

### Protection against Propaganda

SCIENCE SERVICE of Washington, D.C., has published under the title "Propaganda Protection" a series of short articles forming an exposition of the methods and aims of war propaganda. The chemist and physicist are frequently criticized for discovering poison gases and high explosives, but without the will of the fighter the destructive compounds would be powerless. The aim of the propagandist is to make people willing to act in a particular way, and his general means are the arousal of emotion and the stifling of reason. The specific methods are the appeal to prejudice and hate by the use of slogans, by the demand for haste since delay may bring reason into play, by the use of statements that can neither be proved nor disproved, by concealing the source of the statements, and by persuading the hearer or reader to associate particular evils, for example, conspiracy, plotting, oppression, injustice, and particular virtues, for example, bravery, sympathy, humanity, patriotism, with some particular creed, party, or country. The propagandist knows the weaknesses of mankind and in many cases consciously exploits them for his own ends. The general methods are not new in the history of mankind, but the development of the means of communication by travel and radio has made all of us much more vulnerable to the propagandist attack. It is commonly asserted that more knowledge is the best immunizing agent against propaganda; but to be effective we need much more knowledge of our own mental make-up, as well as greater knowledge of facts outside ourselves. It is unfortunate that our knowledge of psychology lags so far behind our knowledge of other aspects of reality.

### Physical and Mental Welfare Society of New Zealand

ON July 22 last, a body known as the Physical and Mental Welfare Society of New Zealand was formally incorporated; the object of the Society is, broadly, to promote the application of current scientific knowledge to physical and mental welfare. The Society originated in a movement which has existed and operated throughout the Dominion for several years. It was promoted by a group of voluntary workers in the social services, under the leadership of Mrs. Ysabel Daldy, who has hitherto worked under the *noms de plume* of "Mother Machree" and "Silent Peter". In numerous weekly articles contributed to some twenty New Zealand newspapers, she has interpreted current scientific knowledge in its bearings on social welfare to the general reader in simple and attractive language, thus moulding public opinion and preparing the way for necessary reforms. She has been assisted by the "Silent Peter" group of specialist advisers, which is stated to include representatives of the medical profession and others well qualified severally to advise and write on health, nutrition, agriculture, education and some branches of science. Through her articles in newspapers and by correspondence with Government departments and with individuals, Mrs. Daldy has done valuable

work in guiding and stimulating public opinion, and the increased opportunities afforded by the new Society of reaching the public by lectures, publications and other means, should enable this body of scientific opinion to exert its full influence in promoting the application of science to social problems in New Zealand.

### Archæological Investigations in the Hadramaut

FURTHER details of archæological investigations in the Hadramaut of southern Arabia were given by Miss G. Caton-Thompson in a lecture before the Royal Geographical Society on November 7, in which she described the results of the expedition undertaken by Miss Elinor W. Gardner, Miss Freya Stark and herself in the winter of 1937-38. The uniform, but crude character of the palæolithic industry of the region, to which she referred in her preliminary report (see NATURE, 142, 139, July 23, 1938) was again emphasized. This industry falls well within the limits of the Levallois flake industry; but its crudity is strikingly apparent on comparison with the corresponding industries of Africa, North Arabia and Palestine. It represents a low ebb in contemporary standards, which Miss Caton-Thompson is inclined to attribute either to the influence of a harsh and impoverished environment, or possibly to the absence of technical stimulus from contact with more progressive groups, such as, for example, might have been supplied from East Africa. The latter alternative postulates the separation at an early date in the Pleistocene or before of south-west Arabia from East Africa. The conception of an early marine separation of the two regions is reinforced by the fact that of the three culture groups classified morphologically by the hand-axe, the flake, and the blade industries, the hand-axe culture group, which covers practically the whole of Africa, failed, so far as the evidence goes, to reach south-west Arabia. The huge numbers of flint implements of Levallois type argues a *status quo* so far back as the middle or later Pleistocene. Of the evidence of plant life found in the tufa in the Wadi Luqrun, absence of structure makes identification impossible; but one is a species of *Celtis*, another type, the commonest, resembles the fig in leaf; and some kind of palm is certainly present.

### The Government Laboratory

SEVENTEEN THOUSAND samples in excess of the number submitted in the previous year are recorded in the report of the Government Chemist as having been examined in the year ended March 31, 1938. The total number was substantially larger than half a million. The work of the Laboratory, however, is not to be measured by numbers alone, for it involves much research into the reliability of existing methods of analysis, and many investigations into new methods of detection and determination of substances. Further, the staff is constantly being consulted on technical matters, while, in addition, its members contribute notably to the advance of pure and applied chemistry both by publication and by personal service