For the Review.]

NATURE LESSONS.

No. II. The Tyro's Attempt.

"Well, how did you get along with the birds?"

"Birds! It's very curious. After I gave your advice to my school — and it was taken with about as much enthusiasm as the announcement of a holiday — I thought when going home I should use my own eyes and gather up some facts about birds myself.

"I first commenced to take an inventory of my ornithology. 'How many birds do you really know by name,' said I to myself. 'Our domestic farmyard birds, they are good enough for three or four lessons and by that time I can find out something about our wild natives. But what do I know about them anyway? Suppose I should ask the boys how a goose differs from a duck, or a hen, or a pigeon, or a turkey, or a peacock, would I know to what extent the answers would be right or wrong?' Just then I passed near a flock of geese whose habits I watched for quite a while with a new interest. I noted their manœvres with their goslings in entering a pool in which some of them swam. I saw them feed and enjoy their accustomed intercourse with all the curiosity of the beggar boy peering into a ball room. I then interfered with their domestic arrangements to see how they would adapt themselves to the exigency of the instant, and retired satisfied amidst a storm of hisses and bills presented in every possible posture for examination, and within microscopic, if not dangerous, proximity to the eye of the now rapidly retreating observer.

"A neighboring farmyard in like manner supplied a group of ducks, a turkeycock, and other less impressive fowls. My head was full of the peculiarities of forms and habits belonging to each of these, when I heard a peculiar whistle in the air, and saw a flock of chickens with the mother hen rush to shelter. It was a hawk. Spent half an hour in trying to get a good sight of him. Passing by a small piece of wood I saw some small birds, and noted their appearance and call. And lastly I was scared by the sudden explosive scream of an owl, on which I was able to make some observations. In the morning returning to school I observed a partridge and two or three other birds. In twenty-four hours I really appeared to have noticed more about our birds than in the whole twenty years of my life."

"And how did your scholars do?"

"Why! Every one of them made some observations; and some of them, at least two or three, appeared to be acquainted with everything about our wild birds and their habits. I could take down but a small number even of the names of birds which they knew. I find out that there are two or three at least in the school who are born naturalists. I have already materials enough for lessons for a month, I believe.

"Yes, I expected you to find at least one person in your school who naturally from the first caught the fever of noting what he saw. Your present course will stimulate him to excel specially in natural history, while he will on the other hand be of very great use in helping you and your school to advance all the more rapidly on account of his experience."

"True! That is how it looks. I can now understand how he enjoys his quest. For half an hour I forgot everything last evening in following up a bird which was strange to me and passed my path while going through the patch of woods. There is nothing like it for mental relaxation, for carrying the mind away forcibly and completely from its usual train of monotony or worry. But I see a person must make a beginning before he can realize it."

Such, substantially, was the conversation. Next we hope to have some specimen lessons.

Plant Study.

No. III. Asters and Golden-rods.

In September the fields and hedges are bright with asters and golden-rods. There are about fifteen or sixteen species of each in the Atlantic Provinces, and the determination of some of these species is often a matter of perplexity even to the skilled botanist. Dr. Gray once remarked to the writer that no genus of plants gave him more difficulty than asters. But teachers and scholars at first need not concern themselves with difficulties of species. The structure is of first importance. So let us begin.

Choose an aster, and take with it into the class-room a sunflower, belonging to the same family — compositæ. This is the largest family of plants, embracing about one-seventh of all the plants found in the temperate zone, and more than half the plants found in our fields in September. It is distinguished by having flowers collected in heads, surrounded by one or two circles of bracts (involucre), anthers united in a circle round the style, and an inferior one-seeded ovary (akene). The family is divided into two series, the first having tubular flowers (Tubulifloræ), the second with ligulate or ray-flowers only (Ligulifloræ). The sunflower and aster belong to the first series, nearly all the flowers of which are both tubular and ray, the former (perfect) occupying the centre, and the latter (pistillate or neutral) occupying a row on the margin.