

(The major axis is presumably quoted in terms of the Earth's equatorial radius.) These values are supported by elements computed by the Mullard Radio Astronomy Observatory, Cambridge, which gives a somewhat larger inclination, namely,  $65^\circ$ , and a period of 103m. 40s. The figures, which should be regarded as tentative since they are based on a few observations only, lead to heights at perigee of 250 km. and at apogee of 1,630 km.

The observable passages of this satellite near the British Isles occur at present between 5h. and 15h. each day, and it can be seen as a bright object (magnitude  $-1$  to  $+1$ ) when suitably placed before dawn. Since 14 revolutions occur in 1,451m. 5s., the tracks repeat themselves 11m. 3s. later each day, and this interval, together with the regression of the nodes, causes the tracks to swing westwards about  $7^\circ$  per day.

#### Russian Earth Satellites and the International Geophysical Year

In a written reply to a question regarding scientific information on the first Russian Earth satellite in the House of Commons on November 1, M. H. Nicholls, the Parliamentary Secretary to the Ministry of Works, representing the Lord President of the Council, said that the Royal Society and not the Department of Scientific and Industrial Research is responsible for co-ordinating United Kingdom participation in the programme of the International Geophysical Year. The appropriate committee is considering the arrangements for collecting scientific information obtained in Britain from the Earth satellites and transmitting it to the World Data Centre of the International Physical Year for publication. In addition, it was understood that arrangements were in hand for an account of some British observations of the satellite to be published.

#### Theratron Cobalt-60 Beam Unit at Westminster Hospital

At Westminster Hospital, London, on November 4, the Lord Chancellor, the Right Hon. Viscount Kilmuir, unveiled a commemoration plaque and so put into commission a theratron cobalt-60 beam unit that is a gift to the Hospital, through the British Empire Cancer Campaign, from Mr. and Mrs. Michael Wix. This apparatus, made by Atomic Energy of Canada, Ltd., is the second theratron to be installed in Great Britain, and is designed to permit moving-beam treatment of malignant disease while the patient lies upon a couch that forms an integral part of the equipment. An additional feature of this second theratron is a facility that permits the couch to be moved to and fro simultaneously with the rotation or other movement of the beam. Also, all adjustments of the couch in order to arrange a patient precisely for treatment are electrically powered so that a single 'joy-stick' switch readily permits movement up or down or to and fro. The cobalt source behaves effectively at approximately 1,500 curies and provides, at a distance of one metre, a dose-rate of 33 röntgens per minute.

During the proceedings before the unveiling ceremony, Sir Stanford Cade gave a brief historical survey of the Hospital's Radiotherapy Department, tracing the growth of its radiotherapeutic tools from a few milligrams of radium in 1922 to a 1-gm. radium unit in 1929 and then to the present when, in addition

to conventional X-ray machines, it now has a two-million volt Van de Graaff generator, the theratron put into commission on this occasion and a caesium-137 beam unit that is now being assembled. Lord Kilmuir, in his address, emphasized that there is still a place within the National Health Service for the private benefactor who feels called upon to serve the welfare of his fellows. This gift of a theratron, which will benefit the unfortunate victims of cancer for many years to come, is a striking example of such service.

#### British Museum (Natural History): The Stanwick Skull

AMONG the items reported to the Trustees of the British Museum at their meeting at the British Museum (Natural History) on October 26, was the gift by the Society of Antiquaries, London, of a human skull showing fatal wounds, found during excavations of the Roman fortifications at Stanwick, Yorkshire, during 1951-52. Examination of the skull showed that it was that of a man who had been violently attacked with a sword or axe, and afterwards beheaded. The slaying probably took place just before the capture of the Iron Age fortress by Roman troops in A.D. 71-74. It is uncertain whether the skull is that of a British native or of a patrolling Roman soldier. As it was found in the ditch close to the entrance of the fortress, and was not accompanied by other human bones, the head was probably displayed on the gate, and then became dislodged and fell into the ditch during the final attack. The skull is referred to by Sir Mortimer Wheeler in "The Stanwick Fortifications" (Report of the Research Committee of the Society of Antiquaries, 17, 533; 1954).

#### Fertility and Fertility Control

THE first Oliver Bird Lecture was delivered by Dr I. T. Mann at University College Hospital Medical School, London, on November 6; he spoke on "The Biochemical Basis of Spermicidal Activity". The lecture was sponsored by the Society for the Study of Fertility and held under the auspices of the Oliver Bird Trust (see *Nature*, October 12, p. 737). Dr. Mann discussed the mechanisms of action of various compounds which render sperm incapable of fertilization, either by killing them, by inhibiting their motility, or affecting their fertilizing power without impairing their motility. The latter part of the lecture dealt with the biochemical aspects of the use of spermicides as contraceptive agents, and discussed some of the pitfalls in the way of equating spermicidal activity *in vitro* with contraceptive activity *in vivo*. The lecture was preceded by the first meeting of the Council for the Investigation of Fertility Control, which was set up by the Oliver Bird Trust to work with the Family Planning Association in the organization of tests and clinical trials of contraceptives in Great Britain and elsewhere.

#### Calouste Gulbenkian Foundation Grants

THE Trustees of the Calouste Gulbenkian Foundation, Lisbon, have announced the Foundation's second list of grants, totalling more than £1 million. Among the grants for scientific, medical and other research (totalling £403,250) are the following: to the National Laboratory of Civil Engineering, Lisbon, up to £250,000 to build and equip a new research centre, the Calouste Gulbenkian Institute, for funda-