

out with a smart, but moderate-priced Canadian or American car, that they are indulging in wasteful extravagance? The possession of a motor car increases the facility of the farmer for doing business. He covers a wider area in his stock-buying journeys, and sees a lot more country than he could from the old-time gig. This object lesson regarding other people's methods is not lost upon the average farmer, consequently the nation benefits from his increased efficiency. A good deal of ignorant nonsense is talked about these American importations. Farmers were immensely pleased when the American Congress reduced the import duty upon wool, throwing open the great market of the United States to our wool-growers. Frozen meat and butter are allowed to pass the American Customs' barrier on better terms to-day than when Sir Joseph Ward, returning from a Premier's Conference in London ten years ago, interviewed President Roosevelt on the question of trade relations between the United States and New Zealand. They discussed reciprocity, and Sir Joseph Ward's opinion at that time was that it would not be to the disadvantage of this country if such an arrangement could be made. To put the matter into concrete shape, he suggested that New Zealand should exchange wool and kauri gum for American fish and paper. He pointed out that the Americans sent to London to buy their wool, and had to go to the expense of re-shipping it to the States. The progress made in trade relations between the two countries has been even better than Sir Joseph Ward hoped for, but if the critics of imported American motor cars imagine that they can do business on the one-sided principle of American encouragement for our products, and New Zealand discouragement in regard to their's, they fail to grasp the first principle of international trade, and commercial fair-dealing. If Parliament had taken notice of some enthusiastic but short-sighted people and adopted a heavy import tax on goods from neutral countries as soon as the war began, we would have felt more severely the lack of supplies which have to be imported. Farming and general business in New Zealand has been kept going in all branches in a remarkable way, thanks to the wise policy of drawing on a wide area for our necessities.

**The Coming Age of Research** Members of the New Zealand Institute recently listened to some well founded criticism, by Professor Easterfield, of the unenlightened, short-sighted attitude of many manufacturers towards scientific research. The critic, however, made the mistake of over-doing the dark side, hence his condemnation fails to stir the commercial mind, which is much too busy to be troubled with a tirade. Perhaps Professor Easterfield could tell us what result has been secured from the research scholarships set up by the New Zealand Government some years ago. The idea was to encourage post-graduate work of a research nature, but the whole thing has been kept out of the public eye, so that if the average New Zealander were asked about this valuable feature of our education system he would reply that he had never heard a word about it. A very handsome bonus £10,000 awaits the discoverer of an improved method of treating New Zealand flax—an official encouragement to science which ought not to be overlooked by the critics. However, the scientific men have every reason to be proud of the practical recognition they

are to receive henceforth, consequent upon the realisation that the organisation of brain-power is of infinitely greater value and security to a nation than even standing armies. That which science has especially gained from the war is prestige. Neglect of science in certain quarters has brought such retribution to the negligent ones that the lesson will probably never need to be repeated. That is true not only of science as applicable to military purposes, but also of science as applicable to industry.

#### World-wide Science Organisation

The war has given an impetus to scientific research, the material and intellectual fruits of which cannot yet be estimated. Is it too sanguine a hope that they may actually indemnify the world for all that the struggle has cost? This impetus has manifested itself in two ways: first, in the increased attention which various manufacturers have been forced by recent circumstances to devote to the scientific side of their own industries; second, and especially, in the elaborate plans adopted by various governments for the promotion of research on a national scale. The international position of scientific organisation is outlined by the "Scientific American." The British government, besides organising research on behalf of the army and navy, has developed a scheme for an "advisory council on industrial research," which will control all government activities under this head. This means, among other things, that the universities and other educational establishments will be encouraged by the government—if necessary by means of state subvention—to train even specifically for particular lines of research. In Australia steps have been taken to form a new official body which is to be known as "the Commonwealth Institute of Science and Industry," and which will exercise much more extensive powers than those entrusted to the British organisation, since its duties will not be merely advisory; but it will assume direct control of a vast amount of research and practical work in behalf of Australian industries. In Japan a national laboratory for physical and chemical research has just been established. Other government undertakings of analogous character are reported to be in prospect in various foreign countries. Lastly in America an interesting scheme for scientific industrial research under government auspices has recently been evolved along lines differing considerably from those of the projects above mentioned. It is proposed to establish experiment stations in engineering and in other branches of the mechanic arts in connection with the land grant colleges throughout the country. These stations are designed to do for industrial research what the agricultural experiment stations are doing for agricultural research. Water supplies, as to potability and economic distribution; sewage purification, and its ultimate inoffensive disposal; economic disposal of urban and manufacturing wastes; flood protection; architecture; road building; are some of the items which fall within the field of this undertaking engineering problems connected with transportation, manufacturing and public utilities. So widespread is the movement to encourage scientific research that the "Scientific American" hopefully asks: "Are we not upon the threshold of an Age of Research such as the world has never before known?"