A Model Farmer.

Just before the organization of the Dominion Farmers' Council, when we were urged upon to make an attempt to organize the farmers of our Dominion, we addressed meetings of the Middlesex County Council and the East Middlesex Agricultural Society, asking each of these bodies to nominate three of their most honorable, successful and progressive members to act with us as a committee for the purpose of discussing the propriety of organizing a central council or club; and Mr. Henry Anderson, a portrait of whom we present herewith, was elected chairman of the committee appointed by the East Middlesex Agricultural Society. Mr. Anderson was the first Secretary of the Dominion Farmers' Council, but he now occupies the position of Vice-President. Mr. Dougald Leitch, the President, an illustration of whom has appeared in the ADVOCATE, was the chairman of the committee appointed by the Middlesex County Council.

Mr. Anderson was born in Wiltshire, Eng., in 1818, and immigrated to Canada with his parents in 1833. His father farmed on an extensive scale in England, and brought sufficient means to get a fair start in Canada. He with his family settled near Wilton Grove, about seven miles south of London, and the old homestead was left to his son Henry-the subject of our sketch. Although virtually belonging to the second generation, Henry Anderson possesses all the energy, frugality and perseverance of the oldest settlers, and although he commenced life on his own account with a farm to his credit, yet in his earlier struggles the inducements to go into debt were strong, but his manly spirit of independence and selfreliance, which he exhibits in all his doings, has enabled him to go through life with the blissful satisfaction of owing no man a cent. It is related that, on one occasion, when he had no ready cash to buy a pitch-fork, he struggled through the harvest with a wooden one made by his own hands. However, these days have long since passed away, and since that time he has accumulated 200 acres of land, besides still being the happy possessor and occupier of the venerated old homestead, with attractive surroundings, a cheerful and intelligent family, and the pleasing gratification of standing high in the estimation of his neighbors and acquaintances.

Mr. Anderson has been director of the East Middlesex Agricultural Society for 26 years, and Secretary of the same for 20 years. He was general superintendent of the Western Fair for 4 years, and general superintendent of the Provincial Exhibition-a position which he held for 11 years, and then resigned. He held the office of Deputy Reeve of the township of Westminster for several years, and afterwards the office of township clerk. He is one of the originators of the Westminster Fire Insurance Company-one of the most prosperous insurance companies in the Province-and has been secretary of the company since its inception (1857). He has also held numerous municipal offices of a minor description. He was the active organizer of the first Grange that was established in Canada west of Kingston, and took an active part in promoting the interests of that organization. He ceased connection with the Grange because he could not get them to unite on an independent basis to study their true interests, and found that they continued to vote on party lines,

He is engaged in mixed farming on a mixed soil—varying from almost pure sand to a heavy clay. He feeds about a dozen Shorthorn grade steers every winter, and his dairy herd is of a mixed character. Although a close tudent of agricultural matters, he has devoted his greatest energies to municipal matters, and is regarded by the Council as their municipal lawyer. He has had a great deal to do with municipal litigation, and is a terror to the lawyers on many points. He has strong faith in the principles upon which



HENRY ANDERSON.
Vice-President Dominion Farmers' Council

the Dominion Farmers' Council is established, and takes an active part in promoting its interests. If the Council, with its vast intellectual resources, cannot succeed in organizing the farmers on an independent, self-reliant basis, he does not see what power on earth can accomplish this most desirable result.

Rust and Blight in Grain and How to Prevent it.

BY THOS. ELMES, PRINCETON, ONT.

I have been engaged in introducing and testing new varieties of seed grain the last few years, and carefully studying the various diseases to which grain is subjected. This last season I tested 170 different varieties and carefully noted the results of climate and cultivation.

Rust and blight arise from various causes; from an unhealthy state of the plant caused by sowing old varieties of the same seed on the same soil, year after year; by bad drainage; by sowing grains not suited to the particular soil and situation; by late sowing, and by using those manures and fertilizers which unduly increase the amount of juice in the plant, and cause it to burst the vessels which convey it to the head, causing the ruin of the grain and rust of the straw; by the drying of the juice exposed to the rays of the sun; also by the propagation of a fungus which floats in the air or arises out of the soil, fastening upon the plant and extracting its

The different species of fungus are very numerous; it decays our timber, rots our potatoes, mildews our fruits and vegetables, moulds our food, causes smut, rust, blight, mildew, etc., in grain, and is the fruitful cause of many of the diseases of man and beast. But I do not intend to describe the various kinds of fungi, but base my remarks more on the practical means within our reach to withstand their ravages in grain.

The first means we should use to prevent rust and blight is thorough drainage of the soil.

Without this it is impossible to successfully battle against them, as stagnant water is sure to produce disease alike to vegetable and animal life. After this has been accomplished, comes the cultivation and fertilization of the soil. Land intended for spring grain should be fall-plowed, so that the fungus may have more time to escape or perish, and the crop can be earlier sown in spring, which is a very important item.

Again, too much care cannot be exercised in applying manure to land intended for grain. It should be well rotted; indeed, it is better not to manure the same season land intended for the special crop of grain where rust is very prevalent, but to apply all manure the former season for a crop of corn, roots, etc., on ground for fall wheat on fallow not later than the early part of June. Then the spores, which undoubtedly exist in all barn-yard manure, may have time to escape, and the manure thoroughly rotted and mixed in the soil before the coming crop occupies the land, thus escaping the germs of the disease. Next, the judicious use of all manures and fertilizersnot applying in such large quantities as to cause an over-production of juice, producing a rank growth and dark color in the foliage. Disease constantly occurs in plants from over nutriment, and the sap passages are gorged with juices of a greater and thicker consistency than usual; the vegetable powers exerted beyond their just limits, and either a natural passage is produced for the discharge of the superabundance of matter, and thus form a rich bed for the growth of fungus, or the whole plant becomes gouty, unhealthy and blighted, and the crop is a failure, which before had such a promising appearance of an enormous

Early seeding is another important means of averting rust and blight. In fact it is really more than half the battle in successful grain raising.

Light soils with gravelly and sandy subsoil, has invariably blighted spring wheat of late years, as they do not contain certain elements essential for the health of the plant, while the same soil will produce good barley, because it is a strong atmosphere feeder, and spring wheat is not, and is sure to be a failure for want of proper food and moisture in such soil.

Again, we can do much to stay the ravages of rust and blight by a continuous change of seed so as not to sicken the variety of the particular soil. Also by proper selection of the variety, especially those of early habits. Some varieties are almost rust proof, because of the protection given to the sap vessels by the hard, close nature of the fibre of the straw. Of such we might mention of spring wheat: Wild Goose, Italian, Silver Chaff, Rio Grande, McCarling. Of fall wheat: Landreth's White, Garfield, Rogers, Fultz. While of oats: White Russian, Early Blossom New Zealand. Barley: Sovereign (six-rowed), Imperial. In fact, barley is not so subject to be affected by rust, as the first joint next to the head is very little exposed, and retains sufficient nutriment to fill the grain, even if the outside coating is affected.

While many other varieties of grain might be mentioned which are very liable to be overtaken by disease because of their lateness in ripening and exposure of the sap vessels, all such should be rejected where rust is at all prevalent. Among these might be mentioned, of fall wheat, Martin's Amber, Finlay, White Mountain; spring