

FRUITS AND VEGETABLES.

Canadian Horticulturists are being assisted by the chemical investigations instituted with the view of ascertaining the special requirements of our fruit trees. The knowledge thus afforded will lead, I trust, to the more economic and profitable application of fertilizers. Already reports on the chemistry of the apple and strawberry have been published, and further contributions will be issued shortly.

Spraying in order to prevent and check the ravages of insects and fungous foes is now recognized as an indispensable operation by all progressive orchardists. Without Bordeaux mixture and Paris green we can no longer gather a harvest of apples free from spot and the inroads of the Codling Moth. It has been our duty, therefore, to examine into the chemistry of these insecticides and fungicides, in order to obtain an exact knowledge of their constitution, modes of action and best methods of preparation.

WELL WATERS OF FARM HOMESTEADS.

Of the many lines of research in Agricultural Chemistry that we have prosecuted since the establishment of our laboratories, few have been of greater importance than the examination of the well waters of Canadian farm homesteads. Though the natural waters of the Dominion as found in the rivers, lakes and springs are the purest, the equal in wholesomeness and good quality of the best to be found in any country, the water used by the farmer and his cattle is too often of a most pernicious character. It is very much to be regretted that so many of the samples received by us from farmers were seriously polluted. It would appear that our farmers have been in the habit of locating, for convenience sake, the well in the barnyard or stable, or dangerously near some contaminating source. The result of this is that many wells are acting as cess-pits, and their impure waters are reeking with organic filth and disease-producing germs. We have at last awakened such an interest in this vital ques-