

difficult to provide, and the inconveniences neither few nor small, steady, hard work and long hours were a necessity, and the brave pioneers of Ontario were equal to the occasion. but now, with all our natural and acquired advantages, with the wonderful aid of machinery, the life of the farmer, the farmer's wife, and of his sons and daughters, with its beautiful surroundings, ought to be the most attractive of all.

It is therefore most earnestly to be desired that all kinds of country occupations should be put upon a better footing, that the working hours out of doors and indoors should be of a reasonable length, and abundant leisure given for recreation and self-improvement, so that the young people may have time and opportunity for finding out how very enjoyable country life may become in this age of the speedy transmission of news and easy means of communication.

The disinclination for farm life cannot arise from over-education in the proper sense of the term. It may, however, be fostered by imperfect instruction on some points; it is here that our duty as teachers comes in. Let us constantly keep before our pupils the principle that all work is

honourable, that men and women are worthy of respect and attention in proportion as they do their work faithfully, and not at all on account of following one kind of employment more than another. "My Father *worketh* hitherto and I *work*."

It is always well that we, as teachers, pay special attention to the "morals of manners," such as dress, personal appearance and personal habits; but it is also important that we diligently cultivate the "industrial virtues" and hold up before our pupils, on all suitable occasions, the value of industry, thrift, diligence, punctuality and order, the dignity of useful labour and the attractions that life in the country presents to a cultivated mind, one capable of being touched by a love of nature, or open to receive its impressions or teachings. Is there any position of responsibility or trust in the Government or community to which an educated farmer may not aspire? But he must be educated in the best sense of the word; his aspirations must be high *r* than *gain* or *place*; he must be animated by a spirit of patriotism and of devotion to duty; and as he rises to a proper conception of his work, the educating process will still go on.

SCHOOL WORK.

MATHEMATICS.

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1. Show by an example in multiplication how to derive the rule for synthetic division.

Divide $x^{15} + 3x^{10} + 3x^5 + 1$ by $x^3 + 3x^2 + 3x + 1$.

1. This may be done by using detached coefficients, or thus

$$\left(\frac{x^5+1}{x+1}\right)^3 = (x^4 - x^3 + x^2 - x + 1)^3 = \text{etc.}$$

2. Write down the remainder arising from the division of $x^3 - (2+p)x^2 + (2p+1)x - p + 1$ by $x - p$; and show that $2a^2b^2 + 2b^2c^2 + 2c^2a^2 - a^4 - b^4 - c^4$ is divisible by $b+c-a$; and that $a^3 + b^3 + c^3 - a^2(b+c) - b^2(c+a) - c^2(a+b) + 2abc$ is divisible by $a-b-c$.

2. Remainder is found to be 1 by putting $x=p$ in given expression. Put each divisor