

NATIVE FERNS.

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There are many wild plants desirable in every respect for garden culture. Among the first which the collector will be tempted to introduce will certainly be the ferns. One or two of these, perhaps, among other plants in a garden, may seem out of place, and for want of proper treatment prove very unsatisfactory. Still, it does not follow that ferns should always be grown by themselves. If a shady corner can be devoted to their culture, and the necessary amount of water supplied, mosses and some of the smaller flowering plants might grow among them to cover the soil and keep up that moisture of the air so needful for their perfect growth. No ill-used plant is more pitiable than a parched and stunted fern. Arrange your ferns so that each will show to the best advantage, and do not crowd them. The larger growing kinds need room to expand their graceful foliage, and a few stately plants well grown will be better than a large number with fronds narrowed and distorted for the want of room.

The nature of the soil and the amount of shade and moisture you can give them will, of course, influence your choice of species. In this, an acquaintance with ferns in their native haunts will be the best guide; yet, the collector will be surprised in some instances to find how easily the plants will accommodate themselves to a change of soil and surroundings, and how their beauty will be increased by the care which protects them from accidental injuries.

Of the evergreen ferns, the Hart's Tongue and the curious Walking-leaf will be planted for their botanical interest rather than for their beauty. Some of the Shield Ferns and Spleenworts are evergreens, and even here in Canada their bright green fronds are found unhurt when the snow disappears. This makes them especially valuable for rockeries. For other purposes their evergreen character may be rather an objection, as the uncoiling fronds of the young growth of the non-evergreen species are all the more beautiful for being seen alone.

Among the best of our native ferns is the Maiden-hair. Grown in pots for parlor decoration, no exotic can exceed it in beauty, its only fault being that it needs a season of rest. It is equally desirable for out-door cultivation, and can be grown in masses by itself or in detached clumps, in contrast with stiff and stately Shield Ferns, such as Goldie's Fern and the Male Fern. These all need a rich, open soil, with ample room and plenty of shade and moisture.

Another handsome fern requiring the same treat-

ment is Braun's Soft-prickly Shield Fern. Like the two last mentioned, it grows in the form of a circle or crown. The shape of the upright fronds is particularly graceful, and the golden-brown color of the main stalks is also a conspicuous feature.

The bulb-bearing *Cystopteris* should be mentioned here as delighting in the same situation. It is remarkable for its slender and graceful form, and for its little bulbs on the back of the frond, from which it takes its name. Unlike most ferns, it is none the worse for being closely planted, so as even to hide the moss in which it grows. It is hard to describe the exquisite beauty of this little fern in its native woods. Looking down upon it where it grows, in the deep shade of deciduous trees, the dull green color and the confusion of shape in the interlacing fronds, making it look soft as a bank of feathers, and as you watch it there seems to be subtle changes in depth of color, like the uncertain movements of Northern lights. When you stoop to gather a few of its fronds, you will find it difficult to choose among them, and will probably destroy more than you take; yet, if you have to pass the spot you will go a long way around rather than crush the frail things by walking through them. This was, I believe, the first North American fern thought worthy of cultivation in Europe. It needs protection from the wind as well as from the sun.

For drier situations the Beach Fern and the delicate and graceful Oak Fern would claim first notice, but they are rather difficult to manage. The Hayscented Fern, or *Dicksonia*, will bear almost any treatment. The light, feathery fronds take delicate shades of pale green and brown in the autumn, and its pleasant scent is not the least of its recommendations. It is very abundant here in dry pastures and open woods. The perfume seems to attract insects, but I never could find that it is injured by them.

In the wettest place that you can give it the Royal Fern will grow. It, and the other flowering ferns, will beautify an unsightly swamp, or the margin of a slow stream, and make the spot worth visiting. Of other ferns which grow in swamps, the Chain Fern and the New York Shield Fern are worthy of mention; but the most showy, on account of its large size and elegant form, is the Ostrich Fern. In favorable situations it reaches the height of five or six feet. Growing in large, circular tufts, the curving outer fronds form an enclosure or cup, within which rise the curious fertile fronds, very different in shape, which must have suggested the name of the species.

Beside the evergreen sorts above mentioned, there are many other native ferns suitable for rockwork. A collector could not do better than to visit a rocky woodland, and take them up at random. All are interesting, and none of them devoid of beauty.