

AGRICULTURE ON GOVERNMENT FARMS—IV.

THE PRISON FARM AT GUELPH.

It would not be fitting to close a series of articles on agriculture as it is carried on at our Provincial institutions without a resume of this work in connection with the greatest of all these, the Provincial Reformatory or Central Prison Farm, Guelph, Ontario. Born of an idea, which had scarcely reached the embryonic stage in 1907; conceived by the Hon. W. J. Hanna, Provincial Secretary, the man with ideas and the courage to carry them through, the Prison Farm became a reality in 1910, when in April the first of the several smaller holdings which now comprise the 840 acres devoted to the economic, social and moral welfare of Ontario's misdoers became the property of the Provincial Government. Each of the several farms purchased had its own quota of farm buildings, and it was in one of these stone farmhouses that the first consignment of prisoners, fourteen in number, under two guards, were housed during the experimental stage of prison labor on the farm, or as it has been ably put, "the fresh-air cure for criminals." Few men, even among prisoners, will betray their trust. The experiment proved a success, and the number of prisoners moved from the cells in Toronto to the farm at Guelph has been gradually augmented until at the present time upwards of 300 are doing profitable work for themselves as well as for the Province, under the best possible conditions in which prisoners could labor. Few guards are needed. The prisoners are their own guards to a large extent, and no firearms are carried by any of the few paid guards in charge. "The boys," as the prisoners are known to all the officials, stand for no misdemeanors on the part of their fellows. They have privileges which they appreciate, and fully understand the penalty for misbehavior. Consequently, although they at present all sleep in one large room, no "rough house" results. They go about their work quietly, systematically and cheerfully, laughing and chatting with an interest in the work in hand, which cannot but have an elevating effect upon their characters. They go away from the institution better fitted physically, mentally and morally to grapple with everyday life and far more likely to make a success of it than if their terms were dragged out in cells behind thick walls of stone and bars of iron.

The idea was a sane one. The 840 acres purchased cost an average of \$75 per acre, and, considering the advantages, was cheap at the price. Few better sites could be conceived for such an institution. An abundance of water is supplied by the Speed River traversing the property. One of the best stone quarries in the Dominion is situated on the place. Dolomitic limestone in abundance furnishes work for many, and lime for building purposes. Rock is crushed for roads and limestone is ground for fertilizing purposes. Railways run through it, and last, but by no means least, the farm proper consists of soil peculiarly well suited for such a farm, ranging as it does all the way from a fairly heavy clay to gravel, and, in some places, even to sand or sandy-loam consistency. Superb soil for all classes of crops makes a widely diversified system of agriculture possible, and this is the only system for such a farm. There is high land and low land, heavy land and light land, north slopes and south slopes, east slopes and west slopes, all good land for some particular crop, and all to be utilized to best advantage, both as regards prison labor and farm output.

The farm is complete within itself. Everything is accomplished by prison labor. The new buildings now going up are built by the prisoners themselves. Not only do they do the building, but they manufacture the building material. The stone is quarried, the lime is burnt, the cement tile are made; the mason, carpenter, finishing and all other work is accomplished with little outside assistance. It is an independent little city on a farm, where all the necessities of the little community are met by the community itself.

The permanent buildings now under construction are two large dormitories, an administration building, guard-house and cell-fronts, bath-house and laundry and a large industrial or mechanical building.

A cement arch bridge spanning the Speed River was one of the first large undertakings on the premises. Every iota of work connected therewith was done by prison labor, and municipalities desiring to build bridges of beauty and permanence would do well to inspect this one and take a lesson in architecture and workmanship.

THE FARM PROPER.

No farm is a success without a practical farm director. Seeing this need, Mr. Hanna secured last spring S. E. Todd, B. S. A., a graduate of the Ontario Agricultural College, and placed him

at the head of Government farms in Ontario. He has now over 5,000 acres under his surveillance, and the Prison Farm is one of the most interesting propositions of the entire undertaking. About 730 acres comprise the farm proper and of this 200 acres is now old pasture, not a permanent pasture, for although much of it is rough, it is gradually to be forced to yield to the advance of the cultivator. At present the farm is being operated on the plan of a four-year rotation of crops, two years in hay or pasture, followed by a hoed crop and then a grain crop. This is to gradually give way to a three-year system, eliminating one of the hay crops. This year twenty-eight acres of alfalfa were grown, and this has been increased for next year by fifty acres of new seeding, at twenty pounds per acre. Fifty acres of corn, forty-five acres of potatoes and twenty-five acres of mangels and other roots are grown annually. Red clover is one of the strongest features of the farm, and some of the best catches of new seedling were noticed here that the writer has ever seen. While this was a very favorable season for seed catches, Mr. Todd believes that a good deal of the success is due to a fairly heavy seeding, twelve pounds of red clover and six pounds of timothy being sown per acre. There is no doubt but that a good many fields of clover seedling have to be broken up each year as a direct consequence of sowing too little seed. While much of the red clover has a very large top for the first season's growth no bad results from snow-smothering are looked for, but the new seedling of alfalfa has been clipped, as it was deemed necessary to take this precaution to save it from this danger.

While the elevation at Guelph and the situation, being so far inland, are not the best suited for fruit-growing, an eighteen-acre orchard was planted last year, and the trees have done remarkably well. The filler system was used, the rows of trees being set thirty-five feet apart, and the trees in the rows 17½ feet, every second tree being a filler of the Wealthy or Duchess variety. The Baxter, McIntosh, Snow and Alexander varieties have been extensively planted, being hardy trees, and good bearers of fruit of high quality. Few Northern Spys were set, as these do not stand the climate well in that district. Plums, cherries, pears and bush fruits also have considerable place in the plantation.

The horse and hog barns and farm buildings other than the dairy barn are not yet built, the old buildings on the original farms being used for the purpose of accommodating these classes of stock. The pigs kept are all of the Yorkshire breed, and a better type of bacon brood sows, young pigs and shoats is seldom seen. The pigs are fed off as economically as possible. Pasturing is resorted to during the summer months, and to show what is possible in this connection, we cite the case of seventy hogs which have been pastured on five acres of red clover since July first, during which time they have received only twenty-five pounds of grain daily, and at time of writing were as fine a lot of hogs ready for the finishing touches as any feeder could wish to own. The secret of the clover standing the pasturing so well was that it was not turned upon too early in the season. It had got past the soft, sappy stage before the hogs commenced feeding upon it, and consequently it withstood their onslaught much better than it otherwise would have done.

THE DAIRY BARN A COW PALACE.

The casual observer of farm outbuildings pays little or no attention to architecture, yet architecture is supposed to be an expression of national life and character. Such was the Gothic, the Greek, the Roman, the Mediaeval and Renaissance architecture. It is true, however, that a

farmer's outbuildings are more or less of an indication of his character. The dairy barn on this farm is something entirely new in design and for neatness and outward appearance has few equals. It is like the whole scheme, a result of ideas, not only of the Provincial Secretary, but also of his assistant, S. A. Armstrong, whose fertile brain conceived many entirely new practical devices in connection with the barn, as well as in the erection of the other buildings at the institution. The barn or barns are T shaped, the feed storage barn being placed across the end at right angles to the dairy barn proper, and in each of the corners where these two join a cement silo, eighteen feet by thirty feet, is erected as part of the wall of the main building. This gives the silos the appearance of being a part of the main building, which they are, and their large, round walls and nicely pitched, round roofs would vie in attractiveness with the bay windows on a fancy city residence. The silo is not a detached or semi-detached portion; it is an integral part of the structure. To protect the silage from freezing the inside walls of the two silos are to be lined with four-inch hollow-cement tile. The painting of the building adds much to its general appearance, there being no conglomeration of colors thrown together, the body of the building being simply a dark green, trimmed with white, and the roof amber colored. These blend well together and have a good effect.

The cow stable is 162 feet long and 39 feet wide, and has stalls for eighty cows. The stable is a one and one-half storey structure, the first storey being of hollow-cement tile, eight inches thick, which insures proper insulation. The wall is strengthened by buttresses, being simply cement tile poured solid with concrete, the upper portion clap-boarded. At the extreme end of the stable there is an annex the full width of the building and 35 feet long, one side of which is to be divided into four maternity box stalls, eight feet by fourteen feet. The other half of this annex is to be used as an outlet for the manure, four openings being left, into which wagons or manure spreaders may be backed, and the litter carriers emptied directly into them. The manure is to be drawn away as fast as made.

The feed barn is 80 feet long and 44½ feet wide. It is built on eighteen-foot posts and is of clap-board construction. It is entered by a single drive floor, and on either side in front are bays for grain, hay and straw. The space between and beyond the silos, above the cow stable, is used as a granary, and the entire space above the cow barn proper is used as a general storage room for implements, machinery and farm tools.

The cow stable is divided into two rows of stalls and four sections. Each row accommodates 40 head and each section 20 head. The stalls are graduated according to the size of the cows, being from four feet nine inches to five feet nine inches in length and three feet six inches wide. The stalls are floored with cork brick—a mixture of cork and asphalt—which is non-absorbent, perfectly dry, never slippery, and, compared with cement, warm. The cows stand facing the light, with the litter passage, 11 feet wide, in the center of the barn, and the feed alleys, five feet wide, along the outside walls. The mangers are built of cement, with the bottom corners rounded, and the fronts about a foot higher than the floor of the feed passage to prevent feed being wasted. The mangers are continuous, and the cattle are watered from them, but between each stall hang galvanized-iron manger partitions, fastened on a continuous angle iron and hung in weights, so that they may be dropped into the manger before feeding the cows, and thus keep each cow's portion entirely separated from her nearest neighbor.



The Dairy Barn on the Prison Farm.
One of the most complete dairy barns in America.