

the few exceptions in this particular are the *Cycas* family of palms—a photo of one of these, *Cycas revoluta*, can be seen in the November number, 1899, of *The Horticulturist*, which shows the difference in habit; the leaves of the *Cycas* developing from the crown of the plant, somewhat similar to the development of the fronds of many species of ferns, notably the Tree Ferns, instead of from the leaf blade as in the case of the *Areca* family of palms.

The *Caryota*, *Seaforthia* or *Ptychosperma* palms, amongst others, develop their leaves by means of a leaf blade that often attains a length of five or six feet before commencing to open, this habit being more noticeable in these larger growing species than in some of the smaller species, and as the plants attain to a greater age this peculiarity is still more noticeable than in younger plants.

The plant mentioned in the question will doubtless develop the side segments of the leaf blade in due time if the plant is healthy; heat and moisture, especially syringing, will greatly assist the development of the leaf, but do not attempt to hurry the process in any other way. I consider the gradual development of the leaves of those mentioned, and similar species of palms, to be one of their most pleasing and attractive features, as the network of brown fibry filament that adheres to and connects the numerous terminal segments of the leaves with each other, until the whole leaf is fully developed, gives the plant a beautiful and unique appearance, and gives pleasure and delight to those who study the wonderful construction and growth of these useful and ornamental plants.

Hamilton.

W. HUNT.

Orchard on Limestone Ridge.

1151. SIR,—We are the owners of a farm lying towards the northern portion of the County of Huron, Ont., through the centre of which runs a limestone gravel ridge, elevation being somewhat above the other parts of the property. On this ridge the soil is shallow, so much so that it would not pay for the cultivation of other crops upon it. This part of the farm is grown over with a thick

coat of wire or June grass. We are just now considering the question of planting ten acres of this ridge to winter apples. We have been advised to summer fallow this the first season, then the following spring plant trees forty feet apart each way, and cultivate by ploughing under pease or some green crop for a season or two. The trees to be of the Talman Sweet variety, and when two or three years old, graft on three or four of the best winter fruit varieties. Your opinion would be regarded as valuable as to the soil mentioned: cultivation, planting, grafting and staking; also the names of three or four of the best winter varieties of apples adapted to this section, or any suggestion from you would be appreciated by us.

"AMATEUR."

We have no experience in planting apple trees on a limestone ridge, in shallow soil, but would fear two difficulties: First, that the trees would suffer from drouth and become stunted, and second, that the soil would lack fertility. If, however, these two difficulties can be overcome, possible success might result. The advice given our correspondent regarding treatment of the soil is good, and the Talman Sweet is a first-class stock for top grafting. In planting we would advise drawing as much good soil, with as large a proportion of humus as possible, and use it to fill in about the trees; cultivate thoroughly every year, either adding manure, or ploughing in clover or some such crop, and thus the best conditions will be afforded.

Some good winter varieties of apples are Ontario, Wealthy, York Imperial, Ben Davis, Pewaukee and Canada Red.

Best Single Geraniums.

1152. SIR,—Will you be kind enough to give me the names of the six (6) best single geraniums for bedding out. I refer to those having the largest stems and trusses. You can send the answer through the *Horticulturist*, if you wish.

C. HIRSCHMILLER.

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We have been testing over 260 varieties of geraniums at the College, and where there are so many excellent varieties to choose from, it is difficult to narrow the list down to half a dozen. Among the scarlet varieties there is a great range for choice, while among the whites the really first class