

called a map. Also, that in this map one inch stood for one thousand miles. Then was asked, "About how wide is the continent of North America across the widest place?"

The points of the compass were applied to the map by having the latter placed on the floor with the top toward the north end of the room, and from this the positions of North, South, East and West were referred to the map.

Now Miss Sunbeam's great success in teaching was due to the fact that she kept *curiosity* fully alert and active, and so she had intellectual growth. "How often do you tell fairy tales?" she was asked.

"Oh, I tell the pupils a fairy tale at least once a week, and then they relate it to me in their own language, and illustrated by drawings on the black-board, and on slate, or paper. You see, my pupils are quite accustomed to sketching everything. We have large collections of leaves for winter use which have been sketched and cut by the pupils. But, so much for our little *homey* chat. Good-bye."

SUPPLEMENTARY READING.

ARNOLD ALCOOT.

IN compliance with the wishes of teachers that the stories written by our own children might be printed, I send to the JOURNAL the following which are original, the teacher merely having said, "My Dog," "My Doll," "Boys and girls write stories."

As space is limited only three are given. In another number, I shall give samples of autobiographies and dialogues from my pupils.

Each of the writers of the following was nine years old:

1.—I have a hound. Its name is Carlo and it goes with me everywhere. He can catch any rat that comes near him. He is a faithful dog, and is ten years old. He can pull a little waggon with me in it.

2.—I once had a faithful St. Bernard dog. One day as I was walking along the wharf a little boy fell in the water. Prince, as I called my dog, jumped in after him and saved him. The boy patted Prince for saving him. So I took Prince home and gave him his dinner. And then he rode me all over in my dog cart.

3.—Now, boys and girls, I am going to write you a story of my doll if you will sit nicely. I once had a doll and it was made of wax. It was almost as big as myself, too. It was Pearly. One day I was asked to go to a concert and I had to have a doll. Guess what it was dressed in. It was dressed in pink satin. And it had a crown of flowers. It was dressed as a bride and was most beautiful.

THE SCIENCE TEACHER.

FROM F. MULLBERG'S ADDRESS TO THE TEACHERS OF CANTON VAUD

THE teacher of natural science ought to have the necessary special scientific schooling for that purpose. In no department of instruction is it less permissible to teach authoritatively than in this, and to make it a subordinate branch for a teacher not specially prepared for it is often worse than to provide no scientific instruction whatever; for the teacher must not only be master of the material he teaches, but ought also to be a model of the intellectual training he tries to impart; he should have the capacity to observe, describe, and reason accurately about the material of study. In order to give his instruction in such a way as to incite his pupils to an interested activity in their studies, it is indispensable for him constantly to try to develop his own intellectual powers further, and continually refresh them by special studies (which, however, should not be introduced into the school). Not only should every lesson be well prepared, but after every lesson the teacher should give, himself, an account of the result of his instruction, and, in case of ill success, he should ascribe its cause to himself rather than to his pupils, so as to avoid mistakes in future. One of the constant faults of teachers is that in order to get on with their pupils as fast as possible they themselves describe the objects or phenomena under consideration and derive laws from them, instead of allowing the scholars to do so. They pre-digest, in other words, to a certain extent, the intellectual food which they ought to allow the scholars to attack for themselves, subject to control and correction only. A science teacher should be

able to show his pupils how to give graphic reproductions of what they have learned. Whatever drawing might be necessary for this purpose should not, however, be presented ready-made to scholars, but should be drawn by the teacher on the large scale on the slate or board before their eyes. If the teacher, besides his instruction proper, has to furnish the material for study, e.g., plants, etc., prepare demonstrations, lead excursions into the field, and have charge of the natural history collections of the scholars, it is clear that a great burden is laid upon him, which is all the greater because natural science teaching is by itself more fatiguing than other branches, since it requires the guidance of each individual scholar, and because the attention of the teacher must be divided between the different scholars, the material for demonstration, and the progress of the instruction.

FORM AND DRAWING.

J. A. HILL.

How is it so little is said or written on the educational value of the study of "Form and Drawing?" The leading characteristics of manhood come from the atmosphere of the early days. Many of the finer traits of a man's nature, and his more ennobling ideas of a great Creator, are woven into the soul through the medium of the study of form and design. There can be no question as to the constant influence of the beautiful as a factor in education. It is allied to purity, and as the former is more clearly seen in the study of form, so the latter becomes permanently impressed in the nature. Its moral effects are obvious from the influence it exercises in developing the love of the beautiful, which plays a large part in moral processes. It has a wonderful effect in the awakening of curiosity. From this starting point the child can be led from one investigation to another until he acquires an excellent knowledge of form in detail, and a practical training in making researches that will be invaluable to him afterwards in studying the sciences.

Seneca says, "The object of education is not external show and splendor, but inward development," and I fear many of us in its search, like Sir Launfal, go far afield when the flower can often be found at the near door. The pupil who gets the training of the perceptive and constructive faculties, which this study gives, will go to his other studies with such a quickening of that class of mental powers as will make him a clearer, stronger and more accurate student in every department of school work. The eye is trained to the accurate perception of size and proportion, and becomes exact in judging angles, distance and elevation. The hand gains despatch and at every move readiness of expression. The memory is trained to definite recollection and the taste refined and cultivated. It requires close observation, and since observation is the study of life it brings the child into closer communion with his Creator.

IT PAYS.

BY ANNIE E. TREAT.

It pays to wear a smiling face
And laugh our troubles down,
For all our little trials wait
Our laughter or our frown.
Beneath the magic of a smile
Our doubts will fade away,
As melts the frost in early spring
Beneath the sunny ray.

It pays to make a worthy cause,
By helping it, our own;
To give the current of our lives
A true and noble tone.
It pays to comfort heavy hearts,
Oppressed with dull despair,
And leave in sorrow-darkened lives
One gleam of brightness there.

It pays to give a helping hand
To eager, earnest youth;
To note, with all their waywardness,
Their courage and their truth;
To strive, with sympathy and love,
Their confidence to win;
It pays to open wide the heart
And "let the sunshine in."

Book Notices, etc.

Any book here reviewed sent post-paid on receipt of price. Address The Grip Printing & Publishing Co., Toronto.

French Course. By G. H. Williams, M.A. Pp 216. Price, 2/6. London: Moffatt and Paige.

The author attempts a change in methods of French instruction, presenting first French words and phrases, then their English equivalents, then the rule. This method is followed through the main body of French grammar. A grammatic appendix, and passages for translation into French—clever mosaics that unite plot-interest with abundant drill on special difficulties is added. The method is on the whole a good one, though it needs modification badly. There is no excuse in a natural method for an order of treatment based only on the parts of speech. Surely the pupil should not at the outset be called upon to learn the plurals of *coq-à-l'âne*, *blanc-seing*. A large number of carefully-selected illustrative sentences give the volume a value even apart from the method. F.H.S.

Matriculation Chemistry. By Temple Orme. Lawrence & Bullen, Publishers, London. Price, 2s. 6d.

In the preface the author lays special stress upon the value of the practical study of the science as the only method to derive much profit. A perusal of the text indicates that the author has subordinated this cardinal principle of science teaching to other considerations. W.H.J.

LET him not boast who puts his armor on
As he who puts it off, the battle done.

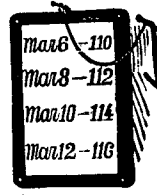
—Longfellow.

I HAD rather never receive a kindness than never bestow one. Not to return a benefit is the greater sin, but not to confer it is the earlier.—Seneca.

IF a man empties his purse into his head, no man can take it away from him. An investment in knowledge always pays the best interest.—Franklin.

Do not dare to live without some clear intention toward which your living shall be bent. Mean to be something with all your might.—Bishop Phillips Brooks.

"As a man treats an animal, so I believe he would treat his fellow. If wrongly, roughly, brutally and badly, he would be so to you if it suited his purpose and he—dared."—Harrison Weir.



**GAIN
ONE POUND
A Day.**

A GAIN OF A POUND A DAY IN THE CASE OF A MAN WHO HAS BECOME "ALL RUN DOWN," AND HAS BEGUN TO TAKE THAT REMARKABLE FLESH PRODUCER,

**SCOTT'S
EMULSION**

OF PURE COD LIVER OIL WITH
Hypophosphites of Lime & Soda

IS NOTHING UNUSUAL. THIS FEAT HAS BEEN PERFORMED OVER AND OVER AGAIN. PALATABLE AS MILK. ENDORSED BY PHYSICIANS. SCOTT'S EMULSION IS PUT UP ONLY IN SALMON COLOR WRAPPERS. SOLD BY ALL DRUGGISTS AT 50c. AND \$1.00
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