

the midrib. The tallest fronds are about four feet in height.

Braun's Shield Fern may possibly be found. It is a strikingly beautiful fern, about two feet high, known at a few widely distant stations in New Brunswick and Nova Scotia, where it reaches its southern limit at sea level. Its glossy fronds, beset with soft hairs, are chaffy on the under side, and taper downward from the middle to a very short stalk. They rise in a close crown, edge to edge, like the circle of plumes in an Indian's feather bonnet. The best frond we could choose as a specimen would be less satisfactory than a blank in our collection, with a photograph or a mental picture of the unbroken circle.

While we are looking for these rare ferns, we are very sure of finding another shield fern which is not rare. It is called the Spinulose Wood Fern, because the lobe of its segments are tipped with small sharp spines. In one or more of its well marked varieties, it may be found in all our wooded districts. It is tripinnate, or nearly so, in the forms most common with us; and its fronds are more or less inclined to remain green through the winter, lying flat upon the ground. It is a beautiful feathery fern, with fronds from one to two and a half feet long. The fruit dots are round and small.

In moist rocky places through the woods we shall find beds of the Beech Fern and the Oak Fern, together or apart. The fronds of the former are from six to ten inches long, triangular in outline, rather longer than broad, and twice divided, the lower pair of pinnae usually bending forward. The fruit dots of both are small and naked, and are borne near the margin. The frond of the Oak Fern is in three divisions, widely spreading; is lighter in colour than that of the Beech Fern; and has a polished dark brown stalk.

A wetter spot may lead us to look for the Silvery Spleenwort, though this fern is by no means common with us. Like all the spleenworts, it has its fruit dots elongated, and protected when young by a covering which is attached by one edge. The covering in this species is light coloured and somewhat shining, hence the name. It differs from the Lady Fern in being pinnate, not bipinnate; and in the fruit dots being less curved. The fronds are

from one to three feet long, and are narrowed towards the base, so that they closely resemble those of the New York Shield Fern. The latter, however, grows usually in lower ground; and can be distinguished from the spleenwort by its fruit.

Leaving the woods and following the stream, we might find the New York Fern and others of interest, including the Ostrich Fern, which sometimes rises to a height of seven feet; but perhaps that trip, and a visit to the waterfall, where the more delicate ferns are found, should be left for another day.

The fronds that we have gathered as specimens must be carefully dried, if they are to be worth keeping. The photographs we have made will be much easier to preserve, and easier of reference. But the collection, whether of photographs or of broken pieces of the plants, has not been the chief object of the journey. We will not class ourselves among those who go to the woods for what they can get in their hands, leaving a trail of desolation in their course. The true lover of ferns is not the one who collects them, living or dead; but the one who likes to see them in their native wilderness, and never misses an opportunity to enjoy them where they grow.

(This paper will be continued in the August number, under the title of "Cliff Brakes and Lowland Ferns".)

SINGING SCHOOL FOR THRUSHES.

Find a family of thrushes and carefully note what takes place. The old male thrush will sing the sweet song in loud, clear, flutelike notes once, and then stop to listen while the young birds try to imitate the song. Some will utter one note, some two. Some will utter a coarse note, others a sharp note. After a while they seem to forget their lesson and drop out one by one. When all are silent the old thrush tunes up again, and the young thrushes repeat their efforts and so it goes on for hours. The young birds do not acquire the full song the first year, so the lessons are repeated the following spring. I take many visitors into the woods to enjoy the thrushes' singing school, and all are convinced that the song of the wood thrush is a matter of education pure and simple.—*Forest and Stream.*

According to this advertisement in a Connecticut country paper, there is a cow in New England which is possessed of rare accomplishments: "Wanted—A steady, respectable young man to look after a garden and care for a cow who has a good voice and is accustomed to sing in the choir."