preference for beef cattle and sheep is due to their greater indirect effect on soil fertility and to the fact that they take far longer to reproduce than pigs and poultry, but much expert opinion is in favour of Dr. Norman Wright's view.

## Sir William Chambers

THE July issue of the Anglo-Swedish Review contains an interesting editorial on the life and work of the architect Sir William Chambers, who was born at Gothenburg in 1723, and died in 1796 in London, when he was buried in Westminster Abbey. In 1739 he entered the service of the Swedish East India Company, and the next year sailed to China as a cadet, and in 1743-45 as an assistant. During his stay in China he devoted himself to the study of Chinese architecture, which exercised a considerable influence on his future. The importance of Chambers is due to the fact that he was the first to furnish accurate information on Chinese architectural interior decoration and garden planning based on personal observations in the East. He made his reputation by the grounds which he designed at Kew, including the pagoda in the gardens, between 1757 and 1762. In 1775 he was appointed the architect to Somerset House. He also designed mansions for Earl Gower at Whitehall and Lord Melbourne in Piccadilly. His principal publications were "Designs of Chinese Buildings, Furniture, Dresses, Machines and Utensils" (1757) and "Plans, Elevations, Sections and Perspective Views of the Gardens and Building at Kew in Surrey" (1763).

## **Biology** in Australian Schools

AT the first public meeting of the Victorian branch of the newly formed Association of Scientific Workers (Australia) held on March 19 in the University of Melbourne, the place of biology in school education was discussed. Prof. J. S. Turner pointed out the inadequacy of the present teaching of science in schools and said that the child is only educated for life if his school science includes an introduction to biology in addition to training in chemistry and physics. The solution of many problems of a troubled world requires biological knowledge-it is enough simply to enumerate them : education, hygiene, nutrition, quack remedies, racial prejudice, population drifts, immigration, agriculture, forestry, soil erosion. Going on to give some statistics regarding Victoria, he showed that inquiries at 36 large schools (including 4 of the largest public schools) revealed that 17 of these schools do not teach biology at any stage to their 6,300 pupils. At the other 19 schools there are 8,000 pupils, 2,500 of whom were of Intermediate or Leaving standing. Of these, 254 take biological science, 230 botany, 570 zoology. In Victoria there are 150 State Secondary, High and non-State Secondary schools, and in only 77 of these is any kind of biology taught. Of the 77 schools teaching biology only 5 or 6 are boys' schools or mixed schools, and it appears probable that in any one year only a hundred or two hundred boys in the whole of the State are introduced in a scientific study of animals, plants and man. Of the 3,500 boys and

girls who in 1938 took English and arithmetic in public examinations, 2,050 took also British history; 400 (all girls) took botany, 500 (about 100 boys) took zoology and 72 took agricultural science.

Prof. S. M. Wadham discussed the lack of biological training in citizens in connexion with the various political systems; he pointed out that the successful introduction of biology in English schools during the last decade was in part due to the decision to allow medical students to pass their first M.B. examination while still at school. Biology is largely a cultural subject, and its introduction into schools would be opposed unless it could be shown to be of direct advantage in later life. Mr. Colman, Inspector of Schools in Victoria, agreed that an extension of biological teaching was desirable, but discussed the difficulties of school time-tables. He showed that attempts were being made to introduce courses of biological and physical sciences into the State schools. Miss Cunningham, of Fintona School, gave her opinion that time-table difficulties are by no means insuperable, and thinks that there can be no argument as to the cultural value of biology in schools. She has introduced a compulsory course dealing largely with human physiology and she found her pupils vitally interested. Prof. R. D. Wright said that the average person's abysmal ignorance of dietetics and normal functions is to be deplored. He is inclined to the view that biology, dealing with variable material, is of greater value as a school science than pure physics or chemistry.

## Conserving Supplies of Potash Alkalis

WITH the object of ensuring that the reduced supplies of potash compounds shall be used to the best advantage the Ministry of Supply has made an Order under which purchases by consumers of caustic potash and carbonate of potash may be made only under licence. Licences will not be granted except in cases where substitution of potash by soda is impossible, but for the present, lots not exceeding half a ton a month are exempt from the Order. Compared with the vast quantities of potassium compounds used as fertilizers the amount used in the manufacture of medicinal salts is small; at a rough estimate it is probable that it does not exceed 5 per cent of the total consumption of potash; but it is desirable, nevertheless, that medical practitioners should prescribe sodium or ammonium compounds instead of potassium compounds whenever this substitution can be made without prejudice to patients. For example, sodium or ammonium bromide should be used instead of potassium bromide and sodium iodide in place of potassium iodide; and so the list might be extended. In the aggregate, the quantity of potash saved for potatoes and other market garden crops and sugar beet, for example, would not be inconsiderable.

## Infectious Diseases and Aeroplanes

IN a recent thesis (*Thèse de Paris*, No. 217; (1940), Dr. J. M. Chauvisé remarks that in addition to the precautions applicable to passengers on aeroplanes