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CHEMISTRY AND THE STATE[1]

IT should be premised that in this account of the relationship of the state to chemistry in Great Britain an attempt has been made to limit it to a description of the more or less direct assistance given by that science to various departments as they came into being or took form. Only in recent years, and as a result of the war, has there been a direct recognition of a corresponding obligation on the other side.

It is obvious that it is to the universities, and, as was the case to a greater extent in the past, to private workers, that the great advances made by British chemists are due. Departmental requirements have, of course, reaped the advantage of these advances, but examples of important contributions to chemical knowledge emanating from the departments themselves are not lacking. The collected story of their connection with the activities of the state may be worth reciting, if it should show the development of its appeal to chemistry and illustrate the gradual breakdown of the view held by the chief of the tribunal before which Lavoisier came that "the state has no need for chemists."

We will find that their employment in an official capacity was in the first instance in connection with the state's pressing necessities, such as its defence, the regulation of its currency and the collection of its revenue, all of them subjects warranting the maintenance of equipment and staff.

As the need for safeguarding the nation's health, well-being and the quality of its food supply became recognized, legislation followed, frequently based on the work of commissions on which sat distinguished chemists of the day, and it became necessary to set up a state chemical department to assist in carrying this into effect.

For some time the science of chemistry had received a limited and vicarious assistance from state grants to the late science and art department and to the universities, but it was reserved for the war to establish definitely and finally the position that the whole future existence of a state might and probably would depend on the existence of a flourishing and efficient chemical industry. This resulted in the definite steps of assisting the application of science to industry and providing direct encouragement for workers in the purely academic field.

It is proposed, therefore, to sketch the develop-

[1] From the address of the president of section B—Chemistry—of the British Association for the Advancement of Science, Toronto, August 7, 1924.