

tutes. The rapid and efficient service it can provide, says the council, is particularly useful in overcoming the shortage of material which results from the lack of foreign currency in Poland.

## MEDICINE

### Dentistry in the Doldrums

LESS attention should be given to transplant surgery and treatments for rare forms of cancer, and more to the problems of the elderly and the chronic sick, mental subnormality and in particular dentistry, according to Dr Henry Miller, vice-chancellor of the University of Newcastle upon Tyne, who addressed the Royal Society for the Encouragement of Arts this week.

Eighty per cent of British five-year-olds have some decayed teeth, 80 per cent of the population has unhealthy gums, half the population has lost its teeth by middle age and yet the cost of dentures in Britain is something like one seventh of that in, for example, Western Germany. "Melodramatic statements about the breakdown of the national health service have often been made without foundation, but there can be no doubt that the dental service has in practice broken down", concluded Dr Miller.

These are the areas of conspicuous inadequacy in an era of advanced medical care which, however, has not resulted in any diminution of the demand for treatment. Dr Miller has not been the only one to comment recently on the undiminished demand for the time of medical practitioners. Here as in the United States, the rise in the standard of general health has raised people's expectations and lowered their threshold for complaining.

Dr Miller does not feel that the general practitioner can any longer be expected to cope with the increasing need for specialized knowledge in medicine. He acknowledges that he is running against the tide of opinion in Britain, now the only advanced country to adhere to the general practitioner system, albeit increasingly streamlined by the formation of group practices within which some degree of specialization tends to develop.

No single person in Britain is responsible for seeing that there are enough doctors and nurses to staff the hospitals, and it is well known that without a steady influx of doctors from India and Pakistan, who make up 75 per cent of junior hospital staff, the hospital system would flounder. In this respect, said Dr Miller, we could learn from Eastern Europe where medical education is provided by state academies and it is the responsibility of the Health Minister to supply the demand for trained personnel.

Although hospitals have had a "lion's share" of health expenditure, said Dr Miller, they have suffered nevertheless from a need for large capital sums with which to replace antiquated buildings. He estimates that it will take fifty years to replace the present system, "by which time what is built now will be outdated". Furthermore the optimum size for a hospital is still controversial. It is simply not practical, Dr Miller pointed out, to institute a system of small hospitals each equipped with a different kind of specialized unit, when the increasing number of motor accidents will ensure that many patients will require the simultaneous facilities of several specialized units. The minimum economic size for a hospital able to supply this need would be about 2,000 beds.

The accident service is, in fact, one of the neglected areas which Dr Miller particularly emphasized. It deserves special attention because of the increasing number of traffic accidents, the very high proportion of young and active people affected by them, and the critical difference that prompt and appropriate treatment can often make. Prompt appropriate treatment implies large regional centres with competent 24-hour supervision.

## STANDARDS

### Centenary Ahead

from a Correspondent

MORE measurements of the density of water of different isotopic constitution was called for at the 61st session of the International Committee of Weights and Measures held in Sèvres, near Paris, recently. The conference also expressed the hope that the density of air, which is important in buoyancy correction in weighing and which has not been measured for several years, would soon be re-measured.

The international committee meets annually, and carries out the business of the Metre Convention in between meetings of the General Conference of Weights and Measures which take place every four years. The committee, as well as implementing the decisions of general conferences, supervises the work of the International Bureau of Weights and Measures (BIPM), sited at Sèvres.

The international committee is advised by a number of specialist consultative committees. The consultative committees for the definition of the second, for electricity, and for ionizing radiations have met since the 60th session of the international committee. The committee examined and discussed the reports of the consultative committees, as a result of which it recommended the use of the "international

## CZECHOSLOVAKIA

### Celebrations and Doubts

from a Correspondent

THE Twentieth-Anniversary Jubilee Meeting of the Czechoslovak Academy of Sciences was held in Prague on November 16 and 17, 1972. Reviewing the work of the academy since its foundation, the chairman, Academician J. Kožešnik, stated that the rate of expansion of science and technology in Czechoslovakia is such that the budgetary allocation is now some thirty times greater than before the Second World War.

The academy alone now comprises 143 research centres and employs some 14,000 persons. Academician Kožešnik laid special emphasis in his speech on the cooperation in basic research and technology between Czechoslovakia and the Soviet Union, represented at this meeting by Academician M. V. Keldysh, president of the Soviet Academy of Sciences.

Speaking on behalf of the government, Mr J. Foljčík, of the Central Committee of the Czechoslovak Communist Party, spoke of the need to develop further the role of pure and applied science in the national economy,

gravity standardization net 1971" already adopted by the International Union of Geodesy and Geophysics. In the past a value of the acceleration due to gravity,  $g$ , at Potsdam was accepted, and  $g$  at other places on the surface of the Earth was obtained by relative measurements; the value now adopted has been formed by weighting several absolute and relative measurements of  $g$ .

The centenary of the signing of the Metre Convention will be celebrated in 1975. BIPM will publish a book describing its activities to supplement one it published in connexion with the jubilee in 1925. The bureau will also prepare material for an exhibition to be held in Paris. The committee suggested that the opportunity should be taken to explain to the public in general, but more particularly to students and young scientists, the importance of metrology to society, industry, science and the economy of nations. It is planned that a short text on BIPM will be read in all French schools as part of the national celebrations. The committee hoped that the other member states of the Metre Convention would make similar arrangements, and requested BIPM to draft a letter to member states recalling the salient points of the history of the Metre Convention, pointing out that in 1975 the metric system would have gained almost universal acceptance.