fronted with the task of preparing pupils for an examination similar to that of grade IX in Nova Scotia.

It will be advisable to get as books for the teacher's use Spotton's High School Botany and Gray's "How Plants Grow," the former which is recommended by the department being specially important.

Most of us know very few of the wild flowers, naturally, and I think most of us would find it a very dreary business to gather a number of plants and endeavor to find out what they are by looking up in a book. But every one knows a buttercup, at all events, and a dandelion, and a strawberry, and a mayflower. In a sense the buttercup is the easiest flower to examine, but it may chance that some other flower is taken. If the buttercup happens to be the flower first examined a very good description is given in the earliest pages of Spotton, and the student teacher is advised to go over the description very carefully several times with the plant in hand until he feels that he has a pretty thorough knowledge of it. Then he might be able to teach it to his pupils even if he knows nothing more. Now I should advise a teacher, such as I have been considering, to admit very frankly to the pupils that he is a novice in the subject and is really studying along with them. It will get over the unpleasantness of endeavoring (probably without success) to hide his ignorance. Moreover it will add an interest of its own, which will help to make up for other disadvantages, for the pupil to know that he and the teacher are making investigations in a field new to both.

Let us suppose, however, that the first flower gathered and examined is the mayflower. On turning to the index one is referred to the proper page for the mayflower and one finds four lines of description. Nearly one line is taken up with the statement of a fact previously known to most Nova Scotians, "Flowers very fragrant. Dry woods in early spring." In addition it is learned that the botanical name is *Epigæa repens*. The flowers are said to be in small axillary clusters from scaly bracts. Leaves evergreen, rounded and heart-shaped, alternate, on slender petioles. Now in this description there are several words whose significance will probably be unknown. Such words are "axillary," "bracts," "petioles," perhaps also "scaly" and "alternate." But by reference to the index and glossary at the end of Part I of the book, such references will be given as will enable the reader to gain some idea of what is meant. It will be noticed that at the top of the page is the word Ericaceæ, and on looking one will find that this word is at the top of several pages preceding, and it will soon be discovered that the Epigæa is one of a large family or group of plants. In the edition which I have in my hand the description I have given above is on page 141. In Spotton's book the large groups or orders are divided into smaller groups, or genera, each numbered. The genera are taken up in turn afterwards. On page 141, the word Epigæa is preceded by the figure 5, and on turning back to page 138 it will be found that a description of Epigæa is given in which facts not mentioned on page 141 are dwelt upon. The beginner may wonder why the whole description is not given in one place, but on page 138 the general characters of the genus Epigæa are given, on page 141 the special characters of the species *Epigæa repens* are set forth. It so happens that in this particular genus there is only one species of importance, but it will be seen that eight different species of Vaccinium belonging to the same order are described. In the description of Epigæa on page 138, more new words are met and more reference must be made to the glossary. Finally there will be more words to turn up when one goes over the description of the order on page 137.

Possibly two or three hours may be used up in this study, but by the time it is done some real information will be gained, not only of *Epigæa repens*, but of flowers and leaves in general. If Gray's "How Plants Grow" is looked at probably additional information may be obtained, and probably before the examination of this plant is completed it will be noted that the blueberry and lambkill, also common plants, are allied to it.

After a few of the common plants are gone over in this way it will be found that a very material progress has been made. When the teacher has studied out the thing for himself he can help the pupil to travel the same road. I suppose it must be assumed that the pupil has not so much time to spare, and not having so mature a mind as the teacher will need assistance. Perhaps the best way for the pupil is to be guided by the teacher in his observations, the book not being used by him in the earlier stages of his work at all events. But the pupils can bring plants and if they know the names they may be examined under guidance of the book. If the plants are not known some general observations may be made, possibly the natural order may be discovered, but I hardly think it is advisable to worry over unknown plants while there are known ones to examine. On this point some ardent botanists may disagree with me, and perhaps some educationists who are not very ardent botanists; but I think the average teacher will find it dreary work to take up an unknown plant and endeavor to identify it. When one becomes familiar with a good many plants one gets a taste for trying to hunt out unknown ones, but at the first, I should say, see if you cannot find some one to tell you the name of the plant and then examine it. Many of the most common flowers are weeds, and the farmers may happen to know the names. I may say that the book on agriculture, prescribed for grade X, contains a list of common weeds from which hints may possibly be obtained.

In this connection, I may mention that many, perhaps I should say most, of the candidates, appear not to understand what is meant by a weed. In the examination of 1902 a list of *noxious weeds* was asked for and the name of the natural order to which