

should teach, and who did teach, who, had they regarded the laws of their own being, might still have been amongst us, helping us with their counsel and inspiring us with their zeal.

Just here, I may say that I think we who are younger in the work do not sympathize as we should with those who have borne "the burden and heat of the day." We call some of them narrow-minded, crotchety, and wanting in energy, and blame them for allowing themselves to become so. What do we know of the many difficulties surmounted by them. As Carlyle puts it, in his essay on Burns, "Granted the ship comes into harbour with shrouds and tackle damaged, and the pilot is therefore blameworthy, for he has not been all-wise and all-powerful; but to know *how* blameworthy, tell us first whether his voyage has been round the globe or only to Ramsgate and the Isle of Dogs." Let us not judge then; let us see to it that we avoid their errors, and show as good work as they did in proportion to our superior advantages.

Besides, it being necessary to health of brain and nerve not to exhaust our mental energy in doing faithfully a day's work, we must not do so, for we must be students if we would long remain successful teachers. We, especially those of us who have graded schools, and remain long in one place, teach the same range of subjects to scholars of about the same intelligence year in and year out. Do we not all know how hard it is to keep up the enthusiasm of the bright early days of our teachership, when it was all an experiment, and we tried it with such fear and trembling; when we got anecdote and illustration which pleased then so well, and which now we do not employ, because of their being worn out with long use. We know that experience gives us all advantage ground; each has his own way of governing his school, and of reaching the minds and hearts of his scholars individually. In that line he may rest, and no other. He must *work*; must *think*; must be prepared to give new light on any subject when the pupils are ready for it. He must not allow himself to become stereotyped, or follow in one groove. How varied were the objects to which the Great Teacher directed the attention of his learners in order to teach them some grand truth—the loving parent, the thrifty house-keeper, the tender shepherd, the teacher God's love for the erring; the lily in the field, and the bird in the air, his care over us all. It is impossible, without earnest effort, to be mentally agile—always to have something new on hand, and thus keep our work from being monotonous, and so, mechanical. Then we have to remember that the standard for license is rising each year, and unless we want, in the course of a few years, to be called "antiquated," or "behind the age," we must study hard the extra requirements. But as men and women we want a liberal education. We want culture, the object of which we are told is to put a man in relation with the ideas of all ages and civilizations, not to confine him to the ideas local, or of the age in which he lives; and the mind gets the most enlargement from that which is unfamiliar to it, remote from its own inheritance, tradition, local association. I think that perhaps we are too utilitarian as to the subjects to which we give serious attention. We sometimes refuse a subject for study because we do not expect to teach it. I think it would be a good idea if we would go out in the almost boundless fields of knowledge, and take something altogether different in character from Algebra, Geometry, or the Classics, valuable as these are for mental training. Then we must remember our physical and practical education. It is a matter for thankfulness that the day is gone in which it was thought that because a man had a mind he could have no muscle, and, therefore, could do nothing that required it,—that because a girl could make a sentence in a foreign language, she must be pale and sickly, and not able to make bread. We know well that men or women, with their God-given faculties well developed, keep their bodies in

health if they can, and call no work "common or unclean" if, in doing it, they are also doing the duty that "lies nearest to them."

Perhaps after considering the work we must do, if we would take first rank, no one will say that our leisure time is too long, or that each day's work is done at two or three o'clock. There are some who will say it is easy enough to write—that we ought to be students, but there are so many calls on our time. Shut out as we are all winter from the outside world, we have to depend on our own resources for amusements, and the teacher is asked, perhaps oftener than any one, to aid in giving it. While we cannot ignore our social duties by any means, we must remember that as it rests largely with us to hasten the day of the larger heart and kinder hand, as teachers of the people, we must be broader in our sympathies—must rise to the full height of intellectual men and women.

Now I think, as members of a profession, we can congratulate ourselves on our unitedness, our loyalty to each other, and our perfect willingness to bid one another God speed on our way. Still we need the more kindly sympathy of all outside co-workers, and we all have need of more patient—noble, enduring patience—remembering who it is that says to us, as to our predecessors in all the ages, "Cast thy bread upon the waters: for thou shalt find it after many days."

Prize Competition.

ARITHMETICAL PROBLEMS.

FOR CANADA SCHOOL JOURNAL COMPETITION PRIZES—THIRD CLASS.—
BY CHARON.

1. How many houses each having a frontage of 8 yds., 1 ft. can be built on a terrace 153 yds. long, allowing for a roadway at each end, of 5 yds., 2 ft.?

Solution:—Total length of terrace = 153 yds. = 459 ft.

Space occupied by roads = 5 yds., 2 ft. = 34 ft.

∴ Space occupied by the houses = 425 ft.

Space occupied by one house : 8 yds. 1 ft. = 25 ft.

∴ Number of houses is $425 \div 25 = 17$. Ans. 17 houses.

2. A man divided his farm of 474 acres among his three sons, giving John 37 acres more than William, and William 19 acres more than George. Find the share of each.

Solution: If George gets 1 share, William gets 1 share + 19 acres and John gets 1 share + 56 acres.

∴ the 3 shares + 75 acres = 474 acres.

∴ the 3 shares = 399 acres.

∴ 1 share = 133 acres = George's share,

and 1 share + 19 acres = 152 acres = William's share, } Ans.

and 1 share + 56 acres = 189 acres = John's share.

3. The fare for first-class passengers on a railroad is $3\frac{1}{2}$ cents per mile, and for second-class passengers $2\frac{1}{2}$ cents per mile. Find the distance between two stations, when the total fare for 24 first-class and 18 second-class passengers is \$64.50.

Solution:—Fare for 24 first-class passengers per mile = 84 cts.

" " 18 second-class " " = 45 cts.

Total fare collected per mile = 129 cts.

∴ distance is $6450 \div 129 = 50$ miles. Ans. 50 miles.

4. What is the smallest farm that I must buy, so that I may lay it out in lots of either 14, 18 or 27 acres each, and have 2 acres left for a garden?

Solution:—Total number of acres I must buy is L. C. M. of 14, 18 and $27 \times 2 = 378 \times 2$ acres = 380 acres. Ans. 380 acres.

5. The driving-wheel of an engine is 15 feet 10 inches in circumference. How many times will it turn in going a distance of 38 miles?

Solution:—Distance travelled in one revolution = 190 in.

Total distance gone over = 38 times 63360 in.

∴ Number revolutions made = $38 \times 63360 \div 190 = 12672$ Ans.

6. A man exchanged 145 bushels of wheat for 348 bushels of oats. If the oats are worth 50 cents per bushel, find the value of a pound of wheat.