FARM AND GARDEN

Beautify Your Surroundings.

Thrice worthy he who beautifies his home and farm for the sake of self, of family, of neighborhood and of the passing stranger. Few realize the effect of symmetry and beauty in nature on the life of individual and community, unless by travel they have had opportunity for comparison, or have noted the good work accomplished in a town's morals indirectly by application of the laws of order, neatness and ornament. It may be a village improvement association was organized; perhaps one man from an advanced quarter of the globe bought a place and beautified it, or a resident awoke to the prevailing depravity and ordered himself to arise and enjoy the glorious things a wise Creator has put within reach. Somewhere a beginning was made in changing places once chaos into present charm, the same as in forming character strong in rectitude. It may be that the reader is the one person on whom the destiny of his town depends. Though perhaps living in ungrateful desolation, he may make a beginning, however small. With unfaltering determination as the months pass, the man of enterprise will gradually emerge as a leader of reform or an inciting element to it. Nor are public improvement and the enhancement of values in property which it naturally precedes, together with heightened ethics, the only goal. There is more than possibility, yes, strong probability, that the fortune and consequent comforts of the creator of embellishments may increase.

To Develop the Udder in the Cow.

In raising heifers much depends on the care and management given them by the farmer as to their future usefulness. With proper care, says an exchange, he could make her develop into a valuable cow, while carelessness in this respect would make her of little value either to keep or for sale. In the management of young cows whatever will contribute to a large flow of milk tends to develop udder and blood vessels connected with it, milk veins included. Feeding a young cow well for sometime previous to dropping the first calf (suspending the high feed just before calving for fear of inflammation of the udder), and having her rapidly and thoroughly milked three times a day after the birth of the calf, resuming the high feed as soon as all tendency to hardening and inflaming of the udder is passed, will tend to make her a good milker.

Aside from abundance of good food nothing contributes so much to increased quantity of milk as rapid and clean milking. If any teat is naturally disposed to be small, special pains should be taken to have it milked as described, and if a good milker cannot be had let the calf do the milking of that teat or teats involved. It is ruinous to begin milking and stop and then milk again. Once started there should be no stopping till the bag is completely emptied. The practice of letting the calf suck, then taking him off, then milking awhile, and letting the calf go to the cow again to bring down her milk, will spoil the best of milkers. It is better never to have a calf about a cow, at least after the bag has been relieved of the first rush of milk after calving. These facts being neglected by the farmer has sent many cows to the "beef tub" for their worthlessness, that otherwise might have made a good record.

Profit in Bee Culture.

That bee-keeping will compare favorably with any other pursuit in life, is undoubtedly true, and the reason why so many fail in it is that they do not properly attend to it. Men will give their horses and cattle the best of care, but when it comes to the bees, they let them take care of themselves, with the exception of hiving swarms and putting on and taking off boxes. In this way there is no profit, and little, if any, pleasure in apiculture. What would they expect from their cows if treated in that way?

The keeping of cows means milking twice a day for at least 210 days out of the year, and feeding them three times a day for 180 days, saying nothing about cleaning stables and other work necessary to carry on a dairy. When men are willing to thus care for bees, they will find they will give as much profit as can be obtained from cows, or any other branch of rural industry, and in this profit comes very largely the pleasure side of the question.

Bee-keeping means work, with enthusiasm enough put into it to make this work real fun; a place for everything, and everything in its place, and to know how to do things just at the right time and in the right place, if we would make it both pleasurable and profitable.

We also want the best bees, the best hives, and all modern appliances, just as our enterprising dairymen would have the best breed of cows and the best utensils to care for the milk. Also a man must have liking for the business. No man will ever make bee-keeping profitable who prefers to lounge around a country tavern or store instead of working in the apiary. In fact, a person will not succeed in any business unless he has enough love for his calling in life so he will be diligent and faithful thereto. "Seest thou a man diligent in his business? he shall stand before kings," was what King Solomon told his son, and the saying is as true to-day as it ever was.

To be successful in any business, a man must "grow up" into it by years of patient toil and study, till he becomes master of that business, when in 99 cases out of 100 he will succeed. It is this getting crazy over a business which looks to be a good thing, but with which we are not acquainted, and investing all we have in it, expecting to make a fortune, which ruins so many and gives no pleasure as a result.

Formic Acid for Paralysis.

Two hundred years ago formic acid was obtained from the brown wood ants, by tritulating them with water, and then distilling it. The same might be done with honey-bees. The acid liquor was used to irritate the skin as a counter irritant. The reddening of the skin, when using baths of pine leaves, is also due to the action of formic acid present in the leaves. The formic acid of commerce is formed by artificial distillation.

As regards the irritating action of stinging nettles and other similar plants, it depends, as already stated, upon its formic acid. The point of the nettle is as brittle as glass, and by the slightest touch penetrates the skin and breaks off, pouring out its acid and causing the burning sensation.

Some species of caterpillars have formic acid in some of their hairs, which they seem to be able to shake at will, and when a person touches such a caterpillar, the poison penetrates the skin wherever it is moist, and causes burning, itching and inflammation. These poisonous members preserve their irritating powers even after the death of the worm. This accounts for reliable statements that visitors to collections of caterpillars have suffered from exanthematus eruption on the neck.

Formic acid, according to the United States Dispensatory, diluted with an equal measure of water, is an excellent application to paralyzed limbs, exciting the circulation of the blood and producing exunt erythemathous redness, with a prickly sensation as if stung with bees or nettles.

Formate of ammonia has a specific tendency to the nervous centers, and is contraindicated in cases of any active irritation or inflammation of the nervous centers or about them. Those who handle bees should understand whether or not they are afflicted with chronic head or heart trouble, because such persons cannot safely expose themselves to any large doses of sting virus with impunity. But in cases of paralyzed limbs, or paralysis not complicated with head or heart disease, stinging may prove beneficial.

Leafy Branches.

As emblems of humanity, leaves are peculiarly beautiful and expressive. Tongues of nature, they are eloquent with divine teachings, which reach at times the inner ear with a strange power. Man sees his own fate reflected in their short-lived beauty. As light a hold as they has he of the tree of life. A leaf is the type of a single person, and a whole foliage of a tree symbolizes a generation.

The tree sheds its leaves one by one, until at last it is altogether stripped, and stands bare and desolate in the wintry blast, but its trunk and branches remain. So individual men and whole generations die, but the race survives. The leaf is annual, but the tree perennial; and man is frail and perishing, but mankind have an enduring existence. The dark greenness and vigor of the summer leaf portray the strength and self-reliance of manhood, while its fading hues on the tree and its rustling heaps on the ground typify the decay and feebleness of old age and that strange mysterious passing away which is the doom of every mortal. The autumn leaf is gorgeous in color, but it lacks the balmy scent and the dewy freshness of hopeful spring—and life is rich and bright in its meridian splendor.

Deep are the hues of maturity, and noble is the beauty of success, but who would not give it all for the tender sweetness and promise of life's morning hours? Happy they who keep the child's heart warm and soft over the sad experiences of old age, whose life declines as the last September days go out, with the rich tints of autumn and the blue, sunny skies of June!

Yes, we live as a leaf, and we fade as a leaf. The inspired prophet says it in God's own words; nature echoes it through all the long drawn aisles of the forest; and human experience, from Adam until now, adds its universal yet individualizing illustration—each new case exhibiting some new variety—

Leaves have their time to fall,
And flowers to wither at the north wind's breath;
But thou all seasons—all,
Thou hast all seasons for thine own, O death!
We know when moons shall wane,
When summer birds from far shall 'cross the sea;
When autumn hues shall tinge the golden grain,
But who shall teach us when we look for thee?

The Queen's Highway.

A. W. Campbell, C. E., in the Municipal World, writes that a great deal must be taken into consideration before attempting to construct gravel roads. A capital distinction must be made between gravel that will pack under gravel and clean rounded gravel which will not, due to a small proportion of clayey or earthy matter contained in the former which unites and combines the material together. Seaside and riverside gravel consisting almost entirely of waterworn and rounded pebbles of all sizes, which easily move and slide upon each other, is unsuitable for a road covering unless other materials be mixed with it, while pit gravel usually contains too much earthy matter. The gravel for the top layer, at least, must be hard and tough, so that the wear will not pulverize it and convert it into dust and mud. It should be coarse, varying size, from one half to one and one half inches in largest dimensions; it should not be water worn and should contain enough sandy or clayey loam to bind it together firmly. Pit gravel usually contains so much earthy material that it should be screened to render it entirely suitable for the surface layer for this purpose. Two wire screens will be necessary, one with the wires from one and one half to one and three forth inches apart, while in the other they should not be more than one half to three fourth inches apart. The pebbles which do not pass the large screen are to be rejected, or if used should be broken up into small fragments while the earth, small gravel and sand that pass the smaller one, although not suitable for the road surface, will answer for a bed for the road material to rest upon. If the bed of the road is rock a layer of earth should be interspersed to prevent too rapid wear of the latter. In ordinary soils an excavation to the depth of ten or twelve inches and of the required width is made for the reception of the gravel. The surface of this excavated form, called the subgrade, may be made level, or, preferable, it may be arranged parallel to the finished road surface by sloping it from the center to the sides. A layer four inches thick of good unscreened gravel, in its natural state, is first spread upon the roadbed, which is then thrown open to travel until it becomes tolerably well consolidated. The work may be hastened by using a cylindrical roller, two and a half to three feet in diameter and five or six feet long, weighing one and a half or two tons. A better design is to have two such cylinders arranged in a frame, one behind the other, each being composed of two short cylinders, two and a half to three feet in length, placed abreast on the same axis. Gravel roads, carefully constructed in the manner herein described, will possess all the essential requisites of a good road.

Effect of Food on Milk and Butter.

Bulletin No. 80 has been issued from the Ontario Agricultural College containing the following practical points for farmers. The report says:

"During 1891 we conducted an experiment similar to the one here reported.

"The cows used in the experiment were six in number, divided into three lots—two cows in each lot. The general plan was to feed each lot for four weeks on one ration, note the quantity and quality of the milk and butter, then change to another ration and feed for four weeks until each lot had been fed each ration for the same length of time. The rations were:

No. 1. Ensilage, 30 pounds; oat straw, 20 pounds; hay (cut), 10 pounds.

No. 2. Hay (cut), 20 pounds; linseed oil meal, 4 pounds; cottonseed meal, 5 pounds.

No. 3. Hay (cut), 20 pounds; pea meal, 4 pounds; oatmeal, 5 pounds; cornmeal, 8 pounds.

"For practical use I would not recommend either of the rations used in this experiment. No. 1, I consider deficient in milk producing substances, and No. 2 is too rich for our ordinary cows, as they did not appear to be able to digest and assimilate so much meal. I would also warn against feeding much more than 50 pounds ensilage per day to cows weighing under 1,000 pounds. We have found the following ration to give good results: 50 pounds of corn ensilage, 6 pounds of hay, 4 pounds of bran, and 2 pounds of pea and oat meal mixed in equal proportions. If these latter become two high priced, I would recommend the use of 2 pounds of cottonseed meal (in place of the bran or meals) per day to each cow, when it can be bought for about $30 per ton.

"Feed liberally, though not wastefully, bearing in mind that although the per cent. of fat may not be increased by liberal feeding, the total amount of fat or butter may be largely increased by causing the cow to give a larger quantity of milk. Three things determine the value of a cow: the quality of her milk, the quantity she gives, and the economical use she makes of her food.

"During the hot weather buttermakers are frequently troubled with soft butter. This is largely due, in most cases, to improper handling of the milk, cream and butter, but there is a tendency during hot spells for the butter to be soft no matter what the care taken. From the experiments here reported I am led to believe that the addition of a small quantity of meal, especially cottonseed meal, has a tendency to make the butter firmer, or as we say, raise the melting point from one to four degrees centigrade. Last summer we fed about 1 pound per day to each cow, while at pasture, and our buttermaker informs me that he did not have a churning of soft butter during the whole season. Whether this was due altogether to the cottonseed meal, I am not prepared to say, but I think it had something to do with it. In feeding cottonseed meal it should be mixed with bran, cut hay, or some grain meal."

THE HORSEMAN.

The trotting-bred horse of any special worth comes along at the rate of about 1 in 500, and the man not up in such matters, is about as apt to recognize this rare quality when it is possessed by a colt as is the man in the moon. The breeding of draught and coach horses is a special work for the farm, and results pretty uniformly in producing profitable and salable horses.

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The harness should be adjusted so that it does not gall the animal, and the collar must especially be looked after. This must be small enough so that it will not wabble and create sores, and large enough that the horse can easily breathe when the muscles are inflated and pressed against it. The use of sweat pads is to be recommended if the collar does not properly fit the neck, by reason of a falling away in flesh; or, as is the case with some horses, whose flesh is easily irritated by friction, it is often advisable to have two sets of these pads in order to get them thoroughly dried out between times.

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The driver who walks behind a plow team feels the necessity of repeatedly quenching his thirst as pespiration and excercise diminishes the bodily moisture, so that he often refreshes himself from the kept-cool water-jug. Now, a horse is not unlike a man in this regard, and he appreciates a moderately cool drink as well as his master. It is not a difficult matter to supply this want if the driver care enough for the comfort of his team to provide for it. A milk can or some sort of a barrel can easily be taken to the field on a stone-boat or in the wagon, and a few quarts of water to each horse once or twice during the half day will make existence happier forthe horse, and in hot days such attentions are simply acts of mercy.

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Train the colts to the halter at weaning time, or before, and tie them in a comfortable stable every night regularly until they are turned out to grass next spring. This takes some time and a little extra trouble, but it certainly pays if a man is raising decent grade colts. Of course where a large number of colts are raised it may be impossible to tie them all up every night unless an extra man is hired who is really not needed for anything else, but most farmers can take the time to attend to the colts as they ought to and never miss it.

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A halter-breaking horse is unsafe, and if the vice is once contracted it usually remains through life. The height of the manger and feed boxes should be adapted to the size of the colt; he should not be compelled to suspend himself by the lower jaw while he licks up the grain with his tongue. Of whatever material the floor of the stable be made it ought to be dry and kept constantly covered with a thick layer of straw. We talk of the doctrine of good breeding and good feeding. We would do well also to preach and practice the doctrine of good shedding and good bedding. Nothing contributes more to an animal's comfort than a soft, dry bed.

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While the idea that the colts must run out during the entire winter in stalk fields and bare pasture so that they will make hardy, "tough" horses, has cost those who believe in it lots of money, and given them horses tough in every sense of the word, the other theory that the colts ought to be kept up in close box stalls or tied in a cold stable, or warm one either, for that matter, from fall till spring, deserves to be condemned about as severely. There is not much money in a horse which is forced to live the first winter on exercise and cornstalks; neither can a good colt be developed by keeping him tied up and stuffing with corn. The colts need exercise and they need the shelter, the first through the day, the second during the night. The kind of shelter does not matter much so that it is comfortable.

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The colt does not need especially warm shelter. He cares more for comfort than warmth. The stable or shed ought to have a good roof, which will not leak and allow water to drip through, and tight sides, in which there are no cracks to admit draughts of cold air. The doors should be hung so that they clear the ground and shun tightly How quickly a man will growl if somebody leaves the door open and a bit of cold air strikes his back for a moment or two; yet he leaves the door of the colt stable two inches ajar during some of the coldest winter nights, because he is too lazy to clean away the snow or frozen mud from the bottom of it. The colt's halter ought to be of good leather, and made to fit him. The man who invented the miserable web and cheap rope halters deserves no honor. The first teaches the colt how to be a puller and halter-breaker, and the second is hard and uncomfortable and frequently wears through the skin on top of the head and under the jaw, leaving raw sores, which are quite common when the halter is left on the colt day and night.