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0 Vol. XI,II.

## **EDITORIAL**.

## THE FUNDAMENTAL PRINCIPLES INVOLVED.

It is encouraging to note, by our correspondence columns, as well as by editorial and platform utterances all over the country, that thinking Canadians are at long last awakening to the fact that our much-lauded public-school systems possess a lamentable defect, in that they have tended strongly to wean our young people from the land, to fill American towns and cities at the expense of the rural districts, and especially to overcrowd professional and clerical employments. In short, they have not been conceived with a view to fitting our people or inclining their tastes towards the principal occupation the country affords, viz., farming. It is high time the public mind was aroused on the momentous question of the effect of education on national development. We, in Ontario particularly, have long been regarding our school system as a sort of prize institution, for had it not won high distinction at the World's Fair? The fact that the judges of the systems displayed were steeped in the same dye of academic ideals as those who framed our system, and were, therefore, utterly incapable of judging it intelligently in the light of our national circumstances, needs to be pointed out.

However, a gratifying change is coming about, and most promising of all is the evident desire of progressive educationists to comply with and even encourage the reform movement. In Ontario, for instance, school gardens are now being aided with a special Government grant, while everywhere the manual-training and technical-education ideas are gaining ground

With regard to the discussion which has sprung up through our columns, it is well, at this stage, to draw attention to the disposition which Mr. Darling and some other writers have evinced to pass by the fundamental principle involved and quibble over details. "The Farmer's Advocate," not being an educational journal, is not particularly concerned about the merits or demerits of certain pedagogical theories. What it does contend for is recognition of the undeniable fact that the common, and particularly the High Schools, of the Canadian Provinces have tended strongly to bias our children, and more especially the clever ones, away from the land into the cities, and, above all, into the so-called "higher" prof sions. This tendency has been rampant, from the Minister of Education and most school inspectors, right down to the rural teachers. The High Schools, Model Schools and Normal Schools have confirmed teachers-in-training in the pernicious idea that education should fit the children for something "above" farming or mere manual labor, whereas the teachers, and through them the pupils, should have been persuaded that farming is the ideal occupation (for those to whom it is congenial), and that intelligent, productive manual labor is as noble and honorable as desk exercise, if not more so. Perhaps, next in influence to the perverted ideals of teachers is the nature of our school curricula, which have had all too little in common with the ordinary every-day life of the child. It must be recognized that we cannot coop children up for a great part of six or eight years in a school where almost everything they see, hear or read pertains to books and strange conditions of life, without bringing about a distaste for physical work, an unwonted preference for a gregarious habit of life, and a preference for sedentary employment in town or city. The effects will be especially marked where the education is continued

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and Home Magazine

ever from farm life and work, and becomes steeped in the unsound academic ideal of his environment and his associates. Hence the special need for Continuation Classes in rural schools, which must be strengthened generally, so as to obviate the necessity of sending the pupils so early to the town.

To correct and balance up the purely scholastic tendency of our educational institutions, and bring about a love for nature, with an intelligent interest in the country and the farm, we need school-gardening, nature study, manual training and domestic science in the public schools. need our text-books revised, with more practical farm problems introduced into the arithmetics, and more lessons relating to the farm and to everyday life worked into the readers. We need Continuation Classes introduced as generally as pos-, sible into rural schools, and, above all, the teachers must be imbued with a belief in and equipped with a reasonable knowledge of agriculture. The farm must be looked on not as a place to be educated away from, but as a field offering ample scope for the brightest intellects.

The High Schools need reform even worse than the common schools. It is time to cut out this folly of spending five or six hours a week acquiring a useless smattering of French and German, time to cut out a great deal of the advanced Algebra and Euclid, though a ferr of the elements of these are all right. We need more botany, more physics, more chemistry, especially the principles and findings of chemistry bearing on agriculture and humus existence; we need political economy introduced, also manual training and domestic science, with distinct agricultural classes provided as options. In short, we need to balance up our school education by training the hand as well as the head, and training the head along lines that are most likely to be useful, and hence to be followed up in after life. The aim is not to make farmers of everybody, but to do all we reasonably can to cultivate a taste for, an interest in, and a respect for agriculture and all other useful arts. The aim of the past has been to turn out an endless stream of scholars but too few intelligent agriculturists, capable workers, and practical men of affairs. It is time to reverse that order. We must do what we can to moor the young people to the land, instead of drawing them from it.

in a town or city High School, while attending are told that the lion is the king of beasts. Why which the pupil is divorced more completely than should they not also be told that the pig is the most economical meat-producer amongst our domestic animals. They are told that sugar is extracted from sugar-cane and beet ; they should also be told that live stock can extract nutriment from cabbage leaves, seeding lettuces, and other garden refuse. It is pointed out to them that the coat of the polar bear is thick, to protect it from the cold; it would equally interest them to tell them that the coats of cattle, which are thin in summer, grow thick and mossy in late autumn, and the poor pig, having no coat, has to eat more food to keep up the heat of its body."

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## MILK, MORALS AND BACTERIA.

Milk has been steadily advancing in price because of the increase in the cost of production occasioned by the rise in the value of foods. To the city and town family man this necessarily means a serious item in the list of household expenses, milk being one of the necessaries of life, the consumption of which, in a multitude of forms, is every day becoming greater, and for it no substitute has yet appeared. Especially does it enter into the dietary regimen of the infant and the invalid. It is said that two children out of ten in the great cities die, and, during the hot months, 40 per cent. of the mortality is due to diseases of the digestive tract; and, cow's milk being almost their exclusive diet, the inference is unavoidable that many of these die from the impurities or bad conditions of the milk. The invalid who is depending upon it for tissue-building in the fight for life with disease, should also not only have it wholesome, but pure. In seasons like the past, with the consumer crying out for more milk, the producer must needs set his face against the temptation to supplement the efforts of the cow with the pump, for, to add water or to abstract cream, is, to put it baldly, stealing, and he whose careless habits have allowed the contamination of filth, may contribute likewise to the death of his unfortunate fellows. To state these things is but to secure the acquiescence of every right-minded dairyman, and fortify them in the determination to supply a clean and honest article. Nature fortunately holds out danger signals. Of the three classes of bacteria infecting milk (acid-producing, putrefactive and disease germs), the former sour the milk in warm weather, being unpalatable, it is not used. Were it not for this providential property, it is inconceivable how many lives might be lost through the presence of the other two classes of bacteria setting up ptomaine and other poisoning. Whether bovine tuberculosis is transmissible to man or not, in an unsettled question, but there can be no doubt about the injurious ingredients in the milk of diseased cows, arising as secondary products. Then, again, through the water supply and food of the herd, impurities enter the milk. Musty fodders, old and spent grains, immature silage, and the like, are all to be tabooed if the dairyman would guarantee a wholesome content in his cans. For a time, the drift of expert teaching ran in the direction of sterilization and pasteurization as the saleguard for the city milk supply, but experience has not confirmed these processes, because of their effects on the taste and composition of the milk so treated, which has not commended itself to consumers. The exclusion of the injurious germs by absolute cleanliness at every step of the process, and not their destruction by heat, is the teaching of research and of the modern milk bottle itself. 'To secure these things, costs the dairyman money, and when he

## THE LION OR THE PIG?

Not only America is awakening to the fact that rural education is unbalanced in its nature, irrational in its tendency, and ill-adapted to the needs of rural communities, but over in England the same irresistible conclusion is steadily forcing itself home on thoughtful minds. Read this quaint and candid comment, extracted from a letter published in the English Live-stock Journal. The point of the letter is its naively-couched plea for some effort to relate rural schooling to rural environment, and, by simple mathematical problems, common observation, and deductive logic, to arouse the child's interest in and sympathy with fundamental laws and principles of nature and the farm :

" My private opinion is that education in rural districts is not at all on right lines. We turn lads out of school at the age of fourteen more fitted to sit on a high stool in a merchant's office than anything else. We give them no educational interest in the country in which many of them have to spend their lives. To mention one thing only that might be done, why not let some of the object-lessons have a rural tendency ? Lads supplies a product, for the character of which he