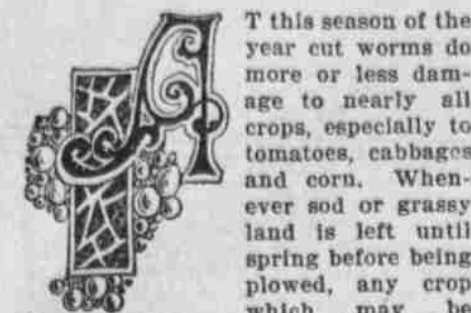


FARM AND GARDEN.

MATTERS OF INTEREST TO AGRICULTURISTS.

Some Up-to-Date Hints About Cultivation of the Soil and Yields Thereof—Horticulture, Viticulture and Floriculture.



AT this season of the year cut worms do more or less damage to nearly all crops, especially to tomatoes, cabbages and corn. Whenever sod or grassy land is left until spring before being plowed, any crop which may be planted on such land will be damaged by cut worms. The reason of this is that the worms are nearly full grown in the spring, yet they need one good meal before forming into pupae, a short time after which they come forth as night flying moths. The life history of the cut worms is about this: The moths lay their eggs in grass throughout the summer months, and after a few days these eggs hatch into small worms which feed upon the grass. The worms cast off their skin from time to time to accommodate their increase in size, and during the cooler weather of winter go deeper in the ground, being dormant for a time if the weather is very cold. Upon the approach of spring, the worms come forth for a finishing touch of growth and soon form pupae in the ground just below the surface. Some time after this the moths are produced, and, after mating, the females lay the eggs for another brood. With most species there is thus but one brood a year. Most farmers are beginning to realize the many advantages of fall plowing, and where sod land especially is plowed in the fall it will greatly lessen the number of cut worms and other insects on such land the following spring. A good remedy for killing out the cut worms in the garden is to make up a mixture consisting of a quantity of bran or corn meal moistened with water, to which is added a little Paris green and a little molasses or sugar, to give a sweetish taste. It is the Paris green that kills the worms, and this should be very thoroughly mixed with the bran, so as to have a uniform mixture. A spoonful of this mixture should be placed near the plants just before night on the day the plants are set out. The cut worms work at night and will be killed by eating of the poisoned mixture. It is much better, however, to place the mixture about in various part of a field a few days before planting, as it will then kill off the worms before any damage is done. H. E. Weed, Entomologist Mississippi Experiment Station, Agricultural College, Miss.

Origin of the Cabbage.

Cabbage (*Brassica oleracea*) is one of the vegetables brought into use at an early day, and although not so indispensable as the potato, is nevertheless an excellent highly esteemed and has assumed an importance that gives it a prominent position, not only in the horticultural catalogue, but also in estimating the productions of our country. I have no statistics by which to estimate its value in this country, but when we learn that in London about one hundred million heads are annually sold, which, at five cents a head, would amount to \$5,000,000 we may be prepared to estimate the amount raised in Illinois at a sum worthy of being taken into consideration in estimating the value of our productions. Just when and where it was first brought into use it is not possible to state now with certainty. A comparatively recent article in *Hardwicke's Science Gossip* says that the plant from which the varieties in use in England originated is to be found along the southeast coast of England. But it is certain that some of the varieties were early in use on the western side of the continent; also that kales or coleworts of some kind were long in use in Greece and Rome, as they are frequently mentioned by Greek and Roman writers and even directions given for their cultivation. It is also certain that various species of *Brassica* are found in different parts of the world.—Cyrus Thomas.

Australian Salt Bush.

In view of the great interest now being taken in Australian salt bush (*Atriplex semibaccatum*), the new forage plant for alkali soils, Director Devol of the Experiment Station at Tucson, Arizona, sends the following brief method of growing it:

The seeds are flat, somewhat heart-shaped, about 1-10 inch long and of a brownish or reddish green color. If covered in wet soil when fresh they are apt to rot, but sown before a rain and lightly covered with soil, or preferably covered with grass or weeds and kept moderately moist they will germinate readily. They may be started in boxes or hotbeds and transplanted to the field; but plants grown in this way do not resist drought so well as those planted where they are to remain. While young the plants require watering two or three times, but when well established they will resist quite severe droughts. Although a perennial plant it grows so rapidly that one cutting may be obtained the first season, and two the following season. It will grow in soil having more alkali than any other plant valuable for forage, and unlike most plants growing upon such soil it has a prostrate habit, growing to a height of but 6 to 12 inches and spreading over several square feet of ground. Single plants have been known to reach a spread of 16 feet, this, too, upon very alkaline soil. It is estimated that from 3 to 6 tons per acre of dried hay may be produced. Sheep and hogs relish it green and when mixed with about 1-3 its weight of other hay horses and cattle eat it dried.

Varieties of Strawberries.

It is almost impossible to advise the beginner what variety to plant. A variety which is very productive in one locality may prove the reverse in another, sometimes even in another field, soil, exposure and location being different. No variety will do equally well on all soils. Reports in regard to varieties are very conflicting in different localities. While one grower is satisfied and recommends a variety, another is disgusted and is going to discard it. In general, we may say that those sorts which are successfully cultivated over a large territory are most reliable; but he who goes a long way from home to get advice in regard to varieties and treatment makes a serious mistake. These problems are purely local. The purpose for which we plant should be considered, i. e., whether for home use or for market. For home use we may consider the characters of a variety in this manner: 1, quality, 2, yield, 3, hardiness. For market, this order should be reversed, thus: 1, hardiness, 2, yield, 3, quality. For market we want a firm berry of good size and color. Of the varieties grown on the Experimental Farm at Madison last summer, Warfield led them all in productiveness, yielding a third more than any other variety. Then came Haverland, Cloud, Eureka, Lady Rusk, Van Deman, Wilson and Bubach. This was the second crop taken from these vines.—A. M. Ten Eyck.

Chinich Bug Lays Flat Land.

It is a plain inhabiting insect, but it may inhabit very limited, flat areas, interspersed among more broken and elevated areas. As illustrating this habit in Ohio, it may be stated that in 1894, it was found quite abundant in Champaign, Logan and Hardin counties, with its greatest abundance in the latter and Wyandot county to the northeast, the two latter being of a more level topography than the two former. This is fully illustrated by maps in Bulletin 69, of the Ohio Exp. Station. In 1895, the area of greatest abundance included only Wyandot and a portion of Hardin counties, Champaign suffering little, while to the south in Green and Clark counties, where, in 1894, it had been found sparingly, it did not occur in abundance at all, thus showing that it had drifted to the lower and flatter lands to the east, except in Wyandot and a portion of Hardin, where these conditions already obtained, and over-run a wide range of practically flat country having a clay soil. A portion of the state lying to the west and north west of Lake Erie, being the ancient bed of the preglacial lake, and the soil sandy instead of clayey, was little if at all infested, whereas, the flat clay lands to the south and west were, in some localities literally overrun with these insects.—Ohio Bulletin.

Why Bees Work in the Dark.

Bees go out all day gathering honey and work at night in the hive, building their combs as perfectly as if an electric light were there all the time. Why do they prefer to work in the dark? is often asked. Every one knows that honey is a liquid with no solid sugar in it. After standing, it gradually assumes a crystalline appearance, or granulates, and ultimately becomes a solid mass. Honey has been experimentally enclosed in well corked flasks, some of which were kept in perfect darkness, while the others were exposed to the light. The result was that the portion exposed to the light soon crystallized while that kept in the dark remained unchanged. Here we see why the bees are so careful to obscure the glass windows which are placed in hives. The existence of the young depends on the liquidity of the saccharine food presented to them, and if the light were allowed access to this, it would, in all probability, prove fatal to the inmates of the hive.—Ex.

The Strawberry Bed.

The new strawberry plant should not be allowed to bear fruit the first season. Pick off all fruit stems as soon as they appear. Three methods of training the strawberry are in use. The hill system, where all runners are removed. The narrow row, where only part of new runners are allowed to form plants; and the full matted row, where plants are allowed to fill all the space, excepting a narrow path between rows. All have advocates and all have special merits, depending on soil, climate, variety and grower. The full matted row is most used, being easiest to manage. Guard against too many plants in small space. They consume moisture, suffer from drought and produce small berries. Each plant should have from four to six inches square space in which to grow and mature its fruits.—M. A. Thayer.

Extent of Tree Roots.

It is commonly said that the roots of trees extend each way as far as their branches. But this is a very uncertain and unreliable rule. There are trees like the chestnut and pines, which grow in sandy soil, which send their roots far down into the subsoil, and have so few roots near the surface that the plow can be run nearly up to them. The elm, which grows best on low, wet land, has most of its roots near the surface. But it can send roots down to a depth of a three-foot tile drain, as we once learned to our cost, a large elm near the upper end of a newly-laid tile drain completely filling it after two or three years, so that the tile had all to be taken up. The tree was cut down and the new tile laid, with the result that the drain suffered no further obstruction.—Ex.

Nitrogenous Fertilizers.

When a soil is rich in humus it is seldom necessary to make any further application of nitrogenous fertilizers, and as all nitrogenous fertilizers are very quickly soluble, and are soon lost to the soil by both leaching and volatilizing, they should never be used until the crop has made a considerable growth.

If the family cat lies with its back to the fire there will be a squall.

DISCIPLINE IN ALGIERS.

French Soldiers Tortured to Death For Slight Offences.

Another monstrous case of Algerian military discipline is reported. The victim this time was a soldier named Cheymol, brother of M. Paul Cheymol, says a Paris dispatch to the London News. He was sent, for some breach of rules, to a disciplinary company. This means a sort of penal servitude of the many fearful kinds that have survived the revolution.

The name of the sergeant set over Cheymol was Perrin. To humble him, Perrin ordered him to be tied by the wrists to a horse's tail, which was to be kept going at a brisk pace until the sergeant cried "enough!" After a long spell of this exercise Cheymol fell. The horse nevertheless was given rein and whip until it was evident that it was dragging not a living man, but a corpse.

A complaint has been sent by the brother to the war minister, but, as there was no breach of rule, he will probably wash his hands of the affair. M. Ernest Roche, however, has given notice of an interpellation, so that inquiry will be made between this and the 17th of May, when the chamber reassembles, of the head of the corps to which Private Cheymol belonged.

Deputy Rouanet, who was for three years in an African regiment which was not a disciplinary one, says that it was a hell upon earth. The officers and non-commissioned officers were brutalized by abstinence, by having no check of public opinion on their bad passions and by the arrogance arising from finding themselves masters of the Arabs.

He, too, was attached by the wrists to a horse's tail and had thus to go all the way in a blazing sun from Constantine to Batna, and thence to Biskra. The worst feature of this torture is the sense of loss of equilibrium. It is impossible to steady one's self, the arms being kept on the stretch, for care is taken to make the horse go at a pace which obliges the soldier tied to its tail to keep at a trot. He is absolutely powerless to prevent himself falling forward if he stumbles against a stone and when he falls he cannot rise unless the sergeant gives the order to the soldier riding the horse to stop.

Bad as were the physical conditions, the moral, M. Rouanet says, were a thousand times worse. There was no more prolific school of crime than the Algerian regiments. "Whose is the fault?" I asked. "The fault," was the reply, "is now that of parliament, which can do as it likes, but it was that old rascal, Louis Philippe, who invented the discipline of the African regiment to get rid of revolutionists in the army."

The first disciplinary use made of Algeria was in sending there, soon after 1830, the whole battalion of the Charter, which rose against Charles X., and was not satisfied to hear that the bourgeoisie monarchy was the best of republics."

CUNNING LITTLE ANIMALS.

Catching Moles is an Art That Requires Experience and Adroitness.

San Francisco Post: "No, boys, it isn't money that makes my pockets bulge out in that way, but it is the equivalent," remarked a gray-haired, gray-bearded rancher from Mendocino, as he took in the slack of a hay rope that did services for a belt. "To tell you the truth, my breeches pockets and my coat pockets too, are pretty well lined with moleskins. Within the last year I have developed into a mole hunter, and it pays. I have several acres in strawberries at Ukiah, and they need considerable water. I used to put in a lot of time digging little trenches and turning water this way and that, but it was disappointing to go out the next day and find that I had been irrigating a mole hill. I set watch on the little pests, and I soon learned their habits. Since then it is no trouble at all to get them. "In the first place, I found that a mole never comes straight to the top of the ground, but always on a slant, and you will see the ground agitated for some time before he throws up his hill. If you step within twenty feet of him when he comes to the top he will instantly stop work and run. It's no use to try to catch him then. "But a mole is the victim of habit. If he is disturbed at his work at 2 o'clock to-day he will not come back till exactly 2 o'clock to-morrow. You can set a watch by him and depend on its being right. Well, I watch around my berry patch and take the time whenever I disturb Mr. Mole. The next day when it is time for him to come back I take my station near the hole. As soon as he throws up his little mound I plant my foot behind him and close up his hole. Then all I have to do is to scoop him out of the dirt and drop him in my pocket, kicking and scratching like a good fellow. I kill him, stretch his skin on a shingle, and a man here in this city pays me \$1 a piece for them to make purses of."

The Use of "Ether."

An observant woman spoke recently of a conversation she had been having with a new acquaintance: "I thought her rather a superior person," she said, "until she let slip the touchstone 'ether.' Then I was on the watch. Pretty soon she followed it up with 'I had ought to,' just as I knew she would."

Not the Whisky.

The coroner's jury in the case of Bill Wilcox, who dropped dead Thursday evening after taking a drink at the Last Chance saloon, decided that it was not the whisky which brought about the sad end. Bill had been drinking the same brand for fourteen years, and although the vitriol in it would eat up a hairpin in ten minutes the coating of his stomach was supposed to be proof against any action of any sort of acid. He probably had some heart trouble. We think it must be so, because he asked for a drink to be "chalked down," and to his great amazement it was handed out. The surprise must have brought about a fatal shock to the nervous system. The deceased was a harmless, quiet, who never even kicked about the weather, and we hope he's brought up in a temperate climate. M. QUAD.

The Spots we see on others are nearly always on our own glasses.

Bitting into a peach reminds a man of kissing a girl with whiskers.

There are people who never care for music except when they pay the first fiddle.

Suburban Life.

Whether you know it or not that second year in the suburban house is a crisis and turning point in your life, for it will make of you either a city man or a suburban and it will surely save you from being, for all the rest of your days, that hideous betwixt and between thing, that uncanny creation of modern days of rapid transit, who fluctuates helplessly between one town and another; between town and city and between town and city again, seeking an impossible unattainable perfection and scattering remonstrant servant maids and disputed bills for repairs along his cheerless track.—Exchanges.

Trying Ordeals for Presidents.

It writing of the "Pardoning Power" (invested in the President) Hon. Benjamin Harrison says in *June Ladies' Home Journal*: "The papers in these murder cases are usually voluminous—a full record or an abstract of the evidence making part. If the trial seems to have been fairly conducted, and no new exculpatory evidence is produced, and the sentence does not seem to have been unduly severe, the president refuses to interfere. He cannot weigh the evidence as well as the judge and jury. They saw and heard the witnesses, and he has only a writing before him. It happens sometimes that the wife or mother of the condemned man comes in person to plead for mercy, and I know of no more trying ordeal than to hear their tearful and sobbing utterances, and to feel that a public duty requires that they be denied their prayer."

The question often asked—"Why are pupils of the New England Conservatory so uniformly successful as teachers or performers?"—is readily answered by those who have been fortunate enough to become acquainted with the institution. With an equipment superior to that of any other school with both American and foreign teachers of the highest rank, with Boston, the art center of America, to furnish the best opera and concert, it is easy to see why one year of study there is better than two elsewhere. Its prospectus is sent free.

Makes a Beautiful Gown.

Nothing could be more simple yet more beautiful than a gown made of the fine French organdie muslins, figured in shadowy designs of trailing roses and shaded green vines. The newest patterns are like a breath of early June, and one of these dainty gowns is made with a plain skirt finished with a deep hem, the bodice gathered into the neck and belt, and trimmed with braces of green velvet ribbon over the shoulders, with small pearl buckles half way down the front. Lace and velvet ribbon from the neckband, which has a buckled bow at the back, and velvet loops and ends fall on the skirt from the left side of the belt.

An Appeal for Assistance.

The man who is charitable to himself will listen to the more appeal for assistance made by his stomach. In the shape of divers dyspeptic quins and uneasy sensations in the regions of the glands that secrete his bile. Hockett's Stomach Bitters, my dear sir, or madam—as the case may be—is what you require. Hasten to use it. If you are troubled with heartburn, wind in the stomach, or note that your skin or the whites of your eyes are taking a sallow hue.

A Reminder.

Down the postoffice steps the Rev. Dr. Fythly carefully picked his way, then his feet suddenly shot out, and he went down right in the midst of a group of stock brokers. "Ah, good morning, doctor," laughed the stock brokers, recognizing the minister, "you remind us of the wicked man, whose foot slipped."

"Nay," retorted the good minister, "but rather do I seem like the man who went down Jericho." "How is that?" chorused the brokers. "Because he also fell among the thieves," murmured the doctor, as he got up and moved decoriously away.—New York Recorder.

Hall's Catarrh Cure

Is taken internally. Price, 75c.

Don't Drift Into the Critical Habit.

"Do not drift into the critical habit," writes Ruth Ashmore in discussing "The Critical Girl," in *June Ladies' Home Journal*. "Have an opinion, and a sensible one, above everything, but when you come to judge people remember that you see very little of what they really are, unless you winter and summer with them. Find the kindly, lovable nature of the man who knows little of books. Look for the beautiful self-sacrifice made daily by some woman who knows nothing about pictures, and teach yourself day in and day out to look for the best in everything. It is the every-day joys and sorrow, my dear girl, that go to make up life. It is not the one great sorrow, nor the one intense joy, it is the accumulation of the little ones that constitute living, so do not be critical of the little faults, and do be quick to find the little virtues and to praise them. So much that is good in people dies for want of encouragement. As I said before, have an opinion, and a well-thought-out one, and advise everything that comes into your life, but do not have too many opinions about people. Their hearts are not open books, and as you must be judged yourself some day, give them the kindest judgment now."

FITS stopped free and permanently cured. No more attacks. Dr. King's Great Peppermint Cure. Restores. Free trial bottle and treatise. Beware of cheap imitations. Dr. King, 221 Arch St., Philadelphia, Pa.

A Child Enjoys

The pleasant flavor, gentle action, and soothing effect of Syrup of Figs, and in need of a laxative, and if the father or mother be constipated or bilious, the most gratifying results follow its use; so that it is the best family remedy known and every family should have a bottle.

The Favorite Sleeve.

The favorite sleeve of the season combines a short puff with a mousquetaire fullness of the wrist. Although the severe coat sleeve is predicted for early fall, it has so far been seen only in conjunction with a few plain tailor gowns.

Pilo's Cure for Consumption is our only medicine for coughs and colds.—Mrs. C. Beitz, 439 8th Ave., Denver, Col., Nov. 8, '05.

A girl can talk for an hour of what she would if she had \$5 of her own.

If the Baby is Cutting Teeth, be sure and use that old and well-tried remedy, *Mrs. Wesson's Boonema Syrup for Children Teething*.

Some men are never content unless engaged in a conspiracy of some kind.

Irrigated Farms in the Milk River Valley.

Room for many farmers on ditches already constructed in the Milk River Valley of Montana and plenty of chances for colonies to locate on free land and establish ditches of their own. Ditches can be made at little expense other than labor with plows and scrapers, and there is no stony ground, just pure soil. Groves along the river and coal in the adjoining pasture bench lands. Finest opening for irrigation farmers in the Northwest. All the staple crops produced. Markets in the mines and good shipping facilities east and west, via Great Northern Railway. Write to Thomas O'Hanlon, Chinook, Mont., for further information.

The man who has the "big head" often wears a small hat.



The Bane of Beauty.
Beauty's bane is the fading or falling of the hair. Luxuriant tresses are far more to the matron than to the maid whose basket of charms is yet unfilled by time. Beautiful women will be glad to be reminded that falling or fading hair is unknown to those who use **Ayer's Hair Vigor.**

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