authors of giving a reference as "loc. cit. p.——", with no indication as to where the previous reference has been given—often several pages previously. He adds: "Surely it should be generally recognised that 'loc. cit.' is not to be used unless the previous reference is on the *same* page as the second reference."

Medical Uses of Radium

Under this title, the Medical Research Council has issued a summary of reports from radium research centres for 1932 (Special Rep. Series, No. 186. H.M. Stationery Office. 1s. net). Brief details of the results obtained during the year are given, as well as a statistical analysis of data relating to the after-histories of patients treated in earlier years. The treatment of cancer of the rectum by irradiation, hitherto disappointing, appears now to have a more favourable future as a result of better understanding of the dosage.

Victorian Bush Nursing Association

The Bush Nursing Hospitals, Victoria, Australia, of which we have received the annual report to June 1933, are apparently furnishing the solution to the problem of medical attendance in the country. They are owned and controlled by the centres, and are available to all who need them at fixed rates. They enable cases of illness to be dealt with which otherwise would have to be sent many miles for treatment.

The Leonids, 1933

Bad weather in mid-November seems to have precluded most of the English observers from watching for the return of the Leonid shower this year. Mr. A. King, of Scunthorpe, Lincs, however, was able to maintain a lookout on November 16 (the probable night of maximum), from 9h. 55m. to 15h. 55m. (G.M.A.T.). There was frequent interruption from cloud and rain, the total time spent in actual watching being 2h. 34m. There were some very clear intervals, and it was evident from the scarcity of meteors that no great shower was in play; indeed, Leonids were not so numerous nor so bright as on November 16, 1931. The following radiant of Leonids was determined:

Nov. $16^{d} \cdot 6$ $151^{\circ} \cdot 8 + 21^{\circ} \cdot 8$ 7 paths

Mr. M. A. R. Khan, at Hyderabad, India, notes: "This year's Leonids were a poor show." He observed as under:

Date	Time (G.M.A.T.) h. m. h. m.	No. of Leonids
Nov. 11	9.30 to 10.30	
19	Do.	3
" 12	9.30 to 11.30	8
" 14	9.0 to 10.15	7
,, 15	9.15 to 10.30	6
,, 16	8.45 to 10.15	19

The sky was generally hazy.

Mr. Arthur Renshaw, Manchester, writes that at 4.30 a.m. of November 13 he noticed that "in an E.S.E. direction the sky was illuminated by what at first I took to be rockets. . . . A group of people waiting for the first workmen's tramcars were gazing in wonderment. Stars were shooting from left to right and vice versa; in most cases there was a

streak of light . . . hanging in the sky, which lasted for several minutes." This account, as regards both the direction in which the meteors were seen and their character, is strangely suggestive of a display of Leonids. If this can be substantiated, it means that the maximum of the shower happened this year at least four days before the usual date—an unprecedented occurrence.

Announcements

Mr. H. B. Waters, deputy director of agriculture, Gold Coast, has been appointed director of agriculture, Kenya.

THE twenty-fourth annual exhibition of scientific instruments and apparatus, arranged by the Physical Society, will be held on January 9-11, at the Imperial College of Science and Technology, Imperial Institute Road, South Kensington, S.W.7. The leading manufacturers of scientific instruments will be exhibiting their latest products in the Trade Section. Research and Experimental Section will contain contributions from most of the important research laboratories in Great Britain, and there will be a special sub-section devoted to experiments of educational interest. The following discourses will be delivered in the evenings at 8 p.m.: January 9, R. S. Whipple, "The Evolution of the Galvanometer"; January 10, J. Guild, "The Instrumental Side of Colorimetry"; January 11, Sir J. Ambrose Fleming, "The History and Development of the Thermionic Valve". Members of institutions and scientific societies may obtain tickets from their secretaries; tickets may also be obtained direct from the Exhibition Secretary, 1, Lowther Gardens, Exhibition Road, S.W.7. No ticket is necessary on January 11.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:-A lecturer in chemistry at the Polytechnic, 309, Regent Street, London, W.1—The Director of Education (Dec. 18). A principal of the Maclagan Engineering College, Moghalpura, Lahore, India—The High Commissioner for India, General Department, India House, Aldwych, London, W.C.2 (Dec. 29). woman inspector of agricultural education-The Secretary, Ministry of Agriculture and Fisheries, 10 Whitehall Place, London, S.W.1 (Jan. 4). A head of the Mechanical Engineering Department in the Liverpool Central Municipal Technical School—The Director of Education, 14 Sir Thomas Street, An engineering inspector to Liverpool (Jan. 5). the Ministry of Health-The Director of Establishments, Ministry of Health, Whitehall, S.W.1 (Jan. 8). A principal of the Yorkshire Training College of Housecraft-The Director of Education, Education Offices, Calverley Street, Leeds (Jan. 12). A bacteriologist or zoologist to investigate foul brood disease in bees at the Rothamsted Experimental Station—The Secretary, Rothamsted Experimental Station, Harpenden, Herts (Jan. 16). A student assistant in the Economics Department of the Harper Adams Agricultural College, Newport, Shropshire-The Advisory Economist.