on the nitrate investigations and other problems. The high standing of its corps of chemists is well known to all members of our society.

VII. THE WAR TRADE BOARD, SHIPPING BOARD, FOOD ADMINISTRATION, TARIFF COMMISSION

These important government departments all require chemists and utilize chemists in a consulting and directing capacity.

The War Trade Board has a member, Dr. Alonzo E. Taylor, who is assisted in passing upon chemical matters by Dr. A. S. Mitchell, Mr. B. M. Hendrix and Dr. R. P. Noble.

The chemical work of the Shipping Board has been under the direction of Dr. W. B. D. Penniman, who, while shutting off the importation of certain products, has helped produce excellent substitutes therefor.

The Food Administration has been guided in chemical matters chiefly by Dr. Alonzo E. Taylor and Mr. Charles W. Merrill.

The chemical work of the Tariff Commission is under the direction of Dr. Grinnell Jones, who this morning gives you a full description of the information being gathered by the Tariff Commission on chemical matters to guide it in its recommendations to Congress, both during and after the war.

Many departments of the government have been in constant communication with our allies on research and industrial chemical matters. Chemical liaison officers have been sent from the Army and Navy and some of the civilian bureaus to keep in touch with foreign development and practise, and their services have been invaluable. In this connection it should be particularly pointed out that not all of the development of chemistry in this country is our own accomplishment, for we have obtained information of the highest importance through the efforts of these liaison officers. On the other hand, chemical information of the highest importance has been sent from America to Europe.

War, the destroyer, has been on the other hand the incentive to marvelous chemical development with a speed of accomplishment incomprehensible in normal times. Discoveries made in the search for instruments of destruction are already in use for the development of chemical industry. Many others, unpublished as yet, and to remain unpublished until the war is over, will prove of the utmost benefit to mankind. The same agencies that add to the horror of war to-day, the same reactions which are used in the development of explosives and poisonous gases, on the one hand, and in counteracting their effect, on the other, will find immediate and useful application in the years to come.

The war has been prolonged by chemistry. The German chemist apparently working for years with war in view has supplied the German armies with the means for their ruthless warfare, but the chemists of America and our Allies have met them fully in chemical development, and when the chemical story of the war is written where all can read, it will be the verdict of history that the chemists of America were not found wanting.

The chemical program of the United States Army and Navy has been at all times ahead of our trained man power and the mechanical devices necessary to apply what the chemists of America have produced.

Charles L. Parsons,
Chairman of the Committee on War Service for Chemists

SCIENTIFIC EVENTS

THE CAWTHRON INSTITUTE OF SCIENTIFIC RESEARCH

We learn from the *New Zealand Journal of Science and Technology* that at a meeting of the Cawthron trustees held on May 30, 1918, the appointment of the advisory board was confirmed for six years from the date of their appointment on September 25, 1916. The advisory board consists of Sir James G. Wilson (chairman), Professor W. B. Benham, Dr. L. Cockayne, Professor T. H. Easterfield, Dr. P. Marshall and Professor R. P. Worley.

The advisory board, in conjunction with the chairman of the trustees, is to make inquiries in regard to the appointment of a director, such director to be a chemist with biological

leanings, and to be a man of fair business ability.

It was resolved that the Cawthron trustees approach the government with a view to the appointment of two scientific investigators to operate in the Nelson District with a view to finding out the causes and cures of certain blights; and that the trustees are willing to place at the disposal of the government the sum of £1,000 per annum for a period of two years on condition that any results obtained be the joint property of the government and the Cawthron Institute.

The regulations for the Cawthron Minor Scholarship are now published, and copies may be obtained from Messrs. W. Rout and Sons (Limited), Nelson. Candidates must be British subjects, and the scholar must matriculate at a university college and study for the B.Sc. degree, and sign a declaration that he will, after graduation, accept (if offered) a Cawthron Scholarship of £150 per annum, and pursue his studies for not less than two years at the Cawthron Institute. The Minor Scholarship is of the value of £80 per annum, plus the fees for attendance at university classes up to the amount of £25 per annum. The tenure of the scholarship is for three years. Preference in the selection of a scholar shall be given (*ceteris paribus*) to candidates from Nelson and Marlborough. The scholarship will be awarded on the science papers of the University Scholarship Entrance Examination in not less than two nor more than three of the following subjects: Mathematics, physics, chemistry and botany. The marks obtained, together with a criticism of the work of the first three candidates in each subject, are to be forwarded to the advisory board, which shall then recommend that candidate for election who appears to give the greatest promise of being useful to the institute.

The second annual Cawthron lecture was delivered in the School of Mines, by Professor W. B. Benham, M.A., D.Sc., F.R.S., on May 30. The subject chosen was "Biology in relation to agriculture," and the lecturer devoted particular attention to the problems of fruit-growing and the kinds of research the institute should attempt. These include inquiries into the efficiency of different kinds of sprays on different kinds of trees, the most productive method of pruning, and the most suitable and economic methods of manuring. Other matters that ought to receive attention are: (1) A thorough-going soil survey—the investigation of the chemistry, physics and biology of the soil, and especially of the humus and its effect on plant-growth, of which little is as yet known; (2) an extended program of investigation of the diseases that attack our plants, and especially those that are injurious to the fruit-tree.

The lecture, together with the first annual lecture by Professor T. H. Easterfield, is to be published by the institute.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE AT ROME[1]

THE operations of the institute have been, of course, profoundly affected by the war. At the beginning of hostilities its very existence seemed dubious. As its vice-president, M. Louis-Dop, has pointed out in a recent report reviewing its history and progress, the question was immediately raised as to the possibility of maintaining, in a conflict which has transformed the political and economic conditions of every continent, an organization based upon the collaboration of nations, the working together of a committee representing all the powers, belligerent or neutral, and the efforts of a personnel of international composition. Notwithstanding these obstacles, the continuation of the enterprise was decided upon. Apparently it was felt that the institute had been established as a permanent institution and the suspension of its operations should be avoided if possible. More than this, it was expected that the usefulness of the institute to the world would be in many ways intensified by the war conditions.

The work of the institute has, therefore, been carried on so far as possible. No nation has abrogated the treaty, so that all are full members as before. Meetings of the permanent committees have been held regularly, and each of the bureaus has been performing its func-

[1] From the *Experiment Station Record.*