in cases where permanence is the prime requisite (*Aust. J. App. Sci.*, 9, 207; 1958). The desired pattern is first produced on the surface of the glass. By a process of electrolysis at an elevated temperature the pattern is transferred in ionic form below the glass surface. Subsequent treatment involving chemical reduction converts the 'ionic' image to metal and the graticule pattern then becomes readily visible and is as stable as the glass itself. By suitable choice of metal and conditions of processing the final pattern may be black or coloured, transparent or opaque. The inventors of the process, A. J. C. Hall and J. C. Hayes, have recently been awarded the Waverley Gold Medal and Prize by the journal *Research* for an essay on their work.

Records of Nodulation in *Coriaria*

In referring to the root nodules borne by *Coriaria* spp. (*Nature*, 182, 474; 1958), Dr. Bond commented that although their occurrence in New Zealand is known, there seem to be no records in the literature. Mr. R. E. R. Grimmett (formerly superintendent of the Rukuhia Soil Research Station, Hamilton, N.Z.) has directed attention to an article, by him, using the pseudonym "Cryptos" and published in the August 1944 issue of *Forest and Bird*, the journal of the New Zealand Forest and Bird Protection Society. Under the title of "The Much-maligned Tutu"—the latter being the Maori name for *Coriaria* spp.—Mr. Grimmett recorded the regular occurrence of nodules on a species of *Coriaria* (now identified as *C. arborea*) in the Wairarapa district, and testified to the faculty of this and other species of the genus for colonizing raw mineral soils and improving fertility, facilitating the eventual establishment of forest. Like Dr. Bond, Mr. Grimmett referred to the paucity of native legumes in New Zealand and envisaged the possibility that *Coriaria* has been a main native source of biologically fixed nitrogen in that country. The field observations which he cited are in excellent accord with such results of laboratory experiments as are available.

International Grassland Congress

THE eighth International Grassland Congress will be held in Reading during July 11–21, 1960. Reading will prove to be a very appropriate town, since it is within easy reach of several important centres of agricultural research. Pre-Congress tours of grassland areas and research institutes are being planned. The main problems to be discussed are: pasture management and fertilizing; plant breeding and genetics; conservation—recent developments; problems of tropical grassland; estimation of grazing intake; biochemistry of pasture plants; hormone stimulation of grazing animals; special statistical techniques. The organizing committee is commissioning the majority of papers to be presented to the Congress, but it will also consider requests from research workers who wish to present papers of particular interest. Further information can be obtained from the Secretary, Eighth International Grassland Congress, Reading, Berks.

Symposium on Interferometry

AN international symposium on interferometry is to be held at the National Physical Laboratory, Teddington, Middlesex, during June 9–11. The symposium is intended for specialists and will not deal