

will cause difficulty in the event of a great revival of trade. So far as the electrical industry is concerned, those employed in manufacturing, contracting and supply have grown in number from 200,000 to 330,000 in the last ten years. Scientific and technical development soon find a remedy for any potential shortage of work by increasing the rate at which power is developed and utilised. He reminded his hearers that electricity is a commodity in everyday use, and that it is unnecessary to fill up complex forms before it can be supplied. If the present rate of progress is to be maintained, more intensive effort and in many cases an appreciable reduction of tariffs is required.

#### School Diets

THROUGH the laxity of their parents in nutritional matters, nearly all children go to boarding schools as 'damaged goods'. This accusation, which is broadly true, is made by Prof. H. E. Armstrong in No. 7 of the gastronomical quarterly *Wine and Food*, in which he reviews Dr. Friend's book "The Schoolboy. A Study of his Nutrition, Physical Development and Health". Schools may not be able to repair the injury inflicted by parental carelessness, but at least they should not add to it, as they commonly do, by providing ill-planned dietaries during the crucial period of adolescence. For more than twenty years resident medical officer at Christ's Hospital, Dr. Friend has striven to better the physical condition of the boys passing under his care by improving the biological quality of the school diet. These experiments have been watched and encouraged by Prof. Armstrong in his capacity as a governor of the school. Prof. Armstrong is constantly directing his stinging wit and pungent criticisms at first one and then another public nuisance. The problem with which he is exercised at the moment is:

"How should the little busy boy  
His belly daily fill?"

Prof. Armstrong urges the introduction of wholemeal bread; far more vegetables, particularly in a raw state; a comprehensive sausage including some of every kind of 'innards'; milk and milk products, of course. For the better provision of bone-forming minerals and vitamins, the milk should be from herds on lime-treated pastures, and in winter-time the cows should be fed on hay made from rapidly dried young grass.

THE large boarding school of the future will call for the exercise of special activities and of special intelligence on the part of the staff. The training of the child's character will be through that most wonderful House of Assembly, the 'tummy', and not through the pursuit of cricket and foot balls and dead languages. The school farm will be as carefully watched as the school classroom. Precious hours of sunlight will not be wasted indoors or the health-giving power of light be annulled by over-clothing. Dr. Friend initiated a great work, and Prof. Armstrong has been his staunch supporter, but

how many boys' or girls' schools have such enthusiastic medical officers or governors? Though it is an improvement on customary school diets, the Christ's Hospital diet is still far from ideal: sugar is too plentiful; fresh fruit and vegetables too scarce; not all the bread is wholemeal, and more milk and potatoes might with advantage be included. The progress of experiments with improved diets is hampered in schools, and may be invalidated by the unintelligent opposition of the school teaching and domestic staff, and by lack of co-operation from the boys and girls, who resent food changes, and protest if their expenditure on the 'tuck shop' is curtailed. In spite of these obstacles, we hope the time is near when schools will ensure health not by fighting disease with an array of clinical thermometers and antiseptics, but, by means of proper food and sunlight, building sound bodies resistant to infection.

#### An Experiment in Political Education

THE 'educated electorate' dreamed of by the liberal statesmen of two generations ago is still to seek; the great mass of voters to-day are probably no better qualified than their ancestors of Gladstone's day to form independent judgments of the merits of rival candidates for election to Parliament. A similar deficiency stultifies democratic government on the other side of the Atlantic. The problem how to help the masses to achieve that critical thinking postulated by democratic theory was discussed in a stirring address delivered on July 26 at the University of Minnesota by Dr. J. W. Studebaker, United States Commissioner of Education. Attention was directed in the address to a remarkable experiment now in operation in Des Moines, Iowa, where the local education authority has inaugurated a public forum for adults. Its objectives are, (1) exchange of information and points of view, (2) development of tolerance and open-mindedness and (3) development of critical intelligence. It is recognised that the leader of such a forum must be a man of eminence in the academic world, with both the theoretical and practical knowledge of current affairs which would command respect and, above all, "that serene detachment which alone can guarantee clarity of judgment". The basic conception of the forum is educational with emphasis upon critical thinking as opposed to the emotional appeal and obscurantism of the demagogue. Such forums, Mr. Studebaker thinks, ought to be found in every city and village throughout America; and he forecasts support by the Federal Government for schemes for establishing them. University extension discussion classes in Great Britain were started with similar aims, but failed to attract as participants more than a minute proportion of the electorate. It will be interesting to see whether Mr. Studebaker's suggestions fructify.

#### Origins of Some Mechanical Inventions

FOR his presidential address to the Newcomen Society delivered on October 16, Mr. C. F. Dendy Marshall took the subject of "The Germs and