ANOTHER S. No. The shark they caught at the shore had one lobe longer than the other.

T. Try the fins, are they bony spines or soft and pliable?

S. They are soft and pliable.

T. The Greek for soft is "malakas;" and accordingly a large division of fish is called the *malacopteri*—soft finned. Can you name others like the carp in this respect.

CHORUS. Trout, salmon, herring, minnows.

S. Wouldn't it be nice to have a carp pond?

Plants in their Homes and in the School Room.

Part V. How to Form a School Herbarium.

We have been asked to give a few directions how to form a school herbarium, or to make a collection of the plants of the neighborhood for preservation and future study. This may be accomplished with a little care and pains, and will add greatly to the interest of plant study. The whole school may take an interest in this, and procure specimens for preservation; but the teacher, and a few of the older pupils to aid him, should attend to the pressing and drying of the plants, which requires considerable care and patience. The process will take between a week and a fortnight, according to the weather. Very little apparatus is needed. Two smooth boards, 18 to 20 inches long, and 12 to 15 inches wide, with a weight (a flat stone) of twenty or twenty-five pounds, will make a good plant press. Some sheets of porous paper—newspaper will serve the purpose very well—cut in sizes of 18x12 inches, will complete the apparatus.

Let all the pupils be interested in procuring and bringing in the plants. Especially let those plants which are made the subject of study be preserved. A tin box or a portfolio is usually taken to the field, in which plants may be brought home in a fresh state for preservation; but these are not essential. By taking up the plant carefully, root and all if a small plant, with some earth attached, and carefully placing it in a newspaper, it may be brought fresh to the school room. Carefully detaching the earth from the roots the plants may be placed with leaves and flowers spread out so as to show to the best advantage between the folds of the drying papers. When the plants are thus placed (several on one sheet if they are small enough) two or three layers of paper may then be added, other specimens placed on these, and so on; care being taken that the plants are not too close together, and that several folds of paper are placed between each layer. They may then be placed between the boards and the weight put on top. Plants will dry more rapidly where they are exposed to the sunshine and a good draught. The dryers should be changed every day for the first four or five days, and then every other day, until every particle of moisture is removed.

Collect for preservation only complete and perfect specimens. Suppose it is the Mayflower. Do not take a part of a plant, but dig down, get the root and the whole cluster that grows from it, only let the specimen be such as can be placed on a sheet of paper when mounted of sixteen and one-half by eleven and one-half inches, for that is the standard size of botanical mounting paper. When the specimens are thoroughly dried they may be affixed to sheets of white paper, moderately stiff, of the size above mentioned. Paper for this purpose is prepared and sold. Glue may be used to fix the plant to the paper, or it may be allowed to remain loose on the paper or between two sheets, which will be the better way if the plant is to be examined on future occasions and serve for illustrations to classes; and that is the object in making collections of dried plants.

After plants have been pressed so that all the moisture is removed, it is customary to place them carefully away for future mounting, with a label attached. This should be put with the plant when first laid in press, on which is written the name of the plant, the locality in which it is found, and the date of collecting. If you are unable to determine with exactness the name of the plant, send it to some friend who perhaps has had more experience in such matters than you have had.

In this way the beginning of a collection, which in future seasons will represent the complete flora of the neighborhood, may be made. Perhaps not more than twenty species can be collected this season. Let them be perfect specimens, carefully selected and dried. It is just as much trouble to dry a poor specimen as a good one. And above all, let the plants so collected and preserved, represent the work done for the season in the class; that is, let them be studied as carefully as the capacity of the pupils will admit.

There need be no expense—beyond a few cents expended for white paper on which to mount the plants—and only a moderate amount of skill and patience in making a school herbarium. If there is no school cabinet in which to preserve the plants a large portfolio may be made, into which the specimens may be placed after they have been dried and mounted. Binder's board or some stiff material may be used as an outside cover for the portfolio; then folios of stiff paper in which all the species of a family may be placed. If the family is large two or more of such folios should be used. For convenience of reference the names of the family should be neatly written on the *lower right hand* corner of the covers containing the species, and the name of each species with locality and date of collection written on the lower right hand corner of the sheet which contains it.