

out some faint idea of plant life, to plunge a pupil headlong into the depths of the study, were to me like setting him to solve some abstruse mathematical problem prior to his learning the meaning of addition and subtraction. Mr. Beal, too, in his paper, whatever he may do in practice, makes no mention of a point which I deem of vital importance, viz., that every student in botany, from almost his very entry on the subject, should be urged to start and taught how to make an herbarium, or collection of plants, for himself. Field-work is of the greatest importance in promoting familiarity with habitats, and in solving most of the problems of plant life, and to induce pupils to engage actively in field-work there is nothing equal to starting them to form an herbarium, for in no other way can such an interest be excited. In my experience, young people can best be stimulated to take an interest in any branch of study by giving them something to do in connection with it.

But it is not alone in the excitement of an interest in the study of botany that the value of an herbarium lies. The ultimate end of any scientific study being the mastery of all that can be learned concerning it, the formation of a collection of plants in a manner most convenient for reference is a necessary part of the science of botany.

But enough has been said to give you an idea of the general principles on which botany is now usually taught in colleges and schools. Let me next devote myself to telling you what I consider the best way for *you* to enter on the study. The first step is to procure a text-book on structural botany. For choice I would name Gray's "Lessons in Botany." It is not too complicated and yet is extensive enough, except for advanced students who wish to devote themselves specially to the study. A work on systematic botany is also essential, and I know of none better than the "Manual of the Botany of the Northern United States," which covers our Canadian flora in great measure. I would advise any one purchasing to get the "Lessons" and "Manual" bound together. In this shape, the books are not only cheaper but more handy. We have in combination excellent works on both departments of Botany, Structural and Systematic, no small desideratum to the beginner, who, in naming plants by the latter, will