

ing their tiny beak and sucking the vitality from the trees. Very soon a scale commences to form around them from an exudation, which is a secretion from the general surface. By August the impervious scale is complete. The eggs are then soon deposited and the parent louse dries up, and shrinks away to nothingness.

REMEDIES.

As the scale is impervious to most fluids, though oils will penetrate it and destroy the eggs, the best time to fight these insects is just after the eggs hatch. At this time soft soap or strong soap-suds sure death to the young lice. Hence, the trees should be washed the first week of June with soft soap, not only making the application to the trunk, but also to the main branches and limbs as far as possible.

IMPORTANT FACT.

We thus see that an application of soft soap to our apple trees, made the first week in June, is of exceeding value. It not only exterminates the sappers (bark lice), but banishes the miners (borers). We thus understand why our fruit trees thus treated seem fairly to laugh, as if grateful for such timely aid in banishing their enemies. I have no hesitation in affirming that the apple grower will find the above one of the most paying operations that he can undertake in his orchard. Let all, then, scrape their trees early in the spring, apply soft soap—not lye—the first of June, and again the first of July, not forgetting to adjust cloth bands by the last of June.—*Prof. A. J. Cook.*

Garden Pests.

STRIPED BUG, OR CUCUMBER BUG.

After trying many methods, I find nothing so cheap and effective as to keep a close watch, and as soon as the bugs appear, scatter wood ashes over the vines, either by hand or with a dredging box made for the purpose. To the Hubbard and other winter squashes, it should be applied both on the upper and under surface of the leaves. It is important to begin hostilities as soon as the bugs seem to determine upon a point of attack, and in order to confuse them—and it does assist greatly to distract their attention, and sometimes they quit in dismay even at this—whenever crossing the field I find they have begun operations, I at once scatter over them fine pulverized dirt to answer until some ashes and a dredging box can be brought to the front. Employing these means with promptness, I have rarely lost an acre of vines from their ravages, though I can boast of as many billions of bugs to the acre as any man on this continent.

CUT WORMS.

If balls of fresh clover or other green grass be scattered throughout the field, the cut worms are said to be attracted to them and crawl into them, where they can easily be destroyed. But this cannot be entirely effective, especially on sandy land badly infested, and close watch must be kept, and whenever traces of their work are seen they must be dug out and killed. With early tomatoes and other early crops which would justify the expense, I have saved the crop by scraping away the dirt at the surface and applying from a pepper box Paris green mixed with flour or plaster. Under this treatment—though many plants are attacked—yet little damage is done. Tomatoes in particular, when eaten half off, do not seem to suffer much from it.

COLORADO POTATO BEETLE.

A tablespoonful of Paris green in a ten quart pail of water, applied with a fine rose sprinkler, having but half the usual number of holes, is at once the cheapest, most effective, safe and lasting method of applying poison. Two applications usually answer for the season.

CABBAGE OR TURNIP FLEA.

This little pest often eats off the young plants so soon after they break through the surface that if close watch has not been kept an inexperienced person would believe the seed had never grown. An application of ashes scattered highly along the rows at the earliest possible moment will generally save the crop.

In extensive field culture of turnips, immediate re-sowing of the crop as soon as the loss is discovered, is perhaps the best course. To be sure of cabbage plants, the only safe course is to make several sowings a few days apart. Worm eaten turnips are due to their growth on old soils. Ashes scattered along the rows at the

time of sowing will often prevent, but new soil, not more than two years from the sod, is always to be preferred.

Woody and tough radishes occur on soils so heavy that roots have not made a thrifty growth. The early varieties should not be sown after the middle of May, but the summer sorts instead.

Lice in cabbage are usually due to a slow growth, either on account of poor soil, drouth, or other causes, and can better be prevented than cured. An application of a pinch of salt to each head often proves of service; but plenty of manure and liberal and constant use of the hoe and cultivator are the best preventives.

Galvanized Wire Baskets.

Messrs. Crooker Bros. & Co., of Wellington Square, Ont., are, we believe, the most extensive manufacturers of wire baskets in Canada; in fact, there is no establishment that we have heard of that has ever turned out such large quantities of baskets, or of such good quality. They manufacture now sixty different sizes and kinds of baskets, differing in usefulness, ornament and size from the large barn baskets for chaff, to the smallest sizes for holding eggs.

Their ornamental flower baskets are very neat and handsome; the ladies' work baskets are branched, and look and are very useful and neat. They have made a great improvement in the root baskets, as they are now much strengthened by having an additional twist given to the wire. The galvanizing is rather an expensive process, as one half of the rank used is wasted in dross. These galvanized baskets must gradually come into use. Their baskets for packing up potatoes and for putting potatoes in, and for putting them in pots for boiling, must be approved of as soon as seen. This is rather a new business, and we hope will be found a profitable one in our country.

Shorthorn Sale.

Mr. Seth Heacock, of Kettleby, Ont., sold 12 head on the Provincial Fair Grounds in Toronto, the day after Messrs. Beattie, Miller and Cochran's sale. The following is a list of the prices:—Belle of King, John R. Craig, \$70; Carlotta, M. J. Corkery and W. Long, Thornhill, \$195; Cherry Duchess, Corkery & Long, \$150; Daisy 4th, S. T. Spangler, Winthrop, Iowa, \$520; Minnie Herman, Corkery & Long, \$320; 2nd Duchess of Oakland, E. T. Noel, Nashville, Tenn., \$135; Susie Mowbray, S. T. Spangler, \$300; Carlotta 2nd, Corkery & Long, \$255; Wallflower 10th, S. T. Spangler, \$200; Oakland Duke 2nd, John Little, Greenwood, Ont., \$100; Alpheas Oxford, S. T. Spangler, \$460.

Cheese Making in Canada.

There has been something of a revolution in cheese making in the Dominion since 1870. The total production in 1870, was 4,984,843 pounds of home made, and the value of this made in factories was, 1,601,738. But in 1873 the exports rose to 19,483,211 pounds, while last year the quantity rose to 24,050,982 pounds.

Hall's *Journal of Health* urges rest from stimulating brain labor. Insanity, it says, always comes on with increasing sleeplessness, and the first step toward recovery is a growing ability to sleep. Too much business stimulates the brain; and if this is continued too long the inevitable results are either insanity, paralysis or apoplexy. Insanity is caused by too much blood being in the arteries of the brain; paralysis is a loss of power—the parts have worked so much they can work no more; apoplexy is when the vessels of the brain are so full, so distended, that they are ruptured. The person who is kept up to the working point by any artificial stimulant runs a dangerous risk of losing life or reason.

Condition and Changes of Eggs.

The late Prof. Agassiz, in a lecture in which he told that the egg is the origin of all animal life, stated the following in relation to the properties and changes in the eggs of fowls:

It appears to have been really ascertained, and the fact is important, that the albumen of the egg of the common fowl, newly laid, has properties differing in some particulars from those of the stale egg. One of these, and that which is best known, is the milkiness which it exhibits when dressed for the table, provided the egg be not put into water of too high temperature, and kept there unduly long; another is seen in the matter coagulating.

Experiments show that the white of the newly laid egg is more readily affected by heat of a certain temperature, than that of an egg exposed to the air, as indicated by the appearance of milkiness it presents—and yet that, within a certain range of temperature the amount of coagulation or the degree of firmness is less. That a difference in qualities should result from exposure to, and the action of, atmospheric air, can hardly be doubted. The newly-laid egg contains, of course, little or no air; and, if atmospheric air be excluded, and its absorption prevented, as by lubricating the shell with oil or any oleaginous matter, the albumen retains for a considerable time the qualities of the newly-laid egg.

The fact just stated is familiar to all experienced and observing egg dealers. The exact time, however, for the change to take place is believed to vary in some measure according to the season, a shorter time in Winter being required than in Summer—the egg, in the former season, owing to a lower atmospheric temperature, contracting more in bulk as regards its substance than in the latter. A very few days, five or six at farthest, seem to be sufficient.

It is also ascertained that, with the absorption of oxygen, in the instance of the stale egg, carbonic acid is formed, and ammonia, and the color of the albumen is darkened, it becoming of a light brownish yellow, and at the same time acquiring an unpleasant smell and taste. But the putrefactive process does not take place, however long the egg may be kept, unless there be some admixture of the yolk and white.

Death to Potato Bugs Without Paris Green.

One lb. sulphur and one lb. quick-lime, mixed in four gallons of water, is said to be death to the bugs, and is preferred by many to the use of Paris Green. We have not yet tried this, but intend doing so.

A Step in the Right Direction.

The members of the Forest City Grange, Pioneer Grange and Delaware Grange, are offering rewards for the conviction of persons destroying insectivorous birds.

"We read in de good book," says a colored Baptist brother down South, "of John de Baptist—member of John de Methodist. And that is the reason most of the colored Southern people are Baptists."

Market Report.

The reports of crops throughout the country being light, has had its effect on our markets. We consequently find prices firmer, though with little advance. The very favorable change in the weather these few days has raised the spirits of the farmers, and though much of the winter wheat was injured beyond recovery by the spring frosts, there has been a great improvement in the spring crops. The reports from the Western States, on the whole, give promise of good yield; the majority of reports indicating at least an average condition. The prospect in Great Britain and the Continent of Europe is always of the highest importance to producers of bread-stuffs. So far as heard from, the weather in England has been propitious, and the prospects of a good return at least fair; markets continue to rule low. On the Continent there is, in most countries, a promise of good crops. In others, as in some sections of France, the prospects are not good.

LIVERPOOL, JUNE 25.—Weather fair. Breadstuffs dull. Flour, 21s to 22s; wheat, 8s to 9s 2d; barley, 3s 4d; oats, 3s 4d; corn, 31s to 32s; peas, 30s; pork 32s; cheese, 58c.

CHICAGO MARKET.—Wheat, 94c to \$1.02; corn, 65c to 66c; oats, 46c to 50c; rye and barley quiet and unchanged.

TORONTO MARKET.—Continues dull and unchanged in price for wheat and oats.

LONDON, ONT., MARKET.—Wheat, per cental—Deihl, \$1.00 to \$1.70; Treadwell, \$1.55 to \$1.57; Spring Wheat, \$1.55 to \$1.68; Barley, \$1.25 to \$1.30; peas, \$1.20 to \$1.30; oats, \$1.30 to \$1.32; corn, \$1.20 to \$1.30; beans, 90c to \$1.25; rye, \$1.10 to \$1.20; buckwheat, \$1.15 to \$1.25; keg butter, 16c to 17c; roll butter, 18c to 22c; cheese, 8c to 10c; hay, per ton, \$15 to \$20; fleece wool, 36c to 38c; potatoes, \$1.00; cordwood, \$3.75 to \$4.00; flour, \$2.25 to \$2.75; oatmeal, \$2.75 to \$3.00; corn meal, \$1.75 to \$2.00; rye flour, \$1.75 to \$2.00.

As certainly as expect our grain to seed without besto tion and preparati of care as much as of system in its cu be attributed the ferior quality, of to a comparison be or of any of the ce and purest of the

All grain has a and this degenerat vented, by due ca accelerated by the It is also apt to be ferior grains and s that we can, by ca improve the stand

None other tha grain should be us foul sample should seed from grain th the winnowing or separating the gra well as seeds of w sure that your pu You must rely sellder, as you can growing crops. seed, be careful in This is too import Grain threshed by jured for seed in t many grains neve have known so threshers were pr in the barn instea might not bruise a seed, by treading ing was by the fla there of care whe

In selecting see all, to see that it Farmers should, a the introduction o of the fungus tri farmers in some hardly needs desc know its appeara It is most deleter diseased ear utter never be sown fro as the spores of s to affect the crop as to escape obs naked eye. In subject, the Mic the spores are so of them could be surface. And germinating pow guarding against ing seed in which

We are not wi vention of smut. the spores may sometimes fail i