FARM AND GARDEN.

How to Manage and Cultivate a Garden Plot.

USEFUL HINTS FOR FARMERS.

Small Fruits in Gardens.

Small fruits can be conveniently grown in a garden with but little loss of room. Currants, raspberries and gooseberries may be planted near the fence, out of the way of the vegetables, and will thrive better in such locations than anywhere else. Strawberries may be grown in close rows, and will give a fair yield on a small space. A few grape vines can be allowed to trail along the fence, or on arbors, and even a few peach trees may be grown, but it is better to have no trees in a garden, as the trees will largely appropriate the plant food and shade the plants from the warmth of the sun.

Cattle Stile.

Some years ago I was desirous of allowing my cattle the run of my hog pasture, but did not want the hogs in the cattle pasture. How to do this was a query. I finally arranged a contrivance and it worked admirably. Make an opening in your division fence so that the posts stand three feet apart. Twenty-two inches from the ground place a roller, which should be four or five inches in diameter, straight, and of any hard wood. The journals may be left on the roller, or the ends may be cut smooth and round, and smooth bolts inserted in the ends, with staples in the posts to receive them. If the former plan is used, 1¼ inch auger holes in the posts will answer. Care should be taken that the roller may work free and easy, for it answers a double purpose. Cows passing in and out will not injure the udder, but when Mr. Hog goes to jump into the other field he will land on his back on his own premises. Last summer I had a hog that would jump the roller—twenty two inches high. Not wishing to make it higher, I placed a board, ten inches high, eighteen inches from the roller, on the hog pasture side. This prevented the hog from facing the roller, and he could not jump; at the same time it did not interfere with the cattle in the least. As I have a nice grove in my hog pasture and no shade in my cattle pasture, I would hardly know how to do without this convenience.

Handle Milk Carefully.

Milk should be disturbed as little as possible before it is set, and should be strained directly into the creaming vessel after milking. It is bad policy to strain milk into a large pan and dip it thence into other vessels for creaming. The agitation and exposure to the air occasioned promotes the clothing of the fibrius and prevents a thorough separation of the cream. The creaming vessel should have a smooth surface and should be a good conductor of heat. Tin is the best material. Wood, earthen and glassware are all poor conductors of heat. A large can that cools off slowly will cream as well or better than a small can rapidly cooled; as in such the sides may be kept cool enough to prevent changes in the fibrin while the mass of milk is still moderately warm and affords the best physical conditions for the separation of the cream. The creaming vessel should have a shape giving as little surface of milk in proportion to the amount contained as it is possible to have. This condition is best fulfilled by a spherical vessel, but this form is inconvenient. The next best form is cylindrical. The ratio of surface volume diminishes as the size of the spherical cylinder increases. A shallow setting furnishes large surface exposure to the air and the bottom and sides of the vessel. The conditions are very favorable to the coagulation of fibrin, and it would be expected to get a slow and imperfect creaming. In reality this is the case, as milk set in this manner is not usually skimmed until after 36 hours. By this time some acid is developed which has a tendency to neutralize the effect of the fibrin clots, so that a fair creaming is obtained. This, however, is not as good as may be obtained in ten hours by setting under the most favorable conditions.

July Hints for Farmers.

It will pay to shake off a large proportion of the fruit from trees that are overloaded.

But few plants will thrive on a wet soil. A good drain is sometimes better than manure.

Bulls are very treacherous. It is usually the gentle bull that injures his keeps. The older they become the more dangerous they are.

Waggons and carts that are used daily should have the axles well greased at least three times a week. It lessens the work of the horses.

Horses should have at least two hours rest at noon. On very warm days horses suffer severely. They should be watered often, and at night should be swabbed and wiped dry.

Filthy quarters cause lice on all classes of stock, and at this season the vermin multiply very rapidly. An animal that is infested with vermin cannot be kept in good condition, even with the best of feeding

A zigzag rail fence is supposed to be one of the cheapest that can be built, but unless the corners are kept free of weeds it is the most expensive fence that can be used, as it increases the labor of weed killing.

Dogs that become addicted to sheep-killing do so from pure viciousness. In a majority of cases the dogs do not eat any portion of the carcass, but will kill a dozen or more sheep for the delight of so doing.

Denmark expends $55,000 yearly for the maintenance of dairy schools. The result is an immense improvement in the quality of the dairy product, and an increase within twenty years in Denmark's butter export from $2,100,000 to $13,000,000 annually.

Before farrowing sows are the better for an abundance of exercise, and should have all they will take; and as soon after this event as they want to let them return to their accustomed exercise. But do not make a sow take exercise by compelling her to forage for a living.

The best time to use the cultivator is on warm, dry days. All weeds and grass will then be quickly killed by the sun, and will have no opportunity to take root and grow. If the ground is damp when it is cultivated the weeds and grass will not be entirely destroyed, and the work may have to be done over again.

Tomatoes may be trimmed of the lower branches and made to grow somewhat in the shape of a tree. The main stalks of the plants become stocky and are better able to bear the weight of the fruit. By supporting the vines on posts or arms more air and sunlight will enter, thus ripenin the fruit more perfectly.

A gain in one direction may sometimes entail a loss in some other quarter. The bountiful rains of this season have given the crops an excellent opportunity, especially corn, but rains also benefit weeds and increase the labor of cultivation. The work is necessary and should not be neglected, as it may entail greater labor next season.

When it is desired to cut two or more crops of grass from a field the grass should be cut before the seed heads form, as the grass has performed its mission when it has seeded; hence if the first cutting is deferred until the seed is ripe there will be no second crop of importance. Such crops as Hungarian grass and alfalfa may be cut every five weeks.

The windmill is an implement that costs very little compared with the advantages derived. Water pumped into a tank can be conducted to the barnyard or to the pasture through pipes, thus saving the expense of pumps and the labor of pumping. Where there is no running water troughs can be arranged for stock and may be kept full without difficulty.

The season has been damp for potatoes, but if seeded now a late crop may be put in, as July is usually a dry month, the fall rains beginning in August. Use plenty of fertilizer and make the rows deep and broad. The seed should be of the best, and some care should be exercised in cutting the seed, so as to have strong sprouts, and good cultivation should be given.

The way to prevent soft-shell eggs is to feed food rich in lime. The grains are deficient in that mineral. If you feed too much grain you give too much starch, and soon the hens will be over fat. They cannot lay unless provided with material for eggs. Fat is useless on a laying hen. Her business is to convert the proper materials—meat, milk and clover—into eggs.

Those who patronize creameries cannot derive full profit therefrom unless swine breeding is made a pursuit. The whey and buttermilk is sold to the patrons at a very nominal price, and can be put to excellent use if made a part of the rations of hogs. Very often the only profit to be made is from the hogs, the milk about paying the expenses of the food of cows and swine.

In order to avoid paying high prices for binder twine, many western farmers decided before harvest to adopt the plan of handling the grain unbound. Some intended to use their binders without twine and leave the sheaves on the ground, just as they were dropped from the machine, for a day or two, or until the grain was sufficiently cured, and then thresh or stack it unbound.

MR. BLUE'S REPORT

On the Live Stock and Dairy Trade of the Province.

The following is an extract from the report of the Ontario Bureau of Statistics The condition of live stock throughout the Province is most gratifying. The pastures have been and still are in excellent condition, in consequence of the abundant supply of rain, although there are a few instances where they have suffered through flooding, and by the cattle having been turned out too early upon them. The milk yield has been much larger than usual, consequently butter is plentiful and good, while the cheese factories are working well in most localities. There seems, however, to be an impression among many that the milk is of inferior quality this year, which is attributed to various causes, but primarily to the cool, wet weather. To this cause may also be attributed the fact that fat cattle are not making flesh as rapidly as might be desired, and are stated to be somewhat poor and thin, more particularly in the northwestern counties. The fact that so much stock was disposed of during last winter is being very naturally regretted by many, especially in the eastern part of the Province, where it is believed the dairy supplies will be considerably affected. Sheep are reported in some localities as poor in condition, owing to damp pastures and cool weather, many having been sheared too early; but horses are in fine condition, and, like all other farm animals, they are exceptionally free from disease. The condition of stock in the spring of the year, although much better than anticipated, was not all that could be desired; it is gratifying therefore to find how quickly they have reached their present favorable condition, and that the freedom from infectious disease reported in our May bulletin still continues. Over the larger portion of the Province the dairy prospects are more promising than they have been for years, and the tenor of the reports in this regard is of an exceedingly cheerful character. Cheese and butter are of good quality and command very fair prices.

How to Manage a Plot.

The work in the garden is mostly done in the spring, and the seed is carefully planted, the ground kept clean, the early crops taken off and the ground abandoned to weeds. One of the most unsightly objects is a plot of ground overgrown with weeds; and as the garden plot is usually made rich the weeds grow very rank and soon mature. As they are allowed to die down, and the ground cleared off the next spring, the result is that the ground is so covered with seeds that it is almost impossible to eradicate the weeds the succeeding year. Leaving the garden in such condition also affords excellent opportunities to insects of all kinds, and the drawbacks are, therefore, multiplied. The proper way to manage a garden is to keep some crops growing in it from spring until the frosts appear late in the fall. Several objects will be gained by so doing, among them the destruction of all weeds, a finer condition of the soil, and a supply of fruits and vegetables for the table, as many vegetables grow quickly and give a supply in a short time after the seed is planted.

—This is the season when people are drowned as a result of trying to change their seats in row-boats.

AN ARMLESS GROOM.

A Dime-Museum Freak Weds a Rather Pretty Cincinnati Girl.

A very unique marriage was celebrated in 'Squire Hauser's office yesterday afternoon, the 'Squire officiating. The bride was Miss Jessie Troeger, who lives at the corner of Main street and McMicken avenue. She obtained some celebrity two years ago by leading a strike of the waitresses in Rockwell's restaurant. She is 20 years old. The groom was Charles K. Adams, better known in the dime museum world as the armless wonder. He was born without these useful members of the body, and, in lieu of a better and more profitable means of livelihood, hired himself out to dime museums. Adams is now about 30 years of age, and, barring the lack of arms, is a fine specimen of physical beauty. The absence of arms is little felt by the Wonder, however, for he has become very expert with his toes and mouth. He can thread a needle or write a neat letter with the former, while with the latter he paints dainty little pictures, decorates chinaware, etc., holding the brush between his teeth.

When the couple entered the 'Squire's office yesterday and said they wanted to be united in wedlock, that official was perplexed for a while.

"How can you join hands?" he asked, blandly pointing to Adams.

"Oh, that is easy enough," said the pretty bride, who stood fully three heads shorter than the groom. And she reached up and grasped the stump of his undeveloped left arm with her right hand.

"See, she said, as she stood smilingly on her tiptoes.

"But the ring. How can he put the marriage ring on your finger?"

"In this way," said Adams, and the astonished officials in the 'Squire's court were thunderstruck to see the circlet of gold between the armless man's teeth. Bending his head he deftly slipped it over the girl's finger.

Satisfied that the couple understood their business, the 'Squire went ahead and performed the ceremony.

After being made man and wife, Adams sat down and, slipping the shoe off his right foot, disclosing a stocking with the front of the foot cut off, he reached into his vest pocket with his toes and brought out a roll of bills. Selecting a $5 note he tendered it as a fee, and putting on his shoe, went away, his little wife sticking close to him.—*Cincinnati Enquirer.*

THE QUAINT AND DROLL.

Answers Appropriate and Otherwise.

Occasionally some really amusing answers are given at examinations, and these lose none of their point by the absolute innocence of the pupil who perpetrates the witticism. "Who was Esau?" was asked an English school pupil. "Esau," said he, with great promptness and confidence, "was a man who became famous as a writer of fables, and who sold his copyright to a publisher for a bottle of potash." "Write an account of Cardinal Wolsey" brought the answer: "He was a famous general who fought in the Crimean war, and who, after being decapitated several times, remarked to Cromwell: 'Ah! if I had only served you as you have served me, I would not have been deserted in my old age.'" "What is the Age of Reason?" evoked the reply: "The time elapsing since that person's birth." A not too devoted student was asked: "What are the letters of Junius?" and his mentor almost fainted when he read the reply: "Letters written in the month of June." "What do we understand by the expression 'The year of Jubilee'?" was asked of a girls' class in an English Sunday School. "Leap year," was the prompt response, given with manner born of assurance of absolute correctness. "Why do we stamp on our coins 'In God we trust'?" was asked of a Weldon, N.C., class. Of course this was a puzzler, and after wrestling with it for a few minutes a sharp little girl put up her hand, saying: "Please, sir, that was a long time ago." It has always struck me that there was a good deal of point in the naive answer. Like the physiology pupil who described the bone of the upper arm as the "humorous," "because it is the funny bone," she got very near the truth.

The Painlessness of Death.

The act of dying, it is now ascertained, is absolutely free from suffering; is really unconscious, insensibility always preceding it. Any anguish that may attend mortal illness ceases before the close, as thousands who have recovered, after hope had been surrendered, have borne witness. Sudden and violent death, shocking to the senses, may not be, probably it is not, painful to the victim. Drowning, hanging, freezing, shooting, falling from a height, poisoning of many kinds, beget stupor or numbness of the nerves, which is incompatible with sensation. Persons who have met with such accidents, and survived them, testify to this. Records to the effect are numberless.—*Forum.*

The Queen Regent of Spain is an expert embroiderer and has done some remarkably beautiful work with her needle. Many of the dresses of the infant King are the product of her hands.

And now the Syracuse *Standard* gravely asks: "Is marriage a crime?"

A LOVER'S COMBINATION.

Sweet, lay your head upon my breast,
As Minnie, long ago;
Tell me, like Maud, you love me best
Of all the men you know;
Turn up, as Lilly used to do,
Those eyes, and look in mine;
Swear, as I have often sworn to Loo,
That I alone am thine.
A radiance flits about thy hair
That once framed Mollie's face;
A soft, seductive, baby air
Once loved so much in Grace.
A fragrance as the violet,
Reminding me of Fan,
Comes from thy balmy lips, my pet,
And makes me think of Nan.
But do not call me fickle, sweet,
For my lost Julia's sake!
This very morn, at Flora's feet,
I swore you took the cake.
Then kiss me dear—you kiss like Nell—
Your true love darling call;
To-morrow I shall Cora tell
I love you best of all!

Wife, emphatically—"Did you say marriage was a failure?" Husband, humbly—"No, my dear, I did not. A married man doesn't have to say what he thinks, does he?"

The woman who hesitates is lost or deserves to be—but, unluckily, the world has never been able to lose her permanently yet.—*Somerville Journal.*

THE GHOST OF CAMERON PASS.

It Turned Out to be a Wild Girl of 25, Dressed in Skins.

In the summer of 1882 W. C. Hart, the geologist, and two other enthusiastic collectors of specimens were encamped near the lava beds between the head waters of the Cache de la Poudre River and North Park. It was a rough, broken region, and the desolation was heightened by the proximity of the crater of an extinct volcano, while bare rocks and dead timber were everywhere. The hope of securing rare formations for their cabinets attracted the gentlemen to the uncanny spot, for every one averred that Cameron Pass was haunted by the spirit of an emigrant's daughter. Joe Shepler, a well-known mountaineer, who was piloting the party through the hills, had often seen the ghost, and promised his companions that they should view the strange apparition before returning to their homes. He said the spirit was a thief, and frequently stole food and furniture from the camps of hunters who ventured within her uninviting domain. At dinner on August 2nd, 1882, Shepler calmly announced that the spirit of Cameron Pass was approaching, and pointed to a strange being which was swiftly moving toward the camp. The marauder came within 500 yards of the men, and seizing a haunch of venison which had been placed on a stone, ran off with it. Hart picked up his rifle, and, calling on his comrades to follow started in pursuit of the thief. She—they were sure it was a woman—led them all a lively race directly toward the lava beds. Being close pressed the hunted creature dropped the meat and sped onward to the opening of a cave. The pursuers entered the cavern on the heels of the strange robber and found the warm body of a dead woman. The fright and exertion had killed her. The corpse was that of a woman about 25 years old. Her only clothing was a rude gown, fashioned of skins. Her hair was very long and she was sunburned and barefooted The remains were buried decently. An exploration of the cave disclosed the fact that it had for some time been used as a habitation by the alleged spirit. The ground was covered with bones, and, although there were cooking utensils about, it was evident that they had never been used. The unfortunate girl had subsisted on stolen meats, roots and leaves. She had dried meat for winter use For several years she was thought to be a spirit.—*Chicago Herald.*

Courtship's Progress.

When a young girl detects the signs of a mutual attachment between herself and a man whose tastes and position in life are suited to hers, she can do no better than confide her thoughts on the subject to her mother, or if she be motherless, to some woman who is much older than herself, and upon whose sympathy and wisdom she can rely. If the older person approve, there are many ways of arranging opportunities for the pair to become better acquainted, and to discover whether their first impressions of each other were correct. A wise mother can easily arrange the social setting of her children. If she gathers about her only such young people as she deems fitting companions for them, the most natural consequence is that ties are formed which will be satisfactory to parents as well as children.

The young man finds easy and natural ways of expressing his regard for a young girl, and by a kind of intuition she can usually satisfy herself from the first of the nature of his feelings toward her. He will show considerateness, deference, and a preference for her society at all times, and yet he will carefully avoid anything that might convey to others the impression that he believes her to hold the same attitude of preference toward him. He will always accept her society as a courtesy which she has graciously conferred, and apart from which he has no claim Indeed, in all manly and chivalric ways he will testify his admiration for her, until he feels a sufficient assurance of her interest in him to warrant him in putting the vital question to her.

If she be an ingenious and high-minded girl she will admit or deny with kindness and candor that she values as he wishes his devotion to her. If her consent is obtained he will then seek the approval of her parents or guardians. If her family objects to the proposed alliance it is the girl's duty to reserve her final decision, out of respect for them. If time and opportunity for knowing each other better only deepen their regard, and parental disapproval continues, the girl has two alternatives—patient waiting and an unhappy assumption of the consequence of disobedience. Each girl must determine this matter for herself, remembering, however, that no one can have a more unselfish interest in her happiness than her parents.

A Difficulty About Witnesses.

"Mr. Smith," said the electric light manager to his foreman, "we want some men to testify to the absolute harmlessness of the electric light current as used by us. You might send Roberts ——"

Foreman—He was killed while fixing a wire last night, sir.

"Well, Jackson will do then."

"He accidentally grounded a wrong wire last week, and is scarcely expected to live, sir."

"Such awkwardness! Send Williams."

"Sorry, sir, but he was paralyzed while fixing an electric lamp on Thursday."

"Really. It's most annoying. Employ some new men at once and send them to testify to the committee before they have time to get themselves killed."—*New York Herald.*

The Fly Crop.

The common fly lays more than 100 eggs and the time from egg-laying to maturity is only about two weeks. Most of us have studied geometrical progression. Here we see it illustrated. Suppose one fly commences "to multiply and replenish the earth" about June 1st. June 15th, if all alive, would give 150. Suppose 75 of these are females; July 1st would give us, supposing no cruel wasp or other untoward circumstances to interfere, 11,259 flies. Suppose 5,625 of these are females; we might have, July 15th, 843,720 flies. It might cause bad dreams if carried on further.—*Pittsburg Dispatch.*

—Lord Tennyson is to receive $1,000 for the poem he is now writing. His first accepted poem brought him the munificent sum of 10 shillings.

THE SCIENTIFIC WORLD.

Items of Utility and Curiosity for Everybody.

The second elevator in the Eiffel Tower has been accepted by the committee. The four hemp ropes temporarily used to sustain the load of eleven tons were cut simultaneously in the test, allowing the load to drop eight inches, and the safety wedges were found to stand the strain.

A discussion of the mythical "joint snake" is going on again in herpetological circles, the popular idea being that there exists a snake which, when broken to pieces joins itself together again. There is, of course, no such reptile. The delusion owes its origin to popular credulity, and so much of fact as is found in connection with the habits of the *ophisaurus ventralis*, a species of snake lizard with a mere rudimentary development of legs. It is very brittle and a slight blow breaks it into fragments. If only the tail is lost a new one is sprouted, but the self-mending powers are purely mythical.

Recent tests at Manchester, by burning in oxygen, shows anthracite coal to give the highest yield, emitting 8 340 Centigrade units of heat.

J. E. Thickston, Metucher, N.J., predicts disaster from the escape of natural gas in the Alleghany region, beside which the Johnstown calamity will appear trifling. His theory is that the escaping gas is not, as in the case of oil deposits, compensated for by the influx of water, and he anticipates a collapse or an explosion.

The manufacture of starch from the cassava, which frequently, under cultivation not the best, yields forty tons per acre, is becoming an important industry in some parts of Florida.

The Egyptian Exploration Fund expenditures since 1883 have been about $8,000 per year and have yielded rich results.

"Rapid dentrifices" are to be eschewed, as the basis of all are acids, whose action on the enamel and bony structure of the teeth is most deleterious. Precipitated chalk, flavored with powdered orris root, a little powdered myrrh added, and rubbed with fine Castile soap, is as good a dentrifice as can be had. Regular and careful brushing, with the use of a good quill toothpick, is safe dental treatment—always presupposing a dentist has first put the teeth in good condition.

The best cement for glass is glue. When it fails it fails through the action of moisture. This may be obviated by treating the glue with bichromate of potash, adding (in a dark room) one tenth the weight of the dry glue to the solution; apply in the dark When exposed to light the glue will harden and effectually resist the action of moisture.

The U. S. Government recipe for permanent whitewash is: Half bushel lime, slaked under cover; strain and add one peck salt dissolved in warm water, and three pounds rice flour boiled in water to a thin paste; half pound Spanish whiting and one pound clear glue dissolved in warm water. This should stand several days and then be applied hot.

The cleanly housewife will find an almost odorless liquid stove blacking, cheap and effective in the following: Mix two parts of copperas, one of bone black, one pulverized graphite with enough water to make a creamy paste.

Uranus was in perihelion in 1883 and will not be again until 1966. At perihelion it is distant from the sun 1,681,864,000 miles. Neptune's next perihelion will be in 2048, when it will be 2,755,207,000 miles distant from Old Sol.

Farmers will find the following table of (inside) dimensions convenient: A box 8.4x8 in. and 4 in. deep holds half a peck; one 7x6.4 in. and 12 in. deep holds a peck; one 12x11.2 in. and 8 in. deep holds half a bushel; one 16x12 in. and 11.2 in. deep contains a bushel.

Some Literary Bon Mots.

The following, said to have been copied *verbatim et literatim* from a sign at Barnet, Eng., is found in a file of the Caledonian *Mercury* for 1789. The inscription shows that business was not so subdivided 100 years ago as it is to-day: "John Nust, Operator in Ordinary and Extraordinary, Mender of Soles, Uniter of the Disunited, Restorer of Order and Harmony though of ever so long and wide a separation. N. B.—Gives advice gratis in the most desperate cases, and never pockets his fee till he has performed a cure."

Dean Alford tells of a certain set of instructions posted by a railway company for the guidance of engineers, which read as follows: "Hereafter, when trains moving in an opposite direction are approaching each other on separate lines, conductors and engineers will be required to bring their respective trains to a dead halt before the point of meeting, and be very careful not to proceed till each train has passed the other."

Newspaper literary blunders are plentiful, but none familiar with the circumstances under which matter for the daily press is prepared will be hypercritical. Taken all round it is creditable to its producers. One reflects on this when he thinks of the sad blunders of eminent authors, whose work has all the advantages of careful revision. A notable instance occurs to me, where Mr. John Morley tells us that "Carlyle teaches us that silence is golden in thirty-six volumes."

Kansas Philosophy.

Man is ambitious to kill a lion until he meets one.

About all some men are good for is to marry and make a woman miserable.

When man economizes he buys less clothes; when a woman economizes she buys less to eat.

It is not the good who die young, but only those who have not lived long enough to be bad.

The most unfair thing that happens to women is that engagements are so short and marriages so long.

—"Hurry to the door, Mary, and let Mr. Smith in. He has rung twice." "That isn't Mr. Smith, it is the other young gentleman." "Well, wait a minute, then I must change the photographs on the mantel.'

—Mrs. Phunnyman—If that Eiffel tower should fall the damage would be irreparable. Mr. Phunnyman—Oh, I guess not; there are too many newspaper correspondents over there. They would soon write it up.