

potatoes, than that which was lately in grass. There being no half-decayed grass to keep the ground loose and open, the roots of the crop penetrate but little into the soil, and are soon injured by a slight drought, which, checking the growth of the leaves, and increasing the roots, exposes them to be nearly drowned by sudden showers of rain, there not being sufficient leaf to dispose of the moisture taken up by the roots. Should such a change from dry to very wet weather happen when grain is in the milk, or potatoes nearly out of blossom, they are frequently attacked with disease, when no injury is received by these crops upon land which was in grass a year or two before.

### CUCUMBER INSECT.

This mischievous animalcule is believed to have been imported from Boston more than forty years ago, in the rinds of watermelons, which were full of them. During a succession of warm seasons they spread far and wide; and there were some years in which scarcely a cucumber fit for pickling could be found near Halifax after the month of August. In the cold seasons that followed the warm summer of 1831 they nearly disappeared, being found only in hotbeds that were always confined to the same part of the garden, but this year they have appeared in many places upon land where Cucumbers had been raised from 12 to 20 years back, originating probably from eggs that have remained in a dormant state. The insect may be found in the black rotten spots upon the cucumber, and also in the center of all those vines which have curled leaves near their termination. It is white, in form resembling the snow-flea (*Podura nivis*), but so small that it cannot be distinctly seen without a magnifying glass. As there is reason, from past experience, to believe that these insects will be more numerous next year, should it prove a warm season, it will be well for those who design to cultivate this vegetable, so grateful to most people in hot weather, to use proper precautions to avoid them. The hot-bed frames and sashes should be white-washed with lime slacked in strong brine, and then placed at a distance from the bed. No part of the manure from the old bed should be used next Spring in making the new ones, which should be at a considerable distance from where cucumbers were grown the present year; and the cucumbers, squashes, and pumpkins in the open ground, should if possible, be planted where it is not remembered that ever they were grown before. There were several seasons in which all the cucumbers planted on cultivated ground were attacked by the insect—during those years nearly all the pickling cucumbers brought to market were raised, by the help of manure, on rough barren land which had never been cultivated. There are many who believe that watery vegetables are unwholesome in the hot season, and that they expose persons to the bowel complaints. This prejudice probably originated at the same period with another which still continues among some of the more ignorant class, that is, that fresh air and cold water must never be allowed to the sick: conceiving them to be equally mischievous. I will mention a few facts that I have observed. During a great part of the hottest August in the last fifty years, the weather was constantly calm and hazy, showers frequent, the air suffocating—the sun rarely visible, and the stars not seen at all. The nights being as warm as the days. Many vegetables were blighted, but cucumbers were of the best quality, and produced a much greater crop than was ever seen in Halifax before or since. Berries were also abundant and of superior quality. It was a sickly time in Halifax; bowel complaints were very frequent, and numbers were attacked with Cholera morbus. Having a very large family I took care that they should have through this hot

Season as many cucumbers as they chose to eat, generally three times a day; and also that they should be plentifully supplied with Berries. They continued in good health, as also did many others who used the same regimen, but all within my observation who were violently attacked were persons accustomed to live upon very solid food. Nature often points out to us our proper nourishment. In very hot weather fruit is of the best quality, and more grateful to our taste than solid food, but when the weather turns cold, the cucumber grows bitter, the delicious watermelon grows insipid, like the wretched specimens we import from Boston, the blackberry loses its taste, and all seem to say, "now let us alone, our season is past."

T. S.

### HEDGES.

In those parts of the Province where the land is sheltered by the hills from the Southwest sea breeze, or wherever the Apple tree thrives, it will make very good hedges, requiring little or no topping. They are common in some parts of France, and have been found very profitable. As they bear a small quantity of fruit among the thousands of trees in the hedges an apple of superior quality is occasionally produced; a great number of stocks are grafted with the new fruit, and then offered for sale, and frequently a considerable sum is realised in this way from a single tree.

In the South of France hedges are generally beech, and in the same country Cottages are often made of living beech, which was planted so close that the trees united as if they had been joined by grafting. As a fence the beech hedge exceeds all others in common use, being a solid wall of wood 6 or 7 feet high, surmounted with a green bushy top. As beech can hardly bear transplanting, the nuts are always planted where the hedge is required. This may be done in the fall if there should be no danger from field mice; but if the nuts are kept till spring, they must not be suffered to dry, as they would not vegetate after drying, but as soon as they are collected they should be packed in the damp beech leaves and kept where they will be exposed to the frost. They will then vegetate as quickly as oats if sowed in the spring.

T. S.

The Editors of the Albany Cultivator will please to accept our thanks for the package of their valuable papers, which they have so kindly furnished us with. We will make the best use possible of the valuable information which the columns of the Cultivator ever contain—by extracting that which is adopted to our climate and circumstances, and publishing it in the Colonial Farmer, for the benefit of Nova-Scotia Farmers.

### THE MARKET.

During the past month the average price of beef has been 30s @ 40s  $\text{P}$  100 lbs.; Mutton, 4d @ 6d  $\text{P}$  lb.; Butter, 10d @ 1s, by the firkin; some small lots have sold at 13d; Hay, £5 10 @ £6. Market dull.

N. N.

### CHAPTER OF FACTS.

**MATHEMATICS AND PHYSICS.**—If the square of the diameter of the circle be multiplied by .7854 the product is the area. If the diameter of a sphere be cubed and multiplied by .6236, the product is the solidity; and the square of the diameter multiplied by 3.14159 is the surface of the sphere.

To find the contents of a cask, add double the square of the bung diameter to the square of the head diameter, and multiply this sum by the head of the cask; then divide the product by 1077 for all gallons of 280 cubic inches each, or by 862 for wine gallons of 231 cubic inches each.

Quineux is one at each of four corners, and one in the middle.