verse to the production of the crop. It is, however, possible to suggest one or two causes of shortage.

Many plants, of which the apple is perhaps the most familiar example, have the habit of bearing a heavy crop of fruit one year, and little or none the next. This is to be explained by the drain which the production of flowers and fruit makes upon the reserve food of the plant, leaving but a small surplus for the formation of next year's flower-buds, a process which must take place contemporaneously with the building up of fruit tissue. In the 'off' year, however, this drain is relatively trifling, and the number of flower-buds formed is proportionately great. It is probable that a similar but less pronounced condition in the partridge-berry is partially responsible for variation in the crop. No remedy for this exists while the plants are in the wild state; in cultivation it might be possible to mow the flowering tips from alternate sides of a field in alternate years, thus allowing one side to bear this year, let us say, while the other side is kept from bearing, and consequently is encouraged to form a large number of flower buds for next year. This suggestion is put forward with some hesitation, as it is not yet backed by any experimental or observational data.

Weather.

A more likely cause of crop failure is prevalence of wet calm weather in the flowering season, preventing the transport of pollen, and consequently the setting of the fruit. A possible remedy is the keeping of bees, which by their visits to the blossoms will transport the pollen and secure the fertilization of the ovules. Upon the practicability of bee-keeping in Newfoundland, I desire to reserve report until a later date.

A possible but unlikely cause of shortage is an epidemic of one of the fungous diseases or insect pests to which the plant is now liable. The possibility of reduction of the crop by injury to the flower-buds in picking time exists, but it may under present conditions be safely left out of consideration.

VII.—CULTIVATION.

As I have from time to time pointed out in the foregoing pages, there are several sorts of conditions in the environment of the partridge-berry which must go unremedied until we have it under cultivation and under our control. Moreover, the plant is being gradually ousted from the barrens, and if the crops are not to be diminished on that account in the future, we must resort either to cultivation, or else burn the barrens again and start afresh. The second alternative is undesirable, for we run serious risk of overdoing things, and by burning a little too deeply, acquiring, not a new berry-barren but a tract of bare rock. Cultivation should therefore be tried, and it is the purpose of the present section to give as full directions for trial as possible.

The Soil.

The soil in which cultivation is most likely to be successful is of course that in which the plant grows naturally, the soil of the barrens; and while it is not necessarily true that the plant will grow in that soil only and in no other, the ensuing directions are drawn to fit that soil.

Selection of Ground.

The spot selected for the trial ground should be on a gentle slope, and should face toward the sun and away from the prevailing winds. Observe on which side of the alder-bushes the berry-plants are most abundant and thrifty, and choose a slope which has the same direction. It is now necessary to make sure that the soil is sufficiently deep over the required area to permit cultivation. This can be ascertained by the use of a probe. An ordinary crow-bar is convenient but a pick-axe will answer very well. This should be thrust into the ground at frequent intervals, and no area should be selected which does not possess, over most of its surface, at least six inches between the top of the turf and the rock.

Clearing.

After a suitable spot of ground has been chosen, it should be cleared of