

THE FARM.

ABOUT THE ORCHARD.

In farming probably no other thing is so sadly neglected and so slovenly cared for, or not cared for, as the orchard. In going about the country every hand one sees orchards having every indication that the owner expected that all he had to do was to plant the tree, and after that it should care for itself, and supply him bountifully with fruit. The result causes the owner to affirm that orcharding is a failure. The majority of the owners of these neglected orchards would not think of planting any other crop and leave it to care for itself, and why should they expect it of the fruit? No business of any description can run itself and pay a dividend.

We will assume in the first place that an orchard has been properly planted in suitable soil which has been well fitted in every respect. Every detail about the care of it should be conducted in such a manner as to incur the least expense and at the same time have everything done well. Therefore we would use such implements as will do the work rapidly and leave the ground as nearly level as possible, and with the surface well pulverized, for the better condition the soil is in the better it will endure dry weather, and better it will endure the fibrous roots of the tree take up and assimilate whatever of plant food there is in the soil. The cultivation should be as shallow as possible and do not use the plow except when necessary for turning under some crop for green manure. We like to have a good cultivation once a week to ten days from the time the soil is in fit condition to be worked in the spring until the middle of July or August. Then the trees should be given an opportunity to ripen their wood and set buds for another season of fruitage. An orchard if cultivated too late in the season, especially if the weather be moist during the autumn will have tender branches which will be liable to be damaged by severe winter weather. The object of cultivation is not so much for keeping down weeds as to keep the surface fine to serve as a mulch for retaining and attracting moisture.

One who cultivates an orchard should be a careful man for no tree can be bruised in root or branch without injury. Of course the team should be a steady one. If one expects to receive large crops of fine fruit he must not neglect to fertilize well for no one must expect to receive something for nothing. No crop responds better to good fertilization than one of fruit, and the better the quality and larger the quantity of the fruit. It has been shown by experiment that in the fruit of the apple tree there is three times as much potash as nitrogen and more than four times as much as phosphoric acid, and that the quantity of nitrogen in the leaves is nearly double the quantity of potash and three times as great as the phosphoric acid, therefore potash and nitrogen must be supplied in abundance. We sometimes prefer to supply the potash in the form of kainit because it is destructive to insects and grubs in the soil, but the amount used should be two to four times as much as in the form of muriate of potash. Potash adds to the firmness, flavor and appearance of the fruit and for an orchard in full bearing 1,000 pounds per acre of muriate or sulphate can be used with profit and half that amount of phosphoric acid. The latter adds color to the foliage. Nitrogen is essential to the fruit tree and must be supplied in the fruit tree and must be supplied in some way. The cheapest way of supplying the nitrogen is by plowing under some green crop like crimson clover or cow peas. If the nitrogen is not furnished in this way perhaps nitrate of soda is the next cheapest form. We consider it economy to use crimson clover and in some sections it would be found beneficial to sow three to five bushels of clover to the acre with the pecks of oats to the acre with the clover thus giving a clover crop which will be a protection to the roots against freezing and thawing during the winter and early spring. The value of clover tops for nitrogen is found to be over \$10 per acre and the roots are worth over half that amount, and this is furnished at small expense, as six to eight quarts of seed is sufficient for an acre and can be bought for \$3 to \$4 per bushel. If one wishes to use a mixed fertilizer let one be used containing 10 to 12 per cent. of potash, seven to nine phosphoric acid and two to three of nitrogen varying the amount per acre according to the age and condition of the trees.

Pruning should be carefully attended to from the time an orchard is planted. If an orchard has been planted as we would do it, cutting back the entire top leaving not over two to two and one-half feet in case of the pear and four to five in case of the apple, then the trunks of the trees will early send out new shoots of which all unnecessary ones should be rubbed off while so tender that no injury will be done, and the tree will give its entire strength to the remaining ones. We prefer to five shoots leave more than three of the trees. Some to form the head of the trees. Some object to summer pruning but we believe in and practise it. The tree should be carefully watched and whenever a shoot starts where it is not wanted it should be removed by pinching off with thumb and finger, so that no wound of consequence will be made, and no suckers will start as from a larger wound. We dislike to remove a branch of much size, but there are great a shock to the tree, but there are cases when it can be avoided as in fire blight or accidental breaking. When blight or accidental breaking occurs we would cut below the fire blight to sound wood, cover the wound with wax or paint and remove and burn the affected branches. See and to it that the tree is well headed in and not left so dense that the light cannot

get in. Never leave more fruit on the tree than it can well mature. If thinning has been properly cared for there will be more bushels than there would be if the tree be left to over bear. Spraying should be done to destroy injurious insects and prevent fungous diseases. The first application should be made just before the buds unfold in spring and the second immediately after the bloom falls and the third in seven days or two weeks from the second, and for some varieties of pears which are very susceptible to leaf blight, continue the application till the middle of July or August. Eternal vigilance is the price of good fruit, and none but good fruit can be expected to return a profit.—J. M. White.

HOW TO BUY A HORSE.

If you want to buy a horse don't believe your own brother. Take no man's word for it, says an old horseman in *Horseshoer's Journal*. Your eye is your market. Don't buy a horse in harness. Unhitch him, and take everything off but the halter, and lead him around. If he has any failing you can see it. Let him go himself a way, and if he walks right into anything you know he is blind. No matter how clear and bright his eyes are, he can't see any more than a bat. Back him, too.

Some horses show their weakness or tricks in that way, when they don't in any other. But, be as smart as you can, you'll get caught sometimes. Even the experts get stuck. A horse may look ever so nice and go a great pace, and yet have a tell until something happens. Or he may have a weak back. Give him the whip and off he goes for a mile or two, then all of a sudden he stops on the road. After a rest he starts again, but he soon stops for good, and nothing but a derrier can start him.

The weak points about a horse standing better be discovered while standing than while moving. If he is sound, he will stand firmly and squarely on his limbs without moving them; or if the plumb and naturally poised; and the foot is taken from it, disease may be weight taken from it, disease may be suspected, or, at least, tenderness, a horse stands with hind legs apart or straddles with hind legs, there is a weakness in his loins and the kidneys are disordered. Heavy pulling bends the knee. Bluish, milky-cast eyes in horses indicate moon blindness or something else. A bad-tempered one keeps his ears thrown back, and a stinging horse has blemished knees. When the skin is rough and harsh and does not move easily to the touch, the horse is a heavy eater and digestion bad. Never buy a horse whose breathing organs are at all impaired. Place your ear at the heart, and if a wheezing sound is heard it is an indication of trouble.

FATAL FIFTY-SIX.

Renowned Characters Who Have Died at That Age.

Among the men and women of genius there seems to be a strange fatality connected with the age of 56. Some of the most renowned characters of the world have died on reaching that limit, including Dante, the Italian poet; Hugh Capet, King of France; Henry VIII., King of England; Henry IV., Emperor of Germany; Paganini, Italian violinist; Alexander Pope, English poet; George Sala, English orientalist; Marcus Aurelius, Emperor of Rome; Frederick I., King of Prussia; John Hancock, American statesman; Maria Louisa, Empress of France; Philip Massenger, English dramatist; Robert the Great, Sultan of Egypt; Scipio Africanus, Roman General; Helvetius, French philosopher and author; Henry II., the first of the Plantagenet line; the elder Pliny, Roman naturalist and the elder Julius Caesar, Chas. Kingsley, author; Julius Caesar, Chas. Kingsley, English author; Juan Ponce de Leon, General and statesman; Thos. Jefferson, American revolutionary; Gen. Tromp Mifflin, American patriot; Gen. Marquis de Lafayette, French general; Gen. George Washington, American general; Gen. Robert Dudley, Earl of Leicester, favorite of Queen Elizabeth; Johann Gaspar Spurzheim, German physician and phrenologist; and Frederick II., Emperor of Germany.

REMARK BETRAYED HIM.

He sat in the smoking compartment of the parlor car complacently puffing a perfecto. His easy manner and his polished language proclaimed him to be a man of the world. Of one thing I am certain, he said, and that is that I understand money thoroughly and completely. His fellow passengers looked at each other uneasily in the compartment. Two keepers boarded the train at the next station and took the solitary smoker into custody. He had escaped from an insane asylum that morning.

CLEVER WOMAN.

What in the world is that contraption you have on each of your pockets, Spendly? O, that's a little invention of my wife. I can put money in my pockets, but I can't get it out again.

THE DEATH PLANT.

The death-plant of Java has flowers which continually give off a perfume so powerful as to overcome, if inhaled for any length of time, a full-grown man, and which kills all forms of insect life that come under its influence.

AN EASY WINNER.

Ah, professor, exclaimed the theatrical manager to the astronomer, you're not keeping up with the procession. How's that, sir? I discover a dozen new stars where you can't find one.

The hereditary Grand Duke of Baden, a first cousin of the German Emperor, has been appointed general in command of the eighth army corps.

IN THE GARDEN.

If you are a beginner at floriculture do not attempt too much at first. You will find in the florist's catalogues bewildering descriptions of gorgeous novelties and promises of a wealth of bloom before unknown from some new variety of flower.

I would advise—especially if your garden-space is small and your means limited—that you shun these alluring dainties.

To one who has devoted a lifetime to horticulture, these novelties may prove of value, but when there are so many tried and true friends in the floral family who will put forth their best efforts for one who has but little knowledge of their habits and needs—those that will bloom if given the slightest encouragement—it is best for the beginner to try the easy ones first.

If you desire an early display of flowers and a constant succession of bloom far into the late autumn, begin preparations at once.

There are many flowers which can be started in the house in boxes or flower pots, during March, thereby enabling them to reach an advanced stage of development by the time they can be bedded out in May.

Other flowers of easy culture grow best when the seed is sown where they are to bloom.

I shall name and describe some of the more common and popular varieties, giving reasonable hints as to their culture and care which will enable all to meet with success in the garden.

The Soil.—Seeds planted out of doors—that is, those of the more common varieties of flowers—will do well if planted in any fairly-rich garden soil, but when raised in the house more care must be taken in preparation.

Mix well together some ordinary garden soil and a small quantity of fertilizer (sheep manure is the best for this purpose and can be obtained from any florist), and add to this preparation a quantity of fine sand—very little if the soil is already porous, but if the soil is hard and clayey. Sift about one-third of this mixture to remove all lumps. It is also well to bake it to kill all animal life and seeds of weeds. The more care used in doing this the better success will attend your efforts.

Some flower pots or small boxes should be filled to within about one inch of the top with this prepared soil. Then you are ready to plant them too.

Be careful not to plant them too deep. Very fine seeds should be merely sprinkled on the surface. Larger seeds should be planted somewhat deeper, but none of the ordinary sorts should be planted at a greater depth than one inch.

Sow in rows and label each with name. Water sparingly. Keep the soil moist, but not wet. Wet soil and poor ventilation will cause the seeds to rot. Asters—These beautiful and favorite flowers bloom in the late summer when planted in the open ground. When the seeds are started in the house in March you gain several weeks' time in the season of bloom, and can have a beautiful mass of flowers long before the aster beds of your neighbors, who planted the seeds out of doors, have commenced to show buds.

The aster seeds should be planted at a depth of about half an inch. They germinate in from five to seven days. When they have grown to a height of from one to two inches in the seed box they may be transplanted into small flower pots or to other boxes, where each plant may have ample room to grow and develop.

Pansy.—The pansy seed is of about the same size as the aster. Pansies give you a long time to develop. If you take long time to develop, if you wish flowers from plants raised from seed in the late summer, you should sow all means start the seeds in a sowing box as soon as possible. For early spring bloom I would commence the purchase of the florist for the purchase of young plants. Pansy seed in September bloom should be sown in May or October, but of this I will say more at the proper season. Seed germinates in about a week or ten days.

Verbena.—The verbena usually blooms in July or August from outdoor planting. Seeds started in the house will give you a wealth of bloom as early as June. This plant thrives best in a sandy soil. The seeds are quite slow to germinate, requiring generally two weeks.

Balsam.—This plant, the old-fashioned lady's slipper has been much improved by hybridization in late years, and the many beautiful colors and perfect form of development have made it one of the most desirable flowers for amateurs to cultivate. The seed is quite large and should be sown to a depth of about one inch. The seed usually germinates in eight days.

Cosmos.—This flower is the queen of the garden at a time when nearly all others have departed in late autumn may be brought into bloom several weeks earlier than its accustomed time by getting an early start with your seeds in the house. These seeds germinate in about one week.

Dahlia.—For many years it was popularly supposed that this popular flower could be raised only from the tuber. This is a mistaken idea, however, as the seeds germinate quite as early, and the many beautiful blooms of the single varieties especially, will repay any one for the little trouble taken to grow the seedlings. Seeds germinate in ten days usually.

Petunia.—The seeds of this flower are very fine, and great care must be taken in their sowing for successful results. But with proper care any one may have an extra early bed of petunias by following closely the general directions given at the opening of this article. Seeds germinate in two weeks.

The seven flowers mentioned above are easily grown, readily transplanted, and almost sure to succeed. The verbena, pansy, cosmos, aster and dahlia are among the most valuable of our garden annuals for bouquets. The petunia makes a grand display in the gar-

den, but is valueless for cutting purposes. The balsam flowers unfortunately lack stems, but the beauty of these miniature roses can be shown to perfection by placing them in a saucer or other shallow receptacle. Sweet peas are now the most popular of early flowers. Next week I shall give some timely hints on the culture of these delicate and beautiful gems of the garden which will point out clearly and distinctly how to grow them successfully.

A FEW DON'T'S.

Don't crowd your seeds. Plant them one at a time if large enough to handle individually, and you will get twice as many seedlings.

Don't forget to spray your seed boxes regularly. Lack of care in watering is productive of more failures in flower raising than any other one cause.

Don't plant two kinds of seed in one box unless their habits and time of germination are the same. Growing planters require more water than germinating seeds.

Don't fail to label your seed boxes and to indicate where the rows are planted, so that you will know whether weeds or flowers are coming up.

Don't let the temperature get below forty degrees in the room where you keep your seed boxes. Seeds grow best in a room in which the atmosphere is kept moist and at an even temperature of about seventy degrees.

Don't place your seed boxes in the direct sunlight until the seeds have sprouted. Keep them in a light situation, however. Heat is more essential than light to seeds; light is essential to the development of plantlets. The young plant is, however, as tender as an infant, and must not be exposed to the glare of a hot sun all day. Watch carefully for drooping leaves, which are a sure sign that the plants have had a sufficient sun bath and need rest and water.

THE STORY OF THE MUD.

A Grim Reminder of Napoleon's Disastrous Retreat From Moscow.

Lately the French and Russian people have had presented to them, as an instance of the irony of fate, a strange accidental comment on the wars and alliances of nations. As all the world knows, the French and Russian people have recently been engaged in the most extravagant demonstrations of affection toward each other. The Russians are also wisely engaged in developing their natural and commercial resources. In the course of this work they have had occasion to deepen the channel of the Beresina River, a crooked and swampy stream, in which much dredging has been necessary.

When the dredgers were lately at work some twelve miles above the town of Borisov, near the hamlet of Studinka, they began to strike mud of a singular quality. It was very black, and had a most peculiar and sulphurous smell. The chemist of the expedition was summoned, and after careful inspection, pronounced the "mud" to be chiefly composed of gunpowder! In some places this gunpowder mud was found to constitute a layer nearly two feet thick.

But this was far from being the only queer thing which the dredges brought up. Presently there began to appear skulls, bones and entire skeletons of men and horses. The workmen were in a state of terror at the gruesome loads that the great shovels brought to light.

Then, so to speak, the story was continued, and its development took an enlightening form. Along with the bones there now appeared guns, sabres, bayonets, cannon-balls, buttons, drumsticks, and even tall, old-fashioned military hats in a fair state of preservation.

Then it became apparent to all what the chiefs of the expedition already knew well, that the dredges were at work on the scene of the famous PASSAGE OF THE BERESINA.

Napoleon's shattered army, in November, 1812, on the retreat from Moscow. From Smolensk the French emperor had led forty thousand men, which were, indeed, already no more than a remnant of the vast army, when the Beresina was reached, a bridge of pontoons had to be made, and while the French were wending their way across these pontoons, they were fallen upon by the Russians. The battle raged, and many thousands of French, with horses, cannon, ammunition and supplies, were hurled into the muddy stream, never to appear again on the surface.

However, the French legions, though they were cold, hungry, decimated, beaten and disheartened, were not the men to sell their lives for nothing; and many Russians also found the bottom of the Beresina.

Of the forty thousand French who had left Smolensk, only twenty-five thousand succeeded in crossing the river and resuming the terrible march toward France. The bodies of their comrades, and also of the Russians who were overwhelmed, were left at the bottom of the stream, which was well-nigh choked by the human debris.

Since that time France, with another Napoleon at its head, has again been engaged in war against Russia. In the fear of a common enemy has made the two nations friends now. In the midst of public demonstrations of the affection which seems to pass the love of brothers, these reminders of a time when the French did love each other, were permitted to show their love, come to the surface to satirize the festivities of the bones of Napoleon's legions.

The bones of Napoleon, the guns, bayonets, buttons and so forth were ticketed and sent to St. Petersburg as curiosities.

The present King George I. of Greece came to the throne in 1863, in his 18th year.

HIRAM DART'S REUSAL.

Why He Did Not Marry the Charming Widow Breese.

When old Hiram Dart was in his 75th year, the faithful old wife, who had been his companion for a full half century, sickened and died, and to the surprise and amusement of his rural neighbors, old Hiram set forth in search of another wife, before Hannah, his first spouse had been six weeks in her grave.

He made no secret of the fact that he was "in the market" and seemed surprised that the bidders were so few. He attributed this fact to the general lack of taste and judgment in the "wimmin folks" of the present day.

"They're a finicky lot anyhow," said old Hiram, "an' it comes o' this fool new wimmen idee."

One day old Hiram drove by a neighbor's house all "rigged up" in his Sunday best and with a blue satin necktie forming a marked contrast to the big red geranium in his buttonhole. He tarried for a moment at his neighbor's gate, and frankly confessed that he was "goin' a sparkin'."

The object of this amatory visitation was the Widow Breese, who lived "over Hebron way," and with whom old Hiram was wholly unacquainted. Some one had, in a spirit of either malice or mischief, made old Hiram believe that the Widow Breese, a robust well-to-do woman of about 60, would be inclined to look with favor on Hiram's suit.

"An' it won't be no harm done to go an' see her anyway," said Hiram as he drove away.

It was nearly dark when Hiram reappeared far less buoyant than when he went away. His neighbor was on the lookout, and hailing the old man he said:

"Well, Uncle Hiram, did the Widow Breese refuse you?"

"Not much she didn't!" retorted Hiram spiritedly. "I refused her!"

"You refused her? Why, what do you mean, Uncle Hiram?"

"Mean jess what I say, I refused the old—old—cattymount!"

"Why, Uncle Hiram is that a respectful way to speak about a lady?"

"A lady! Humph! Great lady old Jane Breese is! You call a woman a 'lady' who sails into a feller with a broomstick an' calls 'im 'an ole fool' an' sich like names?"

"Did Mrs. Breese do that?"

"She jest did! I guess she'd got wind that I was comin', for I'd hardly interdoosed myself an' began to state my bizness when she flew at me with a broomstick an' drenched me with hot water, an' sicked her dawg on me, an' jawed the worst I ever heerd. Then I waited till she got through, an' then I up an' told her p'int blank that I wouldn't have her if she was the last woman on top of the earth. Yes, sir! I refused her jest that p'int blank!"

A FATAL BUTTON.

Strange Mark on the Foreheads of Those Afflicted by a New Disease.

A strange malady has broken out among the lower classes in portions of Mexico and in the State of Guerrero. Doctors of the city have been entirely baffled in their diagnosis and are powerless to alleviate the suffering or to prevent the spread of the disease, which has proved fatal in a large proportion of cases.

The symptoms are described to be languor, followed by the appearance of a bright yellow button upon the forehead, a deadly sickness and vomiting, accompanied by exhaustion and collapse. The disease is not allied to yellow fever, according to the physicians, and its symptoms more nearly approach the mysterious malady known in Asia Minor than any other. It is stated that the people of Aleppo, Asia Minor, are all attacked by their lifetime, and all newcomers to the city are attacked within a few days, but the disease, curious as it is, is rarely ever fatal in the far east.

In Mexico it assumes a malignant phase. The State and National Boards of Health are bestowing much attention upon it. Dr. Demetrio Majia, of the City of Mexico Board of Health, is investigating the epidemic.

RAILS OF PULP.

They Are Now Being Tried in Germany and Russia With Good Results.

A notable success is recorded in the introduction of railroad rails in Germany and Russia from paper material. In the production of such rails wood pulp has not been found adapted, but ordinary pulp from rags, rope stock, &c., is resorted to, the processes of grinding, cooking, digesting and working of these into a pulpy condition being accomplished in regular order, with care, of course, to have the stock in uniform preparation and when as well preserved as possible; and when in a pulpy condition the ingredients for stiffening the rail to a proper toughness and efficiency—so as to stand excessive wear and imparting elasticity, wheels, and other requirements are smoothed, quantities of borax, litharge, applied. Wax, tanners' grease, water-proof fish glue, rosin and fine cement are used in certain proportions, being added to the pulp while it is yet warm, and the ingredients are thoroughly combined and wood alcohol quantity of shellac in the mixture, and the next put into the mixture, and the mass, after being subjected to another stirring, is then allowed to settle.

NO HOPE.

Family Doctor—Nothing more can be done for you, sir. I have exhausted my resources, and I advise you to make your will.

Patient—But I have been told that Family Doctor—Huh! I'd just like to see him try it. I'd have him ejected from the society for breach of etiquette.