## Agriculture and Colonization.

## COMMITTEE ROOM,

House of Commons,

THURSDAY, 2nd April, 1896.

The Committee on Agriculture and Colonization met this day at 10.30 a.m., the Chairman, Mr. Sproule, presiding.

Mr. F. T. Shutt, Chemist of the Experimental Farms, was present by invitation and addressed the committee as follows:—

Mr. Chairman and Gentlemen,—After the interval of another year I again appear before you to give in as succinct a manner as possible some account of the work of the chemical division of the Experimental Farms. In this endeavour, I find a greater difficulty each succeeding year, for every year shows a widening of our horizon, a greater multiplicity of duties which are more and more varied in their character. Indeed I might say that, so pressing are the claims of the work which is constantly pouring in upon us, and consequently in a large measure accumulating, that it seems well nigh impossible to get the requisite leisure for taking a retrospect or a general survey of what we have done, or for the consideration of what we ought to be doing towards solving the problems in Canadian agriculture, of general interest and importance. Some two years ago, when before this Committee, I took occasion to emphasize the important and intimate relationship that existed between chemistry and agriculture, and I then showed that the basis, and indeed the greater part of the superstructure, of modern and progressive agriculture, was chemistry. It is not my intention, therefore, this morning, to furnish any further illustrations to corroborate that statement, but I refer to this relation now because during the past few years that branch of my work which has more directly to do with the education of the farmer has made greater and greater demands upon my time.

## CLASSIFICATION OF WORK.

Correspondence.—I might classify the work of my division under two heads—educational and original research work—the latter being the application of chemistry to the solution of agricultural problems. In the educational work to which I have just referred it is of first importance to mention the correspondence. These letters, the number of which almost daily increases, come from all parts of Canada. They are letters of inquiry in connection with agricultural matters, containing questions relating to the value of fertilizers, the feeding value of fedders, treatment of soils, the composition of dairy products, and, indeed, anything and everything in connection with agriculture. It is obvious that this branch of my work has now become an exceedingly important one. It occupies, I presume, about one half of my time. Just as our people recognize the character of the assistance and the value of the assistance which chemistry can render them in their work, so will this work become greater and greater; that is to say, that we shall be used more and more as a bureau of information.

Conventions.—Speaking of the directly educational part of my work, I should mention that a further branch of it consists in the addressing of conventions of dairymen, farmers and fruit growers, on agricultural topics. Necessarily some time must be expended in the preparation and delivery of these addresses and a further time is necessary for the revision of the reporters' manuscripts of those addresses which are to appear in the transactions of the societies before which the lectures are given. You can readily understand that there is not sufficient time to attend all the farmers' institute meetings to which one receives invitations, but every year I am present at some at least of the principal conventions of our dairy and fruit growers' associations in Ontario, Quebec and the Maritime Provinces. All of these societies publish their transactions, and consequently we have issued, under provincial auspices, a considerable amount of literature