

short period to experience the personal side of the work, although this is not as easy as it sounds, because of the tendency of GPs working near the teaching hospitals to refer to them all their difficult patients. But most people agree that medical education should not be determined by historical accidents, particularly as each doctor costs about £2,000 a year to train.

TRANSPORTATION

MoT Reorganizes

THE appointment of a new Director General of Research and Economic Planning and the setting up of a new Policy Planning Unit are the main changes in the organization of the Ministry of Transport which will come into effect in October. These changes have been stimulated partly by the need for overall direction of the rapidly growing research and economic activities of the ministry, and also by the recommendations of the Fulton Committee on Government policy planning.

Mr J. A. Jukes, who is at present a deputy Under Secretary of State in the Department of Economic Affairs, has been appointed Director General of Research and Economic Planning. Mr Jukes has spent most of his career in operational research and as an economic adviser to various authorities. There will be four main groups under his directorship: The Road Research Laboratory, the Directorate of Economics, the Directorate of Statistics and the Directorate of Scientific Studies. These groups have also been slightly reorganized in an attempt to increase the coordination between them. The Road Research Laboratory will continue to provide the major source of research, and it is hoped that the new organization will ensure that this is used to the full in solving transportation policy problems. The Directorate of Economics will work in conjunction with the Directorate of Statistics; the former will cover the expanding field of transport economics and provide general economic advice, and the latter will provide the statistical backing for the ministry's economic and scientific work. The Directorate of Scientific Studies will take over the work of the ministry's Chief Scientific Adviser and his staff, and will cover a number of studies in the area of operational research. The existing Mathematical Advisory Unit at the ministry will form part of this directorate.

The new Policy Planning Unit, under the directorship of Mr J. R. Madge, who is currently in charge of the Road Safety Group, will be responsible for longer-term planning and is a direct consequence of the Fulton Committee's recommendations. The committee was concerned that in all Government departments, long-term policy planning was being left to officials who were overburdened with more immediate demands. It suggested that planning units should be set up in every ministry in order that policy planning could be taken out of the everyday running of the ministry.

EXHIBITIONS

The First Geologist

WILLIAM SMITH is not called the "Father of English Geology" for nothing. He was not only the first

person to show that sedimentary rocks in different areas can be correlated and that each formation can be identified by the fossils it contains; he also constructed the first true geological maps and the first table of strata in England. This work established the branch of geology known as stratigraphy which revolutionized what was still an embryonic science.

To mark the bicentenary of Smith's birth, the British Museum (Natural History) has prepared a special exhibition. The most spectacular work on display is a hand-coloured geological map of England and Wales mounted as a single sheet drawn to the scale of 5 miles to an inch and measuring 8.5 feet by 6 feet. The map,



William Smith at the age of 68 (from a portrait by Fourau in the rooms of the Geological Society of London).

produced in 1815, is remarkable for its completeness and accuracy and was Smith's greatest work. This was not, however, his first geological map. His earliest attempts to construct them were probably made about 1793 and 1794, two or three years after he had started work as a surveyor in the coal mining district of northern Somerset, and by 1799 he had completed maps of the surroundings of Bath, the oldest geological maps of any part of Britain. For five years up to 1799, Smith had been occupied in surveying and superintending the construction of a canal linking the Radstock coalfield with Bath and, luckily for him, he was able to make extensive journeys up and down the country. During this time he made his geological observations and compiled for the first time a small geological map of the whole of England and Wales which he published in 1801. Other maps of increasing complexity were brought out in the following years, the best known being the large 1815 map. With this map, he also published a book which contained a short account of the geological formations to be found in each county and two tables of strata (one of which he had prepared in 1799). He followed these achievements with some more books, several charts of sections (the one on display shows a section from London to Snowdon),