

England. I would read a few paragraphs and then require the pupils to write. If there were any words which they would be likely to misspell, I wrote them on the blackboard, remembering that 'prevention is better than cure.' From the very first the children were delighted with the exercise. By this work the children gained much. It was practice in listening attentively, for they soon found that if they only half listened some things would slip out of the mind before they could be written down. Then it is an exercise in writing, for a carelessly written exercise must be done over again. Then they are getting a taste for good literature and more interest in books and in reading generally. One teacher told me that after trying in vain to awaken an interest in the art of composition she hit upon the following plan, which succeeded beyond her expectation and it gave her a good opportunity to study the likes and dislikes and the inclinations of her pupils. On Monday morning she announced to her pupils that the only subjects for composition the following Friday would be descriptions of something each scholar had seen being done; these were to be accounts of the actual working of some business or occupation, and each writer was to be familiar with his subject. At the appointed hour all went industriously and eagerly to writing. She told me that twelve girls described the process of making bread, and their directions were for the most part safe to follow. Three boys, the sons of blacksmiths, described intelligently and minutely the work of horse-shoeing. The sons of artisans looked after the trades of their fathers, for seven boys wrote about the building of wooden houses. I agree with that teacher; that is a good plan and I recommend it to the consideration of others.

Anything we desire to learn is best learned by practice on successive days. Therefore, I think there should be a period, however short, devoted to composition writing on each school day. The matter of the composition should be selected from the class work in which the pupil is engaged—his history, his geography, his reading.

The pupils of a given class are asked to write what they can on a topic selected from the class work of the preceding day. They are allowed from ten to fifteen minutes in which to write. Then each pupil is asked to read silently his own composition, to discover whether each division of the subject-matter has a paragraph to itself and whether all he has to say on that division is contained in that paragraph. If he finds his work faulty he is told to correct it at once. Then the pupils are told to read each his composition a second time to determine (1) whether each sentence has only one central thought. In answering this query he should

mentally divide each sentence into its complete subject and complete predicate. (2) Whether there are any mistakes in capitalization and punctuation. When the pupil is in doubt he should at once look up the word in a dictionary. After a few trials all this work can be done within a period of thirty minutes. The reading aloud of two or three compositions each day, and the questions referred by the pupils to their teacher, show how well the work of correction has been performed.  
—*Maggie H. Mowatt, Chatham, N. B.*

Self respect is the basis of all self-government, which is the only true government for children and youth; and just in proportion as we injure or destroy that fundamental element of real order, we create the very faults we are seeking to eradicate. To rob a child of its self-respect is like removing the mainspring from a watch; and the constant looking for faults will soon give occasion that we shall not look in vain, for by that very means we are planting and cultivating the seeds we most earnestly wish rooted out, and we come to be looked upon as the natural enemy of the children whom we really love and honestly wish to benefit.—*Preston Papers.*

#### QUESTION DEPARTMENT.

CONSTANT READER.—Ascertain the effect of gravity upon the pressure of water at different depths, and greatly oblige a constant reader and subscriber.

The pressure upon any horizontal area of a liquid at rest is due to the weight of the atmosphere pressing on an equal area on the surface of the liquid and the weight of the liquid vertically above the given area. The pressure from the weight of the superincumbent liquid will be very nearly proportional to the specific gravity of the liquid and to the height of the liquid above the given area. The result will be very slightly modified by the compressibility of the liquid and by the distance of its various parts from the centre of gravity, but these results are so small as never to be taken into account. The pressure on a horizontal square foot of water at the depth of one foot will be 62.3 lbs. At the depth of two feet it will be double that, and so on according to the depth.

(1) A person buys 6 per cent. City of Toronto bonds, the interest on which is paid yearly, and which are to be paid off at par, 3 years after the time of purchase; if money be worth 5 per cent., what price should he give for the bonds?

This is an algebraic exercise. Let  $P$  represent the present value of the bonds.

$$\text{Then } P(105)^3 = 100 + 6(1.05)^2 + 6(1.05) + 6 \\ = 118.915$$

$$\text{Therefore, } 102.723 + = \text{Price of bonds.}$$

(2) H. S. Arithmetic, Ex. Papers, p. 215, Part II, Ex. 4.

For solutions see EDUCATIONAL REVIEW, May, 1895, or March, 1896.