THE SUMMER SCHOOL OF SCIENCE.

The twenty-seventh session of the Summer School of Science closed on Tuesday, July 29th. This is the first time that the school had met in Halifax, and to its customary attractions were added those of the beautiful and interesting surroundings which that city affords. We have always thought that one great advantage of the Summer School of Science is the variety of its meeting-places. Not only do the teachers have an opportunity of seeing the scenery and resources and historic spots of different parts of the provinces, thus studying geography at first hand, but also, it cannot but be good for any community to entertain a body of hard-working, enthusiastic teachers.

More than two hundred students, a large proportion of whom were from New Brunswick, attended the school. The work done was excellent in quality, as is usual in summer schools, where the attendance is purely voluntary, and most of the students have found out, by teaching, what they want to learn.

While hard work was the rule, the students had their recreations, one of the most pleasant and novel being the band concert in the Public Gardens, given to the members of the School by the City of Halifax. They were also entertained by the Lieutenant-Governor, and by the Governors of Dalhousie College.

The meetings were held in the Technical School Building. The subjects taught were Agriculture, Physics, Chemistry, Geology, Botany, Zoology, Physiology, Literature, Elocution, Drawing, Manual Training, Physical Drill.

The class in Agriculture was the largest, but students in the other classes were equally keen. Special mention must be made of the Manual Training class, where everyone was enthusiastically busy, and the conversation was chiefly about the passing on the delights of making cardboard work, etc., to the school children.

At the closing meeting seventy-one scholarships were awarded, through the generosity of public-spirited citizens and friends of the school. Honours were shared by Miss Olivia Maxwell, of St. Stephen, N. B., and Mr. Hubert Vickery, of Yarmouth, N. S., who each carried off a $50.00 prize.

There is a likelihood that the session of 1914 will be held in Charlottetown.

DO YOU MULTIPLY OR DIVIDE?

GERALDINE COSTER.

It has been said that all arithmetic consists merely in the four rules plus common sense. Nothing could be more obvious. We all know it. But how many of us think it worth while to teach it? And yet to the average child who has no special aptitude for mathematics, and who "never could do problems," that obvious truth is far from self-evident; and many such children cross the *pons assinorum* of arithmetic on the day when that truth comes home to them.

In the lower middle grades there are usually a considerable number of children who are good reckoners, and can multiply and divide with accuracy by enormous numbers; but set them down in front of the simplest problem and they fail utterly. It is not that they are unusually dull, but that their minds have no power to attack a problem. They cannot "get started on it," but will sit helpless before it for half an hour and then assure the teacher that they "tried for ever so long." No doubt they thought they were trying, but in all probability their minds were not working at all. How often have we not heard a dialogue somewhat as follows:—

Teacher: Now, Katie, how would you set about working example 6?

Katie (with an air of alertness): You divide.

Teacher: What do you divide?

Katie (feeling that her reply was not satisfactory): Oh! I see! You multiply—I mean—Oh! you *add*.

Katie is a good child, and is trying to please her teacher, but is she thinking? Yes, in a way she is, for is she not trying hard to find out what *the teacher wants her to say*!

To Katie one answer is just as likely to be right as another. It is merely a species of guessing contest, in which she is somewhat unreasonably expected to guess right the first time. If this amiable but otherwise deplorable attitude of mind is not corrected while Katie is young, by the time she is fifteen her intellect will be hopelessly stunted, not only so far as arithmetic is concerned, but in all her school studies. She will have developed into one of those children, alas! far too common in our schools, to whom words mean nothing, and in whose eyes question and answer have no necessary or logical connection.

In the middle grades, arithmetic is the subject that acts most directly on the newly awakened