

paper." "Either journals should publish no abstracts whatever, or else exact, useful ones." "... before you have gone very deep into any subject search out the literature of it and prepare a proper bibliography."

These are some aphorisms that strike one who is interested in the literary side of science. Ethics and philosophy as Dr. Smith relates them to science are equally intriguing. The value of this chapter, which appears unassumingly at the end of the book, is such that the attention of every student of science is earnestly invited to it.

FRANK PLACE, JR.

THE DIRECTORSHIP OF THE MAINE AGRICULTURAL STATION

THE Maine Agricultural Experiment Station is by act of legislature created as a department of the University of Maine. Its governing board is the trustees of the university. The director reports to the president of the university. The heads of the station departments report to the director. At the reorganization of the station in 1888 the trustees created a representative body to be called the station council for "the development and management of the station."

By act of legislature the experiment station was directed to conduct investigations into animal husbandry. The prime object was to try to learn how milk production and milk fat production are inherited. As one part of this work a herd made up of reciprocal crosses of high and low producing cows was essential. Such a herd was developed at the university in cooperation with the College of Agriculture. In November, 1919, without consultation with the station staff or the station council the trustees ordered this investigation stopped and the animals making up the herd sold. In January, 1920, after station council action, a committee from that body waited upon the trustees and presented a plan for continuing this investigation at Highmoor Farm. This plan was unanimously approved by the trustees. Among the items approved and as taken from the trustees records of that meeting is "The plan includes the use of certain barn space at

the farm and the construction of an additional barn for housing, and water supply and equipment for caring for the animals and their products." Acting under this authority the council committee and the station director immediately took steps to put this action into effect. A barn was erected, the old barn remodeled, a well drilled and equipment purchased. The building of the barn was inspected in June when it was about half completed by a committee of the trustees who were appointed by the board with full authority relative to the new construction at Highmoor Farm. The committee from the station council met with the committee from the trustees. Neither at that time nor at any time while the construction was in progress did the trustees make any suggestion as to change or modification of the trustee action of January, 1920.

November 29 without previous notice the director of the station was requested by telephone to go to Bangor to meet the board of trustees. When he appeared he was told by the president of the board that the trustees unanimously demanded his immediate resignation. On asking why, the director was informed that by building a barn at Highmoor Farm he had exceeded his authority. The director denied that he had exceeded authority and cited the paragraph from the trustee records above quoted. He refused to resign. At about 10 o'clock the morning of November 30 he received a notice signed by the clerk of the board of trustees notifying him that the trustees had removed him from being director, the removal to be effective December 1. The director spent the remainder of the 30th putting station matters in the best shape possible for leaving in the limited time. As the trustees had delegated no one to take his place and as they had ignored the president of the university in the matter by sending the communication of removal direct to the director, the director suggested to the heads of the station that they should continue to act automatically in station management as they would were the director temporarily absent. And there the matter now rests.

The Maine Station in its 35 years of existence has through its discoveries added many millions to the wealth of the state. It is the only research agency the state has for discovering the laws underlying successful agriculture. Research is slow painstaking work. The research worker must be kept from harrowing concern. For it is only by concentration on his project that success can be had. This action of the trustees has fundamentally disturbed the confidence of the research man. He argues if the director after a quarter of century of faithful work is dismissed without adequate reason, where does he stand, what hope has he of being able to complete a study that must extend over long periods of time? At no time in the history of the station does it so need the steadying hands of friends of agriculture. The last request of the removed director is to the friends of agriculture, and he is happy and proud to know they are for the most part his personal friends as well, to come to the support of the station. It has been receiving \$5,000 a year from the state for its support. To tide it over until increased federal appropriations which are being asked for in a nation-wide movement are available, this amount must be increased to \$25,000 a year. Otherwise it will not be possible for any one to hold the present very efficient organization together. Help will come from the outside eventually but for this help to be efficient the agriculture of the state must see to it that the legislature makes provision for its immediate support.

CHAS. D. WOODS

QUOTATIONS

SCIENCE AND THE NATION

MOST of us receive daily appeals for war memorials of various kinds. Would not the best, and, in the end, the cheapest, war memorial be a growing and efficient body of brain-workers, able and willing to solve the problems which the war has left in its train, and to help the nation in its hour of need? For leaders both in peace and war we must find and train men who will be competent to

use the national resources in the most effective manner. Scientific workers are naturally marked out by their progressive instincts and severe training to serve not merely in an advisory capacity in the councils of the nation, but also as executive officers. Moseley and others of his type will not have died in vain if the Cenotaph reminds us that men of science must take an active part in the affairs of state, in guiding the development and thought of the nation, and in seeing that the bitter lessons learnt during the last six years are not forgotten.

This end will not be attained by service on committees, whether for chemical warfare or any other subject. If the War Office seeks to be scientific it should establish within itself, as the Admiralty has done, a research department with distinguished men of science as permanent members of the staff to suggest and supervise work on methods of modern warfare. It would be the business of such officers to make use of science for purposes of national security, and workers in university or other laboratories could please themselves whether they cooperated or not in particular researches or experiments. We can understand the objections offered by Professor Soddy and others against men of science associating themselves as a body with problems of this type, but until human nature reaches a higher ethical plane than it occupies at present we must have a War Office, and an essential part of it should be an able scientific staff, the members of which would be responsible for making us strong enough to meet any crises which the future might bring. No committee of sixty or more associate members can do this, and none would be necessary if the War Office ranked a scientific service with the General Staff, as it should do, instead of inviting scientific workers to devote their time and knowledge to "offensive and defensive aspects of chemical warfare" for little more than out-of-pocket expenses.

We claim for science a much more responsible position, and a far higher appreciation of its worth, than our war leaders offer to it even now; and we do so because we remember that