## Special Papers.

## MY WINTER CLASS.

## by fred. brownscombe, pbtrolra.

Br my winter class I mean those pupils, mostly boys, who attend school for the months of January, February and March only, being required at home the rest of the year.

When I began teaching I rather dreaded this class as a disturbing element in the school, a sort of "invasion of the Vandals." Here are a number of boys from fourteen to seventeen years of age, who have been in the fields or woods for nine months and who, having been under no discipline there, will find it irksome at school. They are at ${ }^{\text {a }}$ troublesome age, the age when they imagine themselves to be men and ape the ways and manners of men. Consequently they are apt to consider the school somewhat beneath them and to show a reluctance to enter into certain parts of the school programme. Besides this, many come with a deeply-grounded prejudice against certain subjects; so much so, that if they do not decidedly object to study them, they will exhibit such an indifference to the objectionable work as will make it a hopeless task to endeavor to carry it on. I think that I ain here stating an experience common to nearly all rural teachers.
With this class then, how are we to proceed that they may obtain the greatest possible benefit from their three months schooling? The first essential is the cooperation of parents and pupils. To gain this, I call upon the parents at the beginning of the term for the purpose of describing my plans and shewing them that I an making a special effort for these boys and giving them work directly in line with their business. To these pupils I speak in a similar vein. I endeavor to converse with them individually, to have them feel that I am really interested in their progress; then a friendly feeling being established, the work will proceed rapidly and without friction.
I intimated before that this class at first was scarcely my favorite, but now it is the one I find most pleasure in teaching. For, in the ordinary classes, there is a good deal of monotony and a considerable amount of cram, and the teacher is hedged in by programmes and examinations till all free choice is crushed and his originality is given little scope for exercise. But with this class it is different. Within certain bounds, the teacher is completely free. Having no examinations (that is, excepting his own monthlies, to prepare for, he may linger where he is enthusiastic and pass more quickly where he feels less interest. He may wander fearlessly from the beaten path and, indeed, I think a considerable deviation from the ordinary programme necessary.
But in what follows I do not presume to lay down the course for this class. Not by any means. I give it merely as a sample. Each teacher must arrange his work to suit himself and his class.
Now to begin my course. On Reading,
which I suppose comes first, I have no
suggestions to offer, except that for the sake of variety, the class occasionally read from some book or paper other than their textbook.

In writing I make no change, this class, as the others, writing alternately on copybooks and on scribblers. The work on the scribblers is to give special training in freehand writing. On them the school frequently practise ovals, connected small letters, connected capitals, and various combinations of letters. This is a pleasurable change from the monotony of the copybooks, and it is only in some such way as this that pupils will acquire the muscular movement in writing.
After reading and writing of course comes Arithmetic. It consists entirely of farm arithmetic and practical mensuration. After a brief review of fraction; and measures, we begin at the woodpile, taking it practically. The class measure the wood at the school, find number of cords and value, find how many cords the woodshed will contain, find how high the wood must be piled on a sleigh of say 12 feet long to contain say $2 \frac{1}{4}$ cords, etc.

When the wood-pile is pretty well exhausted, the class turn to the lumber yard, and here I might remark, that before dealing with such things as lumber, plastering, shingling, papering, etc., half-hour talks with persons interested in these will aid one much more than the study of a textbook. For it is as true of this subject as of any other, that, as an eminent writer says, text-books are always at least ten years behind the times.

After discussing lumber measure, with exercises on boards, planks, scantlings, etc., the class apply their knowledge to fencing. By actual measurement they determine the quantity of lumber required for the school, and its cost, including posts. Other kinds of fences are introduced; close board fences; picket fences, with baseboards; barbed wire fences at so much a pound of so many feet, etc., stringers and posts being taken into account in each case.

Fencing is followed by carpenter's work. The class find how many feet of lumber in the flooring of the school, the wainscotting, the sills, the walls, the sheeting of the roof, the platform, the sidewalk; the cost of these, and the cost of the moulding, the doors, the window sashes, etc. Then such problems as the following are given:

A barn is 60 feet long, 40 feet wide, and 20 feet high ; the gables are 8 feet high and the rafters are 21 feet long.

Find the number of feet of inch boards in the two sides, allowing for four double doors 12 feet by 16 feet.

Find the number of feet in the ends and gables.
Find the number of feet required to sheet the roof.
Find the cost of the matched lumber for the doors at $\$ 18$ per thousand.
How many feet of two inch plank are required for the floor 24 feet wide. ?
How many feet of lumber are there in the sills 10 inches square?
How many feet of lumber are chere in the 12 posts of the barn if they are 8 inches square?

If the rafters are 4 inches by 4 inches,
and are placed 2 feet 6 inches apart, what is their value at $\$ 10$ per thousand?

At this time, owing to the gables, it is necessary to teach how to find the area of a triangle-an easy matter.

Then the class work at shingling, finding the cost of shingles for the school shed, their barns, etc.

Land is next dealt with in various exercises, and here I teach square root, applying it to the solution of numerous problems on land such as, "How many 12 foot rails are needed for a straight rail fence 6 rails high, around a square ten-acre field, the rails over-lapping one foot?

After this, one may or not take laths, plaster, paper, carpets, paint; and brickwork and stonework for walls, basements, and houses. In all of these I think ordinary business methods should be used, not antiquated or round about ways. For instance, in finding how much wood in a pile say 12 feet long, 8 high and 4 wide, instead of multiplying 12 by 8 and the product by 4 and then dividing by 128 , why not say, as the man who sells you wood will, that it is $1 \frac{1}{2}$ cords long, 2 high and 1 wide, that is, 3 cords?
Then come parallelograms, triangles, circles, and the cylinder, the problems in every case being of a practical nature.
The last division of this subject is per cent, and interest, simple and compound.
A few other useful things are taken with the class, such as the fact that a bushel contains $1 \frac{1}{4}$ cubic feet, which enables them to ascertain what amount any bin will hold.

As to the order observed in the preceding, it is purely arbitrary, though I have found it as suitable as any other. Again it contains material for two winter's work for
most classes. most classes.
I now turn to a subject to be quickly disposed of, a subject which many desire to see abolished in the Public Schools-I mean Grammar. I do not set the dry husks of technical grammar before this class. I think that with them it would be a waste of time-a limited time which may better be devoted to other subjects of more utility and of quite as great disciplinary value. Its place is taken by exercises in practical grammar and business correspondence, which alternate on the time table with composition.
The practical grammar consists of exercises on the singular and plural number, on the possessive case, on comparison, and on voice and tense, together with the corrections of such mistakes as I notice the pupils actually make.
In the business correspondence is included receipts, promissory notes, orders, due bills, bills of account, etc., and all kinds of business letters and business writing. Here are a few examples : Order from the Grip Publishing Co., certain books, enclosing P. O. order for amount; send your subscription to one of the newspapers; write your teacher asking a letter of recommendation etc. Have the class answer advertisements of various kinds directly from newspapers given them; have them write advertisements of farms for sale, etc. Upon all the above and upon letter writing generally I give pretty thorough instructions, using as

