as a reference book with Grades VII and VIII this year and have found it invaluable.

The reason for this general viewpoint of matters scientific is that the pupil may have the opportunitv to determine his particular bent in this direction and so be able to follow that course throughout the Senior High School years. Botany and zoology, in their simplest aspects, have been found most interesting to these adolescent boys and girls.

In mathematics, algebra is begun in Grade VII and geometry in Grade VIII, having been preceded by mechanical drawing in Grade VII.

In the United States much stress is laid on drawing and various kinds of hand-work, and more time devoted to these classes than may be found practical for us, particularly in collegiate courses, but this fact may give us a hint that psychology endorses the old proverb:

"Satan finds some mischief still
For idle hands to do."

and contrary wise: "A busy boy is never a bad one."

For every class, besides the subjects mentioned above work is required in English, arithmetic, geography, history — which is reorganized into history proper, civics and elementary sociology, physical training, music, domestic and mechanical science. Special stress is laid on oral English. In the Grand Rapids Junior High School all pupils are required to give oral reports before the class of regular assignments and home reading. The best compositions are used in the weekly paper, while the essentials of formal grammar are studied as the foundation of all the English courses.

In Grade IX, after a thorough-ground-work has been laid along the above lines, some of the best literary masterpieces are studied and often, where possible, dramatized by the pupils.

For those who do not expect to go to work immediately upon graduation a very general course is prescribed, one which opens up many fields of knowledge, finally concentrating on one. Such a course is not unlike the collegiate, with less stress laid on Latin and higher mathematics, more upon the sciences, history and English. The aim being to enable the pupil to taste of much so that he may finally chose one. To this pupil as he advances are open also courses in business English and arithmetic, applied mathematics, and some of the prevocational subjects; for if he is to be "educated," he is to be fitted for life in the broadest sense possible.

For those who must chose a means of livelihood immediately on leaving, there is arranged the commercial course, where the English is that of commerce, the mathematics intensely practical and applied to modern business needs, where stenography and typewriting may be learned as well as book-keeping, penmanship, spelling and other courses of the up-to-date business college.

As the student begins these specialized branches, others less useful to him are dropped with the approval of his teachers, so that before he leaves High Schoo! all other courses are subordinated to that which he intends to follow as a vocation.

In some High Schools courses in drafting, electrical engineering, mechanics, dressmaking, etc., are being proposed, but for the most part the ordinary commercial course is the one which has been adopted.

(To be concluded next issue).

THINGS TO GROW IN A SCHOOL ROOM AND ON THE SCHOOL GROUNDS.

Work for September.

By W. Clement Moore.

(Special to The Educational Review.)

When school begins there are many things growing in the flower gardens around you which may be safely transplanted from the soil to pots and they will continue to grow inside.

Among these may be mentioned the following: Amaranthus, Lady Slipper, Geraniums, Schizanthus, Carnations, Sweet Williams, etc.

But your pupils will derive the most pleasure from flowers raised from the seed and started right now. You will find an abundance of flower seed all around you — they will cost you nothing and results will be quick and pleasing. Hundreds of wild flowers are now covered with seed pods and a day spent in the fields will reward you with a fine collection which you may plant at once if the seeds are perfectly dry and hard. Secure for this purpose the ordinary planting boxes or have the boys and girls make them in the manual training classes. A box four or five inches deep and eight or ten inches wide, long enough to fit the window nicely will be just the thing. Place in the bottom of the box an inch or two of old broken flower pots or earthenware for drainage