neglected in these days, I will cite the following fact: Within a week I have received two letters, the one from a middle-aged country woman, living at an obscure place called Bean's Corner, in the State of Maine. She has probably but the slightest pretension to what in these days is called education, and yet her letter has not a single mispelled word in it. The second letter alluded to is from a descendant of one of the oldest and best families in America, a lady of many accomplishments and high culture, and yet her letter exhibits several gross mistakes in the spelling of words of common every-day use.

Apropos of this subject, a friend tells me that he knew a young man of excellent family and social standing, who was engaged a short time since as a book-keeper in a retail grocery. His penmanship was admirable, his arithmetic adequate to the position, and yet "eggs" were transformed by him into "edges," "pails" into "pales," "pepper" into "peaper," with many other equally atrocious perversions of orthography, until the end of the first week "spell." the notice that his services would not be required f[illegible]

The same friend in [illegible] he once attended a course of lessons in penmanship by one of the foremost teachers in this country, whose copies were so often mispelled that they furnished a fruitful subject of ridicule on the part of the pupils.

Perhaps the following Lament, found in the portfolio of a maiden aunt, may amuse your readers, and serve as an appropriate ending to this "scold" about the wretched spelling of these degenerate days:

My dear nephews have all passed through college,
And their sisters of school honours tell,
But, alas! amid all their fine knowledge,
There's not one of them knows how to spell.

You would think Jim as learned as a Rabbi,
His collection of books could you see,
Yet he writes home from France that an "Abbey"
Is teaching him French "à Parreé."

Pretty Fan, who has gone on to Venice,
Into raptures at everything flies,
But especially glowing her pen is
When describing the famed "bridge of size."

With Donald and Duncan, twin darlings,
Spelling fares no whit better I fear;
For they write me that soon at McParlins,
They will enter a "buisness carreer."

Yet these are all children of mothers,
Who in days that are gone would surpass,
In the triumphs of spelling, all others,
Standing oft'nest the head of the class.

3. PRIMARY LESSONS IN BOTANY.

I would introduce the study of botany to a class of pupils in this way: Taking a simple plant in my hand,—a year-old apple-tree would be a good specimen,—and presenting it before the class, ask:

Teacher. "What is this?"

Pupils. "A stick; a switch; a little tree; a plant." (I would endeavour to bring out the latter answer, *plant*.)

T. "What is this?" (pointing to the root.)

P. "Root."

T. "What is this?" (touching the axis or stem.)

P. "Stem."

T. "What are these?" (pointing to the leaves.)

P. "Leaves."

T. "What is this plant made up of?"

P. "Root, stem, and leaves."

T. "How does the root differ from the stem?"

P. "The root grows under ground and the stem above ground."

T. "Do roots sometimes grow above the ground? The roots of the corn are above the surface. Have you seen them?"

T. "Do stems grow under ground sometimes?" Here speak of the plants that grow under ground, such as the potato, etc.

T. "Do you see any joints on this root? Are there any leaves on the root? Here call attention to the place of the leaves. Strip off some of the leaves and then show the *place* on the stem where the leaves grew, and compare the stem thus stripped of leaves, with the root, and show that the stem grows by a regular succession of joints, while the root has no joints, no leaves, and no *place* for leaves.

The characteristics of leaves, as differing from root and stem, are easily made.

The *plant* is a type of the vegetable world, and the plant consists of root, stem, and leaves. The root, the stem, the leaf, may each assume a great variety of forms.

To illustrate: Take a leaf from a book. Let the pupils see you tear or cut it from the book.

T. "What is this!"

P. "A leaf."

T. "What is this?" rolling the paper in the form of a cylinder or cone.

P. "A leaf."

Then let the teacher tear or cut the upper margin of the leaf into lobes, and then roll together. Then roll the paper into a solid cylinder, then dip it into ink, or some colouring matter; *talk* of its being colored, red or blue or yellow, if you do not actually colour it,—continually asking, as you make a change in the form or colour, "what is this now?" Thus develop the fact that the leaf may assume a great variety of forms and colour; but it is a *leaf* nevertheless. On the stem you may find a bud; present this to the class and ask:

T. "What is [illegible]"

P. "A bud."

Let the pupil examine it; ask him to pull it to pieces, and so direct him that he may discover that the bud is a collection of leaves on a short stem; that a bud is stem and leaves. Take a piece of elastic cord and some bits of paper cut in the form of leaves; make a hole in each of the pieces of paper, and then string them on the cord, quite close together; secure each piece to its place on the cord, with a bit of sealing-wax or some mucilage,—this may represent a bud. Now, take hold of the ends of the cord and stretch it, the leaves will be separated more widely from each other, and we shall have a *branch* or a *developed* bud.

Teach that the bud develops into a branch by elongation of the stem and enlargement of the leaves, and not by an increase in the number of leaves.

Some buds do not develop into ordinary branches, but into flowers. Show that a flower is a collection of developed leaves upon a short stem or axis. Call attention to the fact, before stated, that the peculiarly shaped and coloured parts of the flower (sepals, petals, stamens and pistils,) are only leaves. Then call attention to the place of the bud. Let the pupil discover that the bud is always between the leaf, or the leaf scar, and the stem.—*Chicago Schoolmaster*.

4. PRACTICAL AND APPLIED SCIENCE,—AN IMPORTANT QUESTION.

Among the most important of the questions which have agitated our Dominion during the past year, are the building of railroads and the development of our mineral resources. Hitherto we have quietly waited for our territories to be settled as best they could, thinking that afterwards we could build railroads. No man ever wishes to cultivate even the best of land if he cannot get the produce to market, so that if we ever expect to get our lands settled, we must do as our neighbours have done,—build railroads. Emigration will succeed, but not precede this enterprise, and it is well for us that the subject is at last being agitated here.

On the other hand, look at our mineral resources. The rocks of our Dominion are

"Un vaisseau freté pour l'avénir
Et richement chargé."

Pour l'avenir certainly, for hitherto we have left them well nigh undisturbed. During the past year, however, owing to the high price of ores abroad, we have begun to wake up to the fact of our having inexhaustible supplies. New mineral lands have been discovered, old ones have changed hands, and in a number of instances mining operations have been begun.

The question then arises, if we are to build railroads and develop our mineral resources, have we in Canada men competent to do the work? Some such we undoubtedly have, but the number is far too small, and, if much work is to be done, we must either train up men for it or import them from abroad. Undoubtedly the former is the better method. Men born and brought up in a country, provided they have means of education, are better fitted than strangers to cope with the difficulties peculiar to that country. Moreover, if we import men from other countries we cannot, as a rule, expect to get their first, but simply their second or third rate men.

What then is being done by way of training men here? A College of Technology has been established at Toronto on a broad scale and has been highly successful. Besides a "Department of Practical and Applied Science" has been instituted in connection with McGill College. For this latter we may thank Principal Dawson, and a few worthy citizens. Courses of study in McGill College extending over three years, are afforded in

(1). Civil and Mechanical Engineering.
(2). Assaying and Mining.
(3). Practical Chemistry.