

the emanation content of springs and waters may make it desirable to adopt a convenient unit for expression of such quantities.

The committee pointed out that its recommendations were tentative, as all the members of the standards committee were not present at the congress, and had no opportunity of expressing their opinions. It is intended that the preparation of the radium standard should be proceeded with as soon as possible, and it is hoped that the standardisation of substandards will be possible before a year has elapsed. Prof. Stefan Meyer, of the University of Vienna, was appointed secretary of the international committee, and all communications relative to standards should be addressed to him.

The question of the nomenclature of radio-active products was informally discussed at the congress. There was a general consensus of opinion that it was not desirable to alter materially the present system of nomenclature, although it was recognised that it is far from perfect. It was felt that the gain to be obtained by a possibly more systematic nomenclature was more than counterbalanced by the confusion that would arise in consequence of a change of names. It was pointed out that the present system of nomenclature was capable of extension to include possible new products. For example, if future investigation should disclose that the product radium C consists of several products these could be named radium C₁, radium C₂, radium C₃, &c., but the term radium C would be used generally to represent the group of products as they normally always occur together. Reference was made to the undesirability of individual workers assuming the right to give new and fancy names to well-known substances.

A number of suggestions in regard to general nomenclature in radio-activity and ionisation were also made to the congress. For example, it is proposed that the term "half-value period" should be used in all cases to represent the term required for a substance to be transformed to half its original value. It is suggested that the terms "induced" and "excited" activity should be abandoned and the term "active deposit" employed in its stead, as reference is usually made to the radio-active matter itself and not to its radiations. There was a good deal of informal discussion amongst members as to the exact use of a number of scientific terms arising in radio-activity and allied subjects. Such discussions are of great importance in preventing unnecessary confusion in nomenclature due to the development of a rapidly growing subject.

A more general account of the meetings and deliberations of the congress, prepared by Dr. Makower, will appear in another issue of NATURE.

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HEREDITY AT THE CHURCH CONGRESS.

THE discussion on heredity and social responsibility at the meeting of the Church Congress at Cambridge showed clearly the growing appreciation of the importance of biological principles in the study of social phenomena. The debate was opened by a paper by Dr. G. E. Shuttleworth, who dealt with the subject of the feeble-minded, chiefly from the medical point of view. After tracing the history of the different methods of treatment, he pointed out that in the case of most of the feeble-minded "there existed morbid heredity of a strongly transmissible character," and that the only sound process of attacking the problem was to be found in

segregating the rising generation of the feeble-minded in industrial colonies, apart from the general community, for in that way alone could the propagation of the evil be prevented by means in harmony with our feelings of humanity.

Mrs. Pinsent, of Birmingham, a member of the Royal Commission on the Feeble-Minded, gave a brilliant address, which was clearly the chief feature of the meeting. She produced the histories of several mentally defective families, in which disease, mental defect, and crime appeared generation after generation. She pointed out the cost of such families to the community, and the appalling waste of social effort involved in their supervision and maintenance. Good and useful families, themselves often with narrow means, were being taxed to support these degenerate folk, until the more efficient restricted their families under the growing economic pressure, and reduced expenditure on maintenance and education. Thus the unfit replaced the fit within our own civilisation and under our own eyes.

The crowded audience was clearly in sympathy with Mrs. Pinsent's view of the situation, and realised the dangers of ignoring any longer the increased chances of reproduction and survival which our modern humanitarian legislation and social action had given to the degenerate classes.

The Bishop of Ripon spoke on the declining birth-rate, and said that, had it appeared in the less worthy elements of society it would have been welcome, but that, as it chiefly affected the better stocks of our race, it was deeply to be deplored. Especially was it disastrous from the point of view of the Empire, which could not hope to stand against other peoples, and especially against the increasing birth-rate, the growing numbers, and the improving organisation of the Eastern nations, unless our empty spaces in the Colonies were filled with men of British race. Marriage ought to be discouraged among the unfit, while the growth of the fit should be encouraged by a higher sense of duty in the homes and an imperial ideal of national life.

Mr. W. C. D. Whetham traced the part played by religion in the sociological development of society, and pointed out that it alone could give a motive strong enough to lead the mass of mankind to prefer the ultimate good of humanity to the immediate advantage of the individual. Hence religion possessed a real biological survival value, as Kidd showed in his book on "Social Evolution." It followed that the National Church had a very great responsibility towards the race. To play its proper part, it must maintain its hold on the efficient families of the nation, and preach the duty of encouraging the rapid reproduction of the good stocks, while limiting the output of those defective in mind or body. The future belongs to those nations whose religious teachers realise this responsibility.

In the general discussion which followed, there was an almost unbroken agreement with the main point of view of the readers of papers. While one speaker thought that only 50 per cent. of mental defect could be traced to heredity, and another emphasised the importance of alcoholism, there was a general consensus of opinion that the country must be awakened to the need of encouraging the growth of good stocks, and that the reproduction of the feeble-minded must be prevented by legislative action.

The general effect of the meeting on the mind of the listener was to produce the belief that the Church Congress, at all events, was ready, in matters of social action, to "think biologically"—surely an encouraging sign.