

trouble; after the first few inches are trampled above the tiles, the end of the plough is called in, or some form of scraper, made of stout wide planks of suitable length placed on the edge, and so fastened together with rods, that the ends nearly converge at the rear. A chain fastened to the two diverging ends forms the draught medium. This style of instrument has been used by Mr. A. Hood, of Markham. It is his invention, and its use very greatly facilitates the filling of the drains.

(To be continued.)

For the CANADIAN LIVE-STOCK JOURNAL.

Farming as an Occupation.

BY D. NICOL, CATARAQUI.

Agriculture is the means by which, now, over twelve hundred millions of human beings derive their livelihood. It was the first occupation of man, and ever since Adam was placed in Eden to till the ground, it has been the employment of the majority of the human race. There is more capital employed in agriculture than in all other industries. The agricultural interest forms the very basis of a nation's greatness; just as it prospers, so do merchants, manufacturers, trade and commerce flourish.

If agricultural industry were to cease for a single year, the country, with all its wealth and independence would become paralyzed, and be involved in distress. It is the great interest which overshadows every other. If it prosper not, all other occupations must languish and decline; everything ultimately resolves itself into the productions of the earth. Hence of all occupations farming is the most important.

There are, however, in every country, various classes of farmers. Among the pioneers of North America there were but comparatively few practical farmers. Their first business was to clear off the forests. Physical force was of more importance than intellectual culture. Muscle was then at a premium, brains at a discount. The virgin soil, which was rich with the accumulated plant food of centuries, afforded an easy means of obtaining abundant crops, with few failures; and so they continued to sow and reap the same fields, year after year, without any thought of the land becoming exhausted, not realizing the fact that land would not always continue to produce unless there was returned to it something of an equivalent for what is taken from it. And so in many instances this retrograde movement has gone on from one generation to another until the land has become utterly unproductive; and as a natural consequence, agriculture has to some extent been degraded; and notwithstanding all that is being done for its promotion, many still plod on in ignorance, in the same old tracks their father's trod, blaming the unfavorableness of the elements for their want of success. Their homes are unattractive and cheerless; everything about the homestead in slovenly order; the stock degenerate and in miserable condition. It is easily understood why this unprogressive, exhaustive system would dwarf the intellect and banish self respect. The children of this class of farmers are taught to look upon farming as a drudgery, and acquire an utter repugnance to the pursuit. Farm life has no charms for them, and it is scarcely to be wondered at if they seek to engage in other pursuits; but few of them will serve an apprenticeship to a trade. Lacking knowledge, and having acquired unthrifty habits, they are unfit for mercantile business; hence we see many of them engaged in effeminate pursuits, such as peddling maps, patent medicines and patent humbugs, saloon-keeping, and gambling.

But there is a very much larger class who are farmers in a higher and truer sense; they are the bone

and sinew of the country, which produce not only improved stock, grains and fruits, but they produce and rear the men of force and sterling integrity, with stalwart, healthy bodies and robust intellects, the true patriots, the men of true moral power; and he must have a false estimate of the dignity and importance of the farmer's calling, who does not look upon it as being the most useful and ennobling.

Look where we may throughout the history of the world, we will ever find that as a people emerged from the darkness of barbarism and approached the light of civilization and refinement, husbandry assumed importance, and the intelligent husbandman rises in public estimation until he stands acknowledged as the chief cornerstone of his nation's existence and prosperity.

From many years' personal experience in Canada, I know that the farmer's life is not free from anxiety and care, and that his crops are often injured, and sometimes destroyed by the elements over which he has no control, and that insects and blight often blast his bright prospects, just when they seem to be on the point of realization. He is often necessarily exposed to the inclemencies of the weather and climate, and I know that he who begins responsible life without other means than his own strong arms, cannot reasonably hope to attain a position of comfort and independence until he has struggled through years of persistent industry and frugality. Yet I think had I to begin life again, with the privilege of choosing my own means of obtaining a livelihood, I would choose that of farming.

I would not be understood as speaking in disparagement of other callings or professions; all cannot be farmers; many minds are not adapted to it, and many men can do better at almost anything else than farming. I have nothing to say against the mechanical arts; they are particularly necessary to the farmer in his occupation as well as to the comfort and convenience of all.

There is, however, in the human heart, a strong affection for the love of nature and rural pursuits, which makes farming a pleasant occupation. The studies of the farm, more than many others, are pleasing and attractive, and when followed as a science, farming presents a vast field for the display of intellectual improvement and philosophical investigation; almost everything relating to the occupation involves the principles of science. Connected with it are the occult processes of nature that proclaim the wisdom and presence of the Creator of the universe. Compared with some businesses, the farmer has but few risks; he is not troubled with the feverish anxiety and sleepless nights which often rack the brain of the speculator, nor has he the harassing cares of the merchant, or the professional man, nor the perils and dangers of the sea-faring man; there is less temptation to dishonesty and fraud than in any other occupation; and there is no calling in life which is calculated to give a man a higher appreciation of morality, truth and justice.

The multiplication of labor-saving machines and the discovery and application of natural forces to perform work, has, in a great measure emancipated it from the drudgery of toil. The farmer has more leisure time than many engaged in other pursuits. Eight months of the year he is required to be actively engaged in his industry, but during the four winter months he is comparatively at leisure; and if his farm buildings have been judiciously arranged with a view to convenience and comfort, he need suffer but little from even the occasionally extremely severe Canadian winters. He can enjoy most of the cheap

luxuries of life to an extent which no other man at so little expense, for most of the articles which pertain to good living can be produced on the farm with comparatively little trouble. The cultivation of all the different kinds of fruit, the breeding and improving of all the different kinds of live-stock, brings to almost all who intelligently pursue it, true and lasting pleasure. Man has something more to live for than merely to accumulate money; he is to enjoy the fruits of his labor. This fleeting life is his opportunity, and his resources are very great. Nature, with a beauty that dwarfs all art, and which no earthly power can obscure or appropriate, is as much the humble farmer's as the monarch's. There is no profession or calling more ennobling or dignified than that in which the father of our race was engaged, viz., that of beautifying and rendering fruitful the earth; no occupation is more conducive to true happiness than that in which man makes an intelligent use of the resources of nature. Napoleon Bonaparte, on the day he abdicated the throne of France, said to a page, "It is only in a situation like your father's, with his few acres of land and contentment, that there is true happiness."

There is no occupation like agriculture, which by pure air and exercise under the canopy of the sky, so much contributes to the healthfulness and energy of the human constitution. It is an independent occupation. Being less dependent on the patronage of others, the farmer is more independent than those engaged in any other pursuit. "He sits under his own vine and fig tree, none daring to make him afraid." Nobody expects him to cringe or curry favor in order to sell his products; the merchant does not call in question his politics or religious opinions; he may be a communist or a Mormon, yet grain and beef sell for just what they are worth, not a particle less or more than that of his neighbor's, whose opinion on all points are faultlessly orthodox and popular, provided it is of a good quality; hence it is easier and more natural in his calling than in many others for a man to work for living, and at the same time to aspire to success and consideration without sacrificing self-respect, compromising integrity, or ceasing in any way to be essentially a gentleman.

(To be continued.)

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Permanent Pasture.

As grass is the most important item of animal food it is very desirable to produce it in increased quantity. It has been suggested by some of the most prominent and practical agricultural men of the present day, that grasses grow more luxuriantly and more abundantly, by sowing a mixture of them. Having made some observations and practical experiments on the above subject, it affords me pleasure to endorse the opinions of those men in this paper, and to give my experience in the matter as you, Mr. Editor, request.

Some four years ago, while attending the Dairy-men's convention at Brockville, Prof. Brown gave a practical discourse on the above subject, and so impressed my mind with the benefits accruing from permanent pastures, that I determined to try the experiment, and accordingly adopted his formula, viz., Timothy, seven pounds; Orchard, four; Meadow Fescue, two; Red Top, four; Kentucky Blue, two; Italian Rye, two; Perennial Rye, two; Creeping Bent, one; Fan Oat, two; Lucerne Clover, four; Red, one; Yellow, one; Alsike, one; White Dutch, three; making a mixture of 26 lbs. of grasses and ten of clovers, or 36 lbs. of seed in all per acre. This mixture I sowed at two casts, the Timothy and clovers being sown with a machine, and the other grasses by