

in one term and the remainder in the next term? Also, is it better to take up geography and history in the same term or in alternate terms? These questions refer particularly to Grades VIII, IX and X.

2. Should mental arithmetic be graded for the different classes, or is it well to save time and give all the grades the same exercises in mental arithmetic?

3. How often, in the ordinary subjects, should reviews be required?

1. You will find it better to devote the time you allow for mathematical studies mainly to one of the above subjects at a time. On Friday of each week, exercises based on the work they may have previously done in the other subjects should be given to keep the pupils from retrograding in them. Geography and history may alternate, or the geography and history of a country may be taught together.

2. If the time is limited, exercises to promote accuracy and quickness may be given with advantage to more than one class at a time.

3. A review should be taken whenever you find your class is losing hold on facts and principles which are necessary to further progress. But in no case should a review be a mere repetition of former lessons, as that would be dull and uninteresting.

J. B.

NATURALIST.—Can beavers cut through the trunks of very large trees?

H. G. Tyrrell, C. E., in his explorations in North Western Canada found stumps of trees eight inches in diameter cut through by beavers. Prof. W. F. Ganong and G. U. Hay found in Northern New Brunswick white birch trees ten inches in diameter at the point of cutting. Mr. Kilgour Shives, of Campbellton, N. B., has in his possession the section of a tree-trunk, eighteen inches in diameter, cut through by beavers, and says that even larger tree-trunks have been found showing the work of this industrious animal.

M. L. D. —

"Half way down hangs one
That gathers samphire; dreadful trade.
Methinks he seems no bigger than his head."

SHAKESPEARE'S *King Lear* — Scene VI.

Is the samphire referred to the same as the samphire which grows in the sand along our coasts and on the borders of our tidal rivers, and used as greens?

No; our plant is the marsh samphire (*Salicornia herbacea*) a saline plant with horn-like, fleshy branches. It is an annual. Shakespeare's samphire is a perennial found on rocky cliffs, by the sea shores of England and farther south. The plant was formerly held in high esteem for its pleasant aromatic taste, its qualities as a cordial, and was used for salads and as a pickle.

RECENT BOOKS.

MANUAL OF THE FLORA OF THE NORTHERN STATES AND CANADA. By Nathaniel Lord Britton, Ph. D., Director-in-Chief of the New York Botanical Garden, Emeritus Professor of Botany in Columbia University, etc. Cloth. Pages 1080. Price \$2.50. Henry Holt & Company, New York, 1901.

Students of botany throughout the north-eastern states and Canada will look upon this new manual with mingled feelings. The area is rather more extended than that embraced in Gray's Flora, covering more of the west both in the United States and Canada; the descriptions, in smaller type, are somewhat fuller, with a wider range of localities than in Gray; all measurements are given in the metric system; order and family are not regarded as synonymous terms; and instead of beginning with the Ranunculaceae and ending with the higher Cryptogams, the new manual begins with the ferns and their allies and ends with the Compositeae,—an arrangement of orders and families proceeding from the simple to the complex. But the sweeping change is that made in the scientific names of plants. The student will look in vain for many familiar names, nor will the book or index help him much in his search for the departed, unless he is fortunate enough to possess the author's three-volumed "Illustrated Flora."

One would wish that we may henceforth be spared the lack of stability in the scientific names of plants. We do not pretend to understand the principles of nomenclature, but we do know that if names are unstable and liable to frequent change the result is confusion and waste. Unanimity, it would seem, is wisdom here. The principles of nomenclature adopted in the present manual are those of the botanists of the American Association for the Advancement of Science, and these are essentially the same as those adopted by the International Congress of Botanists held in Paris in 1867. It would, therefore, appear wise for the individual opponents of the new nomenclature to lay aside their own preferences and adopt, for the general good, the broader and doubtless well considered scheme.

The new manual is convenient in size for field work. Its descriptions are as free as possible from technical language. One is struck on glancing over the book with the multiplication of new species. For instance the genus *Viola*, which in the later editions of Gray's manual embraced eighteen species and nine varieties, now includes forty-three species and four varieties. An excellent feature is the association with each species described in the manual of one or more English, or common, names, chosen in reference to some distinctive feature of the plant.

ENGLISH LITERATURE. By Stopford A. Brooke, M. A. Cloth. Pages 358. Price 75 cents. The Copp Clark Company, Ltd., Toronto.

Brooke's "English Literature" has become a national classic. For the past twenty-five years it has been the favorite of students and instructors from the time it appeared as a primer to the present more ambitious volume, embracing the revision and additions of 1896, and four chapters (IX-XII) by Mr. Geo. R. Carpenter, of Columbia University, bringing the account of English literature up to the present time. Two of these chapters are devoted to prose and poetry in the United States. The publishers would have won the lasting gratitude of Canadian students if they had added an appendix, showing the beginnings of a Canadian literature. Have we not Howe, Haliburton, Dawson and others to begin with, and names of more recent date that have won some renown in the world of English letters? We hope that the enterprising publishers, who have done so much for the reading public of Canada, will soon bring out a second edition of this book supplying this needed addition.