was started about twelve months ago, and it is anticipated that a new building for civil engineering and a new boiler house to serve the new buildings will be started on the Woodhouse Lane site in about twelve months; at the same time, the University will start the construction of a large new arts block at the Woodhouse Lane end of University Road, and it is planned to follow this after two years with new buildings for mechanical and electrical engineering. The cost of the whole scheme will be something in the region of £4 million, the greater part of which will no doubt come from the University Grants Committee. However, it will be necessary for the University to raise £500,000 towards the cost of these new buildings and their equipment, and up to date about £208,000 has been given or promised under deeds of covenant.

University Expenditure on Research

On May 31, in reply to questions in the House of Commons on the annual expenditure on fundamental scientific research by the University Grants Committee, Mr. H. Brooke, Financial Secretary to the Treasury, explained that grants are not normally earmarked for specific purposes and that research expenditure, therefore, is not separately distinguishable. He declined to comment as to the accuracy of the estimate that the amount is about £5 million and said that he is anxious not to embark on a policy of government earmarking of grants. The arrangements for the next quinquennium, he continued, will be the right moment to decide what future grants should be.

Mechanisms of Hearing and Balance

An up-to-date picture of some of the important topics of research on the ear and mechanisms of hearing and balance is given in a recent number of the *British Medical Bulletin* (12, No. 2 (May 1956): "Symposium on Neuro-Otology", pp. 70+4 plates; 15*s*.). Some new research techniques are described and illustrated in considerable detail. For example, by use of specially designed ultra-micro methods of analysis, it has been possible to estimate some of the electrolytes and organic fractions of the different labyrinthine fluids from small animals, even though the amount of fluid obtainable was sometimes as little as 0·1 μl. There are about a dozen separate articles in this number, and they include contributions on the comparative physiology of the otolith organs, fatigue and adaptation of hearing, and a fascinating chapter on the various types of inherited disorder of the labyrinth which are found in the different kinds of 'dancing' mice. This chapter ends with the sentence: "Further progress will largely depend on the degree of co-operation with specialists in related fields". It is just such publications as the present one which will increase that co-operation, by making clear to specialists in one field of research what is going on in related fields.

Rock Paintings and Engravings in Hyderabad

An interesting article has been prepared by Colonel D. H. Gordon and Dr. F. R. Allchin on some finds of rock paintings and engravings to the north of the Tungabhadra River in the Benakal Forest, Hyderabad (*Man*, July 1955). They were discovered by Leonard Munn, who photographed them and then copied them in colour on the photographs, and the dossier is now in the departmental library of the Indian Section, Victoria and Albert Museum, London. The drawings consist of human beings, horsemen, animals, signs, etc. Colonel Gordon, who has studied the rock-shelter art of the Central Provinces, India, for many years, has come to the conclusion that no part of this art dates back to a period earlier than the first half of the first millennium B.C., and that paintings and engravings continued to be made well into medieval times. The Benakal Forest art for the most part seems to belong to the dolmen period, as there are stone cists in the vicinity, with which they are probably to be associated. This would date some of the drawings to the first centuries B.C.; but a great deal of the art is clearly much later in date, as engravings have been found of Hindu sectarian symbols, scratchings and bruisings of umbrellas, as well as some drawings of temples.

Beef-Cattle Industry of Australia

The Commonwealth Scientific and Industrial Research Organization in Australia has published the results of a survey into the beef-cattle industry of the country (Bull. No. 278). The survey was carried out by W. A. Beattie, of the Division of Animal Health and Production of the Organization, and lasted from 1946 until 1952; it was designed to provide a background for the future planning of research. During the survey Beattie visited and examined all the beef-cattle producing areas of Australia and received co-operation from graziers' associations and primary producers. The survey aimed at determining and defining the structure of the industry as it has evolved in a variety of climatic environments on a large island continent, about one-third of which lies within the tropics. Attention was given to the conditions in each of the natural regions, action that may be taken to enable cattle to survive or thrive in them, the breeds of cattle available, methods of animal husbandry, disease and pest control, stock routes and transport, land tenure, labour, and the social structure of the industry.

Soil Science in India

In his presidential address to the Section of Agricultural Sciences of the forty-third Indian Science Congress, Dr. S. P. Raychaudhuri reviewed recent work in soil science in India with special reference to classification and survey. The first requirements of a basic improvement in Indian agriculture are a fuller understanding of the soils and a scientifically based programme for their better management. Indian scientists are tackling the innumerable problems presented by their soils on a broad front, and appear to be paying particular attention to the chemistry of soil fertility. Recent experience has shown remarkable responses to chemical fertilizers, and this offers immediate prospects of greatly increased yields. The majority of Indian soils are deficient in nitrogen, and the production as well as consumption of sulphate of ammonia are increasing steadily. Phosphate, by itself, is of more doubtful value, but increases response to nitrogen. Potash is generally adequate in Indian soils. Deficiencies of trace elements are reputed to be widespread, but little systematic study has been made of them. Much attention is being paid to salinity and alkalinity of irrigated soils, and soil surveys of irrigation areas have been of great value in preventing costly mistakes. Little work has so far been done on soil physics and microbiology, but the study of bacterial nitrogen fixation offers a promising field which is now being explored.