

### Recognition of Technical Education

In the Carpenters' award covering the whole of New Zealand, announced recently by the Arbitration Court, the technical education of apprentices is given, very wisely, proper recognition. Technical education of apprentices to this trade is to be compulsory. The award stipulates that every apprentice to the carpentering or joinery trade shall for the first three years of his apprenticeship, or until he has passed the set examination, attend a course of trade instruction at the nearest technical school; if an apprentice has 70 per cent. of attendances at the school classes, the fees shall be refunded by the employer; if he passes an examination equivalent to the City and Guilds of London Institute, an apprentice shall in his fourth and fifth years be paid 5s. per week in excess of the apprenticeship wage; if a technical school is more than three miles from the residence of an apprentice, the compulsory clauses shall be inoperative. This arrangement at once elevates technical education into its proper place, and gives an effective blow to the old idea of the "rule of thumb" worker being good enough. Employers will now have a direct interest in the efficiency of these schools, for they have to pay higher wages to the well educated apprentice, and they will no doubt see that his training is on useful lines for the industry. We would have liked a clause giving the boys some time off from ordinary work hours for technical education, but the award contains a substantial instalment of reform of the apprenticeship system, and we look forward hopefully to further progress.

### Conserving our Timber

The agitation against the Government's threatened prohibition of the export of white pine from New Zealand to Australia furnishes another illustration of the way in which we drift carelessly along in this country of great but unconsidered natural resources. The Board of Trade has been busy inquiring into the conservation of this timber, because of its importance for use in making butter-boxes. Sawmillers and their employees, faced with serious loss through the prospect of sudden stoppage in their regular export business, have decided to protest against the prohibition. So far as the public discussion has gone, there has been no suggestion of substitutes for white pine, though the Timber Commission of 1913 went thoroughly into this important point and made valuable suggestions which secured the usual fate of Royal Commission reports, to be neglected and forgotten, after having cost the country much money to obtain and publish. This commission made experiments in the use of tawa, taraire, poplar, and pinus radiata for the packing of butter. The result was entirely successful, the butter being free from taint and in excellent condition after storage. Butter boxes are also made from wood pulp, and some day we may have the satisfaction of seeing no waste in our timber mills, but all the refuse turned to account in the form of pulp, instead of being burned, or allowed to rot in heaps. The Commission came to the conclusion that substitutes for white pine can be found, first from imported timbers, and later from timber grown in New Zealand. To avoid taint

to the butter when wood other than white pine is used, it is suggested that the wood be paraffined, and two thicknesses of parchment paper be packed around the butter. The last suggestion should, in the opinion of the dairy experts of the Agricultural Department, be adopted even in the case of white pine boxes. The war forces upon us problems in every direction, and New Zealanders are being led more and more to think out how to best use their rich resources. The old wasteful methods of pioneering days have gone, and the new era is one in which business organization, and the co-operation of trained scientists, will work wonders in development such as will put into the shade the splendid efforts of the pioneers.

### Electric Wires

Several recent cases of electrocution in New Zealand point to the urgent necessity of more stringent oversight in regard to this danger. The number of fatalities and mishaps is quite reminiscent of the early days of gas lighting, when ignorant users courted serious trouble by blowing out the light, leaving the gas turned on. Gas escape is an easier thing to detect than defective electrical insulation. There is no apparent difference between a high voltage wire and one which is dead—the difference is sometimes discovered with fatal results. The latest case, which occurred in Christchurch, illustrates the danger to workmen through the use of bare electric light wires. A plumber was employed on the infectious diseases hospital at Bottle Lake, putting a new vent pipe into a sink. He was assisted by another plumber who states that they were working on a roof, and overhead, about six or seven feet above, ran electric wires—two or three of them, all about the same height, and bare. They did not know whether or no they were live wires. One of the men upended a pipe to put it through a hole in the roof and drop it down. The pipe was about 10 ft. long, made of galvanized iron, and about 1½ inches wide. When he dropped the pipe, he said "I have got an electric shock," and slid down the roof into the gutter. He then curled up like a ball, turned over, and straightened out. His mate went to his assistance, but the electric current had done its fatal work. At the inquest Joseph Searle, contractor, said he was engaged in a contract on the Infectious Diseases Hospital. Deceased was a sub-contractor. He gave evidence regarding the accident, and added that the wires were erected before the building was put up. Mr. Ellis said there was evidently a fault in having live wires over a house. The Coroner: The question is whether the wires were put over the house, or the house under the wires. Witness: The house was put under the wires, and the site was selected by the Hospital Board. This case supports our view that it is high time the regulations relating to electric wires—extensive as they appear to be already—were carefully overhauled. Bare wires should not be permitted within a populous area, and as most distributive systems provide insulated wires, this system could easily be made general. Overhead telephone and telegraph wires are so numerous in New Zealand towns that the possibility of breakage and falling across "live" electric wires and thus becoming dangerously electrified, is a grave wide-spread risk.