

work can be done out of school in little botanizing excursions, but as this is inadvisable except in small detachments, I have confined it to the high school grades.

A visit to some ledge or cutting or sea wall will give point to many lessons, in which the minerals of the section have furnished material. This does for fall and winter work and is in line with the regular text book work of the higher grades.

During the winter also, with ordinary pocket microscopes the leaves of the evergreen adapt themselves to a series of interesting lessons. Classifying and giving uses of our native trees in the outgrowth of the conifer lessons. Any of the delightful nature books now published in such abundance may be used to produce good results. A section may be read by teacher or pupils on Friday afternoon. This is reproduced, corrected by teacher and copied by pupils in blank books kept for the purpose. After reading on each occasion, a free discussion should follow as to whether any pupil knows or has heard proof of any of the facts stated in the reading. The chief—perhaps only—value of this talk is that the facts then seem more directly within the comprehension of the little folk.

I said there were many nature books. Each teacher must select for himself. I have this winter found particular values in a charming little book by Wm. J. Long, "Ways of Wood Folk." Almost any of John Burroughs' delightful essays are applicable to this task.

The birds open another wide area in this work. The names and habits of our common habitants must be in our plan. Encourage the pupils to bring the odd flower, the "funny" insect and to tell about the new bird. Then if no one in school can supply information and the teacher fail—"I don't know" has long ceased to be a shock to my pupils—simply postpone the talk until you and they have had a chance for research. With a copy of Mrs. Dana, a Comstock, and a book containing colour plates of the birds, on the desk, the youngest pupil finds the matter of "looking up" a pleasure.

And Nature, the old nurse
Took the child upon her knee
Saying, 'Here is a story book
Thy father has written for thee.'

It is just that—a story book with a leaf turned every little while and eagerly read by the children.

B. G. JAMES.

Weymouth, N. S.

Train your pupils to recite in good English, but do not worry them by interruptions while they are speaking. Make a note of incorrect or inelegant expressions. It would be a good plan at the beginning of the next lesson on the same subject to have the *corrected* expressions on the blackboard and have a short drill on them.

For the EDUCATIONAL REVIEW.]

Astronomical Notes.

In the way of occasional and unexpected phenomena it is impossible to say what may happen in the celestial regions during this month. Since the middle of February we have already had of this sort the most brilliant new star that has flashed out for 300 years, and the southern hemisphere seems to be at present enjoying a sight of the largest comet since back in the eighties.

As to regular and predictable events, the most important by far is the total eclipse of the sun on May 17-18. The double date is enough to show that we shall have no share in the spectacle. It will begin an hour before our midnight on the 17th, and will be at its best an hour and a half after that same midnight, on the morning of the 18th. This means, of course, that, in longitude, it is for the benefit of the other side of the earth. And so too in latitude; for nobody on this side of 30° North will see anything of it, even as a partial eclipse. All of which is a great pity. That famous eclipse of last May, which we all saw here as a large partial eclipse, was a poor thing as compared with this one. Less than two minutes of totality was all that the most favoured land station had; and even at sea, where the best of most of them is wasted, it lasted less than two and a quarter minutes.

But this one of May, 1901, is a six-and-a-half minute total eclipse at its best, and the best of it is that its best occurs very close to an eligible land station. At Padang in the island of Sumatra there will be about six and a quarter minutes of totality, and there and thereabout are gathered observing parties from England and Holland and the United States.

When this eclipse comes round again in 1919, it will last a little longer than this year; longer still at its next recurrence in 1937; and, at its next in 1955, there will be seven and a quarter minutes of totality near Manila and that will be the longest total eclipse of the sun that will have occurred for over a thousand years.

Mercury will be visible as evening star at the end of May and during the first half of June. Venus is passing behind the sun just now. Mars is still in Leo, Jupiter and Saturn are close together near the Milk-Dipper.

A. CAMERON.

Yarmouth, 1 May, 1901.

The *Packet* has more than once had the pleasure of commending the EDUCATIONAL REVIEW, published in St. John, N. B., by Mr. G. U. Hay. The March number is the best we have yet received. One thing we especially like about the REVIEW is its wholesome Canadian patriotism and true British loyalty. Ontario teachers will find it an acceptable addition to their professional reading.—*Orillia Packet*.