

standing this fact, let a man make a calculation of the amount of this substance he will use upon an acre in destroying the potato beetle for one year, and then satisfy himself that he is willing to sow that amount of an active poison which must become a part of the soil, upon his land, before he continues the use of it himself, or advocates its general use. It is not merely a question of the present.—What is to become of this mineral poison in the future? It may never be a source of evil, but no one can avoid feeling a little distrust upon the subject.

There are the main reasons why I have so often objected to its use, and I still feel that those who use it, and advise others to do the same, do not fully realize that the danger is not past when the substance has been sifted upon the plants and no one has been poisoned. At least it cannot be too often or too emphatically brought before the public that in using Paris Green they are sowing upon their land a deadly poison which will remain there as one of its constituents, unless removed by those slow natural solvents which are constantly at work decomposing the mineral ingredients of the soil. W. W. DANIELLS, University of Wisconsin, June, 1871.

PARIS GREEN AND ITS EFFECTS.

It is well that the subject of Paris Green as an insect destroyer promises to be well ventilated, as it is now being used so extensively. But what we want are the facts as regards its effects on vegetation, and if there is danger to life or health in the use of it let it be shown up. Three or four years' use of it in a community would seem to develop the danger, if any, but as yet I have seen nor heard of none in these parts.

I see that Prof. Daniells asserts that the quality of the potato is injured by its use; it may be, but how? Is it absorbed by the vines and carried to the tuber? I heard this so stated three years ago, but the person so believing then uses the article now, and has no fear of injury either to the potato or those eating them.

Others as well as myself have raised as good a quality of potatoes where the poison has been used as could be wished; but the past season the quality of them of all sorts was inferior, which may be safely attributed to the hot season rather than to the effects of the poison.

As regards the degree of strength necessary in using to kill the beetle, I can say that I know from experience, both the present season and the last, that if reduced thirty times it will kill the beetles, but it requires time enough for them to eat the leaves to which it is applied before it takes effect, for their coat of mail is impervious to poisons. Yesterday I put some of them into diluted carbolic acid, and twenty-four hours afterwards many of them were alive and kicking. But when the Paris Green mixture is applied to the younger bugs or grubs it takes effect immediately, and adheres to them and is absorbed. A friend of mine, who is reliable, says he has reduced it forty times, and it had the effect on the young, but not as quickly, yet I doubt if it would be sufficiently strong to kill the old.

I hope there are some who, with a well-developed crop of cucurbits on their trees, will try the effect of the Paris Green mixture on them. If they find it effectual in destroying the "Little Turk," and saving some of their fruit, they will not be obliged to eat it if they think there is danger of being poisoned, but they will have the satisfaction of having used the enemy, and no seed sown for a crop of them another year.

Berlin, Wis.

G. N. SMITH.

DETERIORATION OF VARIETIES OF POTATOES.—Mr. W. Patterson of Dundee,

Scotland, after experimenting with the potato for many years, and in many ways, is of the opinion that any variety of potato is gradually weakened by repeated planting, and that each would ultimately die out; new kinds produced from the seed are the only hope of preservation of full health and vigor. This is not a new opinion, and it certainly is reasonable, not only in view of observed facts, but because the theory is based on good sound reasoning. An important suggestion made by Mr. Patterson is that this work of producing new varieties from the seed should go on steadily, not waiting until varieties fail and then attempt the production of vigorous new varieties from seed produced by the failing variety.

How to Have Good Mutton.

The sheep is a delicate feeder, and makes one of the most delicious and digestible of all the butchers' meats. Like most animals, it improves in flavor by age, and attains its perfection, in most breeds, at the age of three years, when it makes, in Daniel Webster's language, red-mutton—so called because the gravy, though well done, is red and of high flavor. In feeding sheep for the luxurious table, there should be but few together, which allows them greater variety of food and more repose. In large flocks the strong sheep monopolize the best herbs and grasses, and the weakest ones are poor and mean meat; besides, there are always restless sheep where many feed together, and the others are ill at ease while any are on foot. Sheep well-grazed are better than the stall fed, and have that "gamey" and juicy flesh so liked by epicures. The best table sheep in the British-isles are the small Welsh breed, which have the wide range of those mountains.

But the best sheep in the world are often spoiled by bad butchering, and I propose to show how this should be done. Many persons become disgusted with, and never eat, mutton, because of what they term the "wool-taste." Now, a sheep well dressed, may be wrapped in the skin and wool, as well as in the purest linen, and never have a "wool flavor." The intestines of the sheep are, like those of all the ruminating animals, very long and powerful in capillary absorption; and, if allowed to remain in the body after death, infuse the odor and flavor of their contents into the meat, and thus give that ill taste. Everything, then, depends upon rapid dressing. While yet alive, the sheep should be suspended by the hind legs, well apart, to two pegs or hooks, to a cross-timber, so that the body may be easily reached on all sides without turning it. The butcher should be prepared, with a sharp knife, ax, meat saw, thread and water; also, with a block, or low stool, to stand upon, if need be; for the sheep, when suspended, is too long generally to be reached in all parts. The throat should then be cut, severing both arteries, and the blood entirely let out. (If Professor Bergh is about, the animal may be knocked on the back of the head with the pole of the ax before using the knife.) The skin should then be rapidly taken off, at least from the parts to be cut in taking out the intestines, and pinned back, so as freely to allow that operation. This finished, the blood should be well washed out by casting on the body clean water freely. Should the intestines at any time be broken, let them be tied up at once, and the soiled parts well cleaned.

The body should then hang until it is well dry, when it is ready for use. Mutton (and all meats) never ought to be salted, if possible, until it is ready for the cook. Salt absorbs the juices, dries and preserves the meat, but spoils the flavor. Meat should be hung in a cool, dry place, so that all parts may be aired. Do not allow it to become frozen, but if frozen, it should be used at once, if possible. In some parts of Mexico, beef will hang in the air for weeks in the warmest weather, because of the dryness of the climate. The Indians and hunters dry their meats with slow fires.—*Am. Agriculturist.*

BOUGHTON WHEAT.—The Boughton is not a new variety. We have known it in Western New York for a dozen or fifteen years. It was introduced there from Maryland. It ripened early, and could be grown in sections where the Soules was seriously injured by the midge. It never became, however, a favorite variety. On good, rich land it produced a fair crop of handsome wheat, but in unfavorable seasons, or on poor, undrained land, it was apt to winter-kill. The Diehl has all the good qualities of the Boughton, and is early enough to escape the midge, and is not so liable to winter-kill, or be smothered by heavy snows. We believe the Tappahanoe, Boughton, and Early May are one and the same variety.

Conjugal Attentions.

The duties of husbands are thus laid down in a discourse by the Rev. Dr. William Aikman:—"The first duty of husbands is to sympathize with their wives in all their cares and labors. Men are apt to forget, in the perplexities and annoyances of business, that home cares are also annoying, and try the patience and strength of their wives. They come home expecting sympathy and attention, but are too apt to have none to give. A single kindly word or look that tells his thought of her and her troubles, would lift the weight of care from her heart. Secondly—Husbands should make confidants of their wives, consulting them on their plans and prospects, and especially on their troubles and embarrassments. A woman's intuition is often better than all his wisdom and shrewdness, and all her ready sympathy and interest is a powerful aid to his efforts for their mutual welfare. Thirdly—Men should show their love for their wives in constant attention, in their manner of treating them, and in the trifling offices of affection which may be hardly noticeable, but which make all the difference between a life of sad and undefined longing, and cheery, happy existence. Above all, men should beware of treating their wives with rudeness and incivility, as if they were the only person not entitled to their consideration and respect. They should think of their sensitive feelings and their need of sympathy, and 'never let the fire of love go out, or cease to show that the flame is burning with unabated fervor.'"

Keeping Poultry in Orchards.

A writer in an exchange says the public has yet to learn the full advantages of keeping poultry. Few seem to appreciate what they may do among trees in an orchard of a quarter of an acre, where they may be kept by a picket fence four or five feet high, putting in say 125 fowls, and observe the result. He will avoid the annoyance in the garden of which so many complain, while they will work among the trees, doing just what is needed; keeping the ground well cultivated, and destroying everything that can injure the fruit, in the shape of bugs, worms, or other insects; lay a large number of eggs, which are a cash article, to say nothing of the chickens which will pay for raising at the present time. I have about 100 fowls, which have worked admirably among my trees, keeping the ground in good condition, keeping off the insects, and promoting the growth of the orchard. I am satisfied that we have yet to learn the full benefit which may be derived from the proper management of fowls, and it is quite possible that the method that I have suggested may offer the best way of getting your apple orchard into bearing condition again.

Swamps—Drainage.

A proper degree of draining tends to protect crops from injuries which are the result of excess of moisture, and contributes materially to ensure their success. This operation alone, has often been sufficient to render extensive sterile plains exceedingly fertile.

There are probably very few farms of any extent, on which drains are not more or less necessary. Swamps and bogs exist in most sections, and those can never be profitably worked, or rendered of any essential benefit to their possessors till they have been thoroughly ameliorated by opening channels for the passage of all the superabundant water they contain. Draining, in this case, must necessarily precede all other improvements, and if it be not thoroughly and systematically accomplished, the operator will find all his subsequent efforts of no avail.

As an instance of successful and economical draining, we may mention the case of the Rev. D. Huntington, from whose communication to the committee of the Hampshire and Hampden Agricultural Society, we gather the following facts:

"A few years since," says Mr. H., "this land was a swamp covered with bogs and brakes and bushes—the haunt of snakes and frogs and mud-turtles—an entire waste." It was not only useless, but being located in the immediate vicinity of his homestead, was a constant eyesore, and probably unhealthy. In reclaiming it, he first cut the bushes, and then opened a ditch three feet wide, and two and a half feet deep, extending through its whole length. The bog-heads were then cut, taking off the entire surface where it was thought to be necessary, and removed to an adjacent lot, the soil of which was sandy. Here they were made to act as manure, and being intimately mixed with it, they soon so far improved its capacities, as fully to recompense him for the cost and trouble involved in their removal.

The greater part of this soil has had crops upon it, and some parts repeatedly, and the whole, at the time the report was presented to the committee, was fit for the plow. What the expense was, Mr. H. expresses himself unable to state, but was confident it bore no proportion to the improved value of the land. The cutting the bushes, opening the ditch and removing the "bog-heads," could not involve a very heavy outlay, as the work was performed at "odd jobs," and when, probably, the men had nothing else to do. The *Northampton Courter*, in speaking of this subject says:

"As to intrinsic value, lands thus redeemed are to be ranked with the very best. For some crops, broom-corn and beans for instance, other soils are preferable. But for the standard, substantial crops of Indian corn, potatoes, oats and different kinds of grasses raised in our valley, experience will show abundantly, that we have no better lands than those thus reclaimed. Having nothing in view but to subdue and improve them as well as possible, he has never been particular to ascertain precisely the quantity of crops raised. Compared with those raised on the alluvial lands adjoining, however, they will in the proper season of crops, speak for themselves and the soil that produces them. In some respects the soil of reclaimed lands has manifestly the advantage. It is naturally richer. Having for its basis clay or hard pan, it retains the manure put upon it much longer. It is easily cultivated, and excepting those portions of the alluvial which are benefited by freshets, it is, to say the least, as easily kept in good heart."

Covered drains are used to a considerable extent, and answer all the purposes of draining admirably, while they may be plowed over and cultivated as are other parts of the land, so that there is no loss of surface and no disfigurement of the fair face of the field.

These drains are constructed of various materials. They will last for many years made of brush laid lengthwise in the ditch; but if a gullet is made at the bottom six inches square by staking, and the ditch filled with small stones to within twelve inches of the top of the ground it will make a ditch that will last a lifetime.

Brush drains may answer the desired purpose, where stones cannot be obtained; yet, we question whether it would be best to lay down such works where permanent drains are required. A field drained with good and permanent covered drains, presents a neat appearance; there are no ridges or gutters, but the entire surface is level and unbroken. A cheap and convenient article may now be had in *draining tile*, which possesses a permanent efficiency and value. It is made of various sizes, with and without bottoms, and some of it perforated on the sides so as to receive the water at whatever point it may flow in upon them.

We have covered drains across a twelve acre lot, diagonally, made of stones, with a six inch gullet, which has supplied us with twenty hundred gallons of pure water every twenty four hours through all the late drought. On the ground thus drained we have just cut, by the estimation of good judges, a crop of hard grass, red top and clover, equal to three tons to the acre, where two years ago only one ton of meadow grass, skunk cabbage, hardhack and hassock grass grew.

Where stones are plentiful on the farm, they are the material we ought to use in under-draining. If stones cannot be had, draining tile, which can now be obtained at most of our Agricultural warehouses, are far more preferable than wood, and will be found more efficient, as well as more profitable, in the end.—*N. E. Far.*

A gentleman relates that many years ago he was on a visit to the Isle of Man, and during his walks he strolled into the quiet churchyard, where reposed the bodies of many a faithful and humble Christian. Near a grave in the corner of the churchyard he noticed a lady with a little girl (the latter about twelve years of age) to whom she was relating the story of the Dairyman's Daughter, whose remains lay beneath their feet. As the lady proceeded with the narrative, he observed the little girl lift up her eyes filled with tears, and heard her say that she would try and be as good as the Dairyman's Daughter had been. After planting a beautiful lily on the grave, they walked slowly away. The gentleman, upon making inquiry, found that the lady was the Duchess of Kent, and the little girl her daughter. The latter is now the Queen of England.

CURIOUS CASE AT LAW.—At a recent sitting of the Division Court at Catarqui one farmer sued another for damages, laid at \$10, done to his horses' tails. The plaintiff had three horses in pasture, and in this pasture his neighbor's calf was allowed to feed. The calf eat off the tails of the three horses. The owner of the calf knew its propensity, for it had previously eaten the tail off his own horse. The Judge at once allowed the amount claimed, and thought the amount low.