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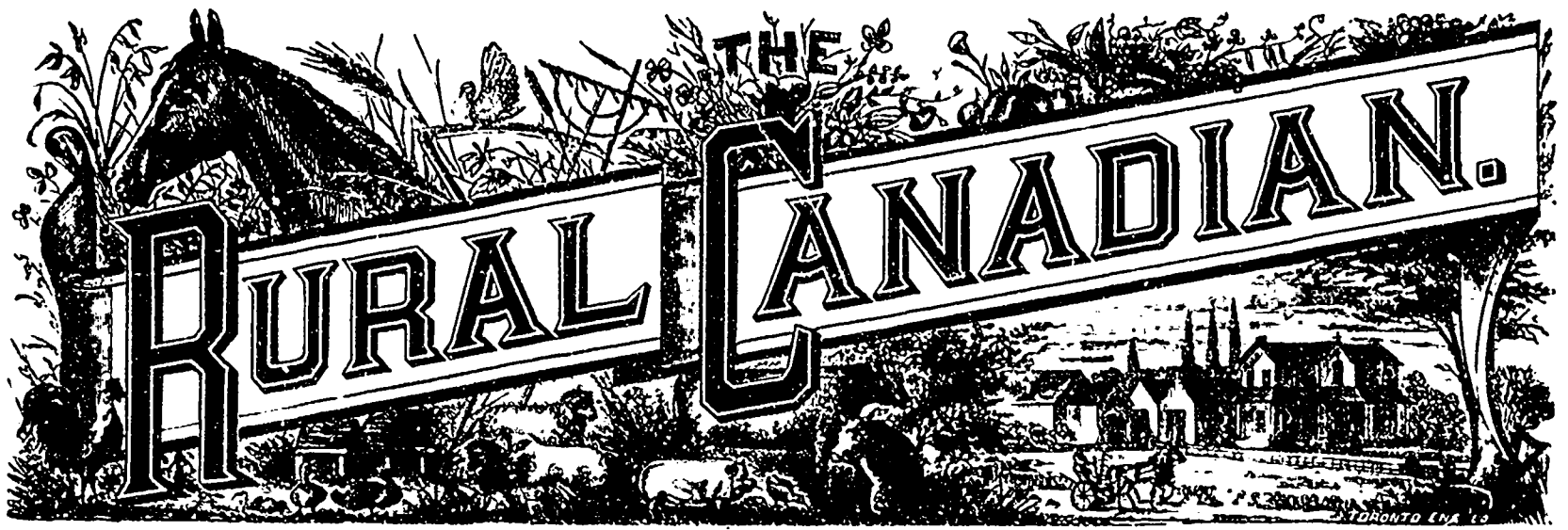
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RURAL NOTES.

PINK-EYE still prevails in many parts of the country. The cool, wet, changeable weather makes the disease difficult of eradication.

THERE is an unbroken field of wheat near Clinton, Ont., comprising ninety-five acres. It belongs to Mr. Ransom, and promises a good yield of grain.

A STRINGENT dog law having been passed in Indiana, there is a revival of the sheep industry throughout that State. Everywhere it is, dogs *versus* sheep.

THE township of Stanley, Ont., is reported as having 5,966 acres of land in fall wheat. With better farming, this kind of crops will be more generally grown.

THE *N. Y. Tribune* pronounces this, after all, the surest and best of coming harvests: "Light is sown for the righteous, and gladness for the upright in heart."

THE sugar meal refuse of glucose factories in the United States has been used by some dairy-men as cow feed. Results: a poor quality of milk, and injury to the health of the cows.

A FARMER who decidedly prefers hornless cattle, says of them: "They are so much more pleasant, safe, and easily managed, and there is no danger from their running with horses and other stock."

MR. J. C. Ross, of Jarvis, Ont., sailed for England about a month ago for the purpose of purchasing Cotswold, Shropshire, and Oxford Down sheep. This is his fifth trip of the kind since 1876.

MR. PHOENIX, a veteran Illinois horticulturist, advises planting the seeds of iron-clad varieties of the apple, as a likely method of obtaining fruit that will endure the severe climate of the North-West.

A NEBRASKA man declares that, if it were not for the noble efforts of the agricultural societies of that State, the rising youth would grow up in ignorance of the fine arts of driving fast horses and manipulating the pool-box.

A CORRESPONDENT of the *Ohio Farmer*, who was beguiled into buying an incubator and brooder, now offers both for sale at any price, but frankly admits he does not know of any use to which they can be put "unless to freeze ice-cream."

THE twine bands used by grain-binding machines, and generally preferred to wire, are liable,

in some sections of country, to be cut by crickets. Tarred hemp twine would, there is little doubt, be left untouched by these and other insects.

THERE is little danger of an over-production of fruit in this country. Great Britain requires fully 2,000,000 barrels of apples yearly in excess of what can be grown there, and the largest crop ever raised in Canada only enabled us to export about 200,000 barrels. Besides this, our own market has never yet been glutted.

AN enthusiastic agricultural writer says that controlling weeds may be made a perfect pastime, as much so as baseball, rowing matches, euchre, or whist; for there is a game to be played, and there are points to be won. The trouble is that you cannot make young people—or, for that matter, older people—quite see it in that light.

THE sale, at high prices, in American cities, of potatoes exported from Scotland, was chronicled in a former issue of the *RURAL CANADIAN*. We regret to say that some later shipments proved a total and serious loss, owing to the tubers arriving in bad condition. In one case a whole cargo of 20,000 bushels had to be dumped into the Delaware river below Philadelphia.

AN English flock of forty Down ewes produced the present season 130 lambs. Thirty of the ewes yeaned three each, and ten four. The lambs were healthy, and have done well. Before, however, we rush to the conclusion that such prolificacy is profitable, we must know the expense and trouble of hand rearing, which must have been practised with a large proportion of this army of lambs.

THE Brock Township Council have set a good example by enacting a by-law to regulate the burning of stumps, brush, log-heaps, wood, straw, and other refuse in the open air. Such fires are prohibited during the months of July and August; at other times they are only permitted after giving eight days' notice to the owner or occupant of the adjoining property. Violation of this by-law renders parties liable to payment of damages, and a fine of not less than \$2 or more than \$50, on conviction before a J.P.

THE *Country Gentleman*, in an article on the indebtedness of farmers, expresses the opinion that the majority of them would be better off if they could not get trusted. We prefer to say they would be better off if they had the manhood to avoid debt. It hurts a man's self-respect and represses his energy to feel that he cannot get trusted, but to be conscious that his credit is good, and yet be self-denying enough not to depend on it, if it can by any possibility be avoided, is a

species of moral heroism which is eminently beneficial to those who exercise it.

GEN. A. BUFORD has published a couple of lectures on "The Church and the Turf," delivered by him not long since in the Campbell Street Church, Louisville, Kentucky, and the pamphlet containing them is offered to jockey clubs at \$200 per thousand. It is contended that the "speeding" of horses is not wicked in itself, and that the turf might be cleansed of all evil concomitants, and made "holy ground," by the use of a right Christian influence. It is said that the General has made some good points in his lectures, and created quite a sensation by them, which last we can readily believe.

MESSRS. LANDRETH & SONS, the well-known seed merchants of Philadelphia, offer \$100 for the best five essays on celery culture, the sum to be divided among the successful authors in the following proportions: \$40, \$25, \$20, \$10, and \$5. They also offer \$125 for the best six essays on onion culture, to be divided as follows: \$40, \$35, \$20, \$15, \$10, and \$5. The competing manuscripts are to be submitted prior to the 1st of August next. Circulars stating the several points to be taken up in these essays may be obtained on application to the firm offering the prizes. We hope some Canadian quills will be sharpened for the contest.

HAVING and harvest are close upon us, and the question of cool, safe, and refreshing beverages for men working in the hot fields is of great importance. Ice cold drinks under such circumstances are dangerous. By far the best beverage for working people on a hot summer day is thin oatmeal and water, with a little sugar. Take a quarter of a pound of oatmeal; two or three quarts of water; boil them, and add from an ounce to an ounce and a half of sugar. If too thick, add water. Before drinking, shake up the oatmeal well through the liquid. This beverage is cool and refreshing. It is nourishing also. In winter it is equally good, if taken hot instead of cold.

It is often desirable to be able to form a pretty correct estimate of the quantity of land in a given field. To aid in doing this, the following table of measurements has been constructed:—Five yards wide by 968 long contains one acre. Ten yards wide by 484 long contains one acre. Twenty yards wide by 242 long contains one acre. Seventy yards wide by 69½ long contains one acre. Eighty yards wide by 60½ long contains one acre. Sixty feet wide by 726 long contains one acre. One hundred and ten feet wide by 397 long contains one acre. One hundred and thirty feet wide by 368 long contains one acre. Four hundred and forty feet wide by 99 long contains one acre.

FARM AND FIELD.

INSECTS INJURIOUS TO THE HOP PLANT.

The hop aphid (*Aphis humuli*) living on the juices of the plant, attacking the tender foliage and twigs, and blighting and withering up the plant, is thus referred to by Mr. Bethune:—

"In England, the growth of the hop is almost dependent, from year to year, upon the appearance or absence of the 'fly' or aphid, known as *Aphis humuli*, though in this country we are not troubled by it to the same extent. It is not necessary to give an account of the life-history of this insect, as that given of the grain aphid will also apply to this variety. It has probably come to this country from England, though the hop is an indigenous plant here, as I have observed it growing on the Kaministiquia River, where it is not at all probable it had been planted, and it is also found growing wild in many parts of the North-West. It is, therefore, not impossible that the insect may have existed here before its introduction from England."

It is to parasites we are indebted for a defence against this pest.

The hop-vine snout moth (*Hypena humuli*) is described as follows:—

"There is another insect very destructive to the hop, viz., the hop-vine snout moth, or *Hypena humuli*. Hops were, and are, grown in the county of Peel to a considerable extent, and while living there I found this insect very abundant indeed.

"Occurring in large numbers, it destroys the foliage of the plants, and so injures them that sometimes no hops fit for market are produced. It is a pale green worm, which appears in June, the moth appearing in July to lay its eggs, and another brood appearing later on, so that there are two broods in the year. When disturbed, it lets itself down by a silken thread a short distance, and if let alone, climbs up again."

Strong tobacco water, lime dusted on the plant, and hellebore, are useful remedies against this insect.

Some cut worms, and a caterpillar very much resembling the cut worm in appearance, but not very precisely identified by the witnesses, are also found among the hop's assailants.

Two butterflies (*Grapta interrogationis* and *Grapta comma*) also feed on the hop, and are occasionally so numerous as to be a nuisance. They are described as—

"Of a reddish colour on the upper surface of the wings and dull on the under surface, with some silvery markings in the form of a semicolon (the Greek mark of interrogation), or a comma, according to the variety."

Their parasites will be noticed with others in due course.

A small butterfly, and its caterpillar (*Thecla humuli*), and a moth (*Plusia balluca*) with wings of "a very brilliant metallic green colour," and of which an illustration is also given (see Fig. 19), feed on the hop, but not to a damaging extent.

The Io Emperor moth (*Hyperchiria varia*) and its caterpillar are also illustrated, the male moth being the smaller and the female the larger insect. (See Figs. 20, 21 and 22.) The insect remains in its chrysalis state during the winter, and the moth appears in the spring. They are not so numerous as to be destructive. The caterpillar has a curious faculty, which is thus described by Mr. Bethune. He says:—

"The caterpillar has won some distinction over our other caterpillars by being possessed of a stinging property. It is covered with bands of bristles, and when they pierce the tender skin of the body they produce an irritation similar to that caused by nettles. It grows to a considerable size, and when coiled up, somewhat resembles the burr of a chestnut. It has a rich reddish-coloured stripe extending on each side of the body throughout nearly the entire length, rendering it, in combination with the yellow spinings, a remarkable insect, and one that can be

PLUSIA BALLUCA.



Fig. 19.

THE IO EMPEROR MOTH AND CATERPILLAR—
Hyperchiria varia.

Fig. 20.



Fig. 21.



Fig. 22.

easily identified. It feeds upon a very large variety of trees, shrubs and plants; amongst others, upon the hop."

AN IMPROVED STONE BOAT.

A correspondent of the *Country Gentleman* describes a novel form of stone boat in use in Monroe county, N. Y. Instead of having the boards composing the "boat" extend under the entire surface, and only slightly turned up at the forward end, the improvement is a stone sled, with runners six to eight inches broad, composed of two three-inch planks, sawed so as to give a rise of six inches or more at the front. On each of these runners is placed a piece of 3x4 inch

scantling, and three lengths of the same four and a half feet long connect the two sides of the boat and form the platform on which good inch boards are laid. The whole is then spiked with wooden bolts extending through the bottoms of the runners. Wooden pins are better than iron, because as the boat wears, iron would tear up the soil. There need not be a particle of iron in the boat, if wide enough boards are used, though it is better to put in a few nails to hold down the centre. This form of boat is very strong, and can be used where an ordinary stone boat would be impracticable. It is decidedly improved by putting in a tongue, so as to be more readily guided. With even the slightest fall of snow it is quite as convenient as a sled.

A POTATO BUG TRAP.

The *Troy Press* tells of a farmer who tried a new remedy for potato bugs with success. He procured a number of boards and placed them here and there among his potatoes, and on these boards were placed raw potatoes sliced. At noon on the first day of the experiment he and his hired men found every piece of potato covered with bugs. The men killed this crop, and at night another crop was killed, though not so large, and in a week not a bug could be seen, and his trouble with bugs after this was comparatively small. In the spring, he says, is the best time to attend to bugs, as a spring bug, he understands, breeds from 200 to 300 during the potato season. He thinks it would be a good plan to dip the pieces of potato in Paris green, as it would save the work of killing the bugs.

IMPROVED GRASSES.

In many respects grass-culture has not kept pace with improvements in other branches. We are continually getting new plants, new trees, new fruits, new vegetables, new grains, but a new grass is never thought of. We have the same orchard-grass, the same red-top, the same timothy, that we had over a hundred years ago, and so far as the drift of thought goes, we shall have the same grasses for a hundred years to come. And yet there is no reason that we can see why there should not be improved grasses, as well as improvements in any other thing, and there doubtless would be if public attention was drawn to the matter as it should be.

VALUE OF AN ACRE.

An acre of wheat will sustain three and a half individuals for a year; an acre of potatoes, ten persons. In Ireland the introduction of the potato has been followed by a decline of every Irish industry excepting agriculture. The small amount of labour required for obtaining sustenance from the potato is taken as the measure of necessary labour, and the time gained is not profitably spent in developing other industries, but is apt to be passed in idleness. It is so the world over, where the earth yields of its abundance almost without toil.—N. E. Farmer.

PEAS AND OATS TOGETHER.

The pea is very rich in muscle and bone-building elements, and oats are also superior to corn in this respect. The oats, also, assist in holding up the pea vine, so as to prevent early lodging, and thus cause it to retain its succulence longer. The crop should be sown in the proportion of two

bushels of peas and one of oats per acre, and well covered. The drill puts them in best. The united crop should produce from forty to sixty bushels of grain to the acre. Now the grain is only a part of the crop. The succulent pea vine is admirable food for pigs, and they should be turned in when the pea is just passing out of the milk, they will then devour the whole plant, and it contains as much nutriment as when fully ripe. The succulent stalk contains from forty to fifty per cent. as much nutriment as the grain.

COLOUR FOR FENCES.

Says the *Country Gentleman*: Colour the fence the same shade as the dwelling, or light brown or fawn colour. The dark maroon trimmings have a somewhat tawdry appearance, and we would prefer them of the same colour as the house, or but slightly darker. We would not make the front yard into a sort of pen, with a picket fence around it, but if a fence is necessary, would extend the yard on at least three sides of the house, or much better, on the four sides; otherwise its ornamental appearance is one-sided.

BENEFIT OF TILE DRAINAGE.

On May 26th we had the heaviest rain of the season. It was so wet before that the ground was hardly fit to work. There are acres and acres that cannot be ploughed this week even if the weather is favourable. Those of us that have our ground tiled can see the benefit of it now. Our tile-makers are having a rich harvest this spring. Corn not all planted yet, and I doubt if some will get through this season. Wheat is up; is of the yellow variety; it is bilious. Rye and oats are looking well. But very little wheat here.—*Cor. Farmer's Review.*

TO PROTECT FARM TOOLS.

An excellent preparation for the preservation of the iron work of farm implements may be made by the slow melting together of six or eight parts of lard to one of resin, stirring till cool. This remains semi-fluid, always ready for use, the resin preventing rancidity and supplying an air-tight film. Rubbed on a bright surface ever so thinly, it protects and preserves the polish effectually.

SECRETARY W. I. CHAMBERLAIN, of the Ohio Board, says he has seen land improved by drainage to such an extent that the first subsequent crop was so much greater than the average that the surplus more than paid the whole cost of tile and putting it down.

A MEMBER of the West Michigan Farmers' Club recently gave his experience with a sandy piece of soil, at the top of quite a hill, that during the summer drouth would dry up so as to kill all vegetation. He tiled it, putting in three-inch tile every four rods. The next year his seeding caught well, and he has averaged 1½ tons of fine hay per acre ever since.

THE substitution of cord for wire in grain binding by machine has been regarded as a good thing for the western farmer, creating a new demand for an easily raised fibrous product of the soil, to the advantage of his pocket-book. But Mr. F. M. Webster reports to the *American Naturalist* that the cord bands are cut in the field by crickets, and instead of compact sheaves the farmer finds only a loose mass when preparing to draw in his stacks. There is no mention of the kind of cord so cut; doubtless tarred hemp twine would be left intact.

From correspondence of the *Connecticut Farmer* we take the following about scattering cattle droppings in pasture, which is made out to be a matter of more consequence than some persons would suppose:—"Having occasion to watch some fires in the spring on the edge of a pasture, I took a hoe and scattered the droppings on about an acre. In another part of the lot was a piece of land of about the same character. On this the heaps were not knocked. As these plots were favourite feeding places, the droppings were abundant. On the first plot no lawn mower could have left an even sward than the cattle did; while on the second plot around each heap was a growth of rank, dark green grass, which went to seed while the intervening spaces were eaten as well as upon the first plot. The snuff of a cow will analyze a tuft of grass with greater celerity and accuracy than the Experiment Station may ever hope to reach. Condemnation quickly follows the discovery of disproportionate ingredients. Will not an animal discover this over-rank herbage in hay as soon as in grass? We often wonder why cattle will not eat a forkful of bright-looking hay. Is not the animal able to scent more of its previous history than we are?"

WILSON FLAGG, the author of a number of charming essays on nature, published under the title of "Halcyon Days" (Estes & Lauriat, Boston), makes a strong appeal for wayside shrubbery. Of the farmers who think that nature should be made subservient to labour, and labour to capital, he writes: "If you stroll along by the estates of these industrious vandals, you will be struck with the baldness and nakedness of the borders of their fields. Not a shrub nor a vine can with impunity lift its head above the ground on either side of their fences, and a squirrel that would venture near them would be hunted like an adder. We may distinguish the possessors of these model farms by observing as we pass by their singular blankness, such as you observe in the face of an overfed idiot." He treats lightly the excuse that wild shrubbery harbours vermin, and he reminds the farmers that this same shrubbery protects the birds which feed on insects. Mr. Flagg appreciates the beauty of a well-tilled farm, but he asks: "Is it nothing to us that the singing birds should find a bushy knoll to nestle in, or a leafy perch to rest upon when they sing to the passing traveller? Is it nothing to us that we may gather a few violets under a hazel bush for the child we lead by the hand? Is it nothing to the young maiden that she can loiter by the roadside in quest of wild flowers, instead of roaming in distant fields, where she does not venture unprotected?" As some insects multiply with increased tillage, it is prudent to encourage the growth of birds, which act as a check upon the insects. We have no sympathy with slovenly farming, but we confess to a love of the nature which greets the eye in the shape of trees and shrubbery.—*Turf, Field and Farm.*

"Two or three years ago," says the Portage la Prairie correspondent of the *Manitoba Free Press*, "when land grabbers and speculators were gobbling up the school lands in this vicinity, John Armstrong took up a section also, and held peaceable possession of the same until recently, when a man named Haggard came along and laid claim to the property, and commenced improving it. Armstrong, thinking that he would be done out of his spec., commenced ploughing also, and both parties are now hard at work ploughing in opposite directions across each other's work, and neither has power to turn the other off, as the land does not belong to them. The neighbours are watching with interest the time when the two sharks will meet in the middle of the field, when it is expected there will be some fun."

CREAM.

"Don't you believe in a future life, in which we shall renew the ties that bind us together here?" "I do," said the henpecked husband, sadly, "but I don't want to."

"Let's illustrate compensation," hiccoughed a political orator. "It's beautiful. You see, an old farmer comes to town loaded with new wheat, and he goes home loaded with old rye."

An American girl in Columbus has married a Chinaman for love, and while she swings in a hammock and reads novels, he does the washing and cooking and keeps the fly traps up to business.

"Your meal is ready, sir," said the waiter to Hayseed, just from the rural districts. "Meal!" exclaimed Hayseed, contemptuously; "do yer think I'm a loss? Get me some corned beef and cabbage, young man."

Cook: "Madame, may I ask you for my testimonials?" Mistress: "What do you expect me to write, you worthless creature? Surely, you cannot expect me to say that I am satisfied with you?" Cook: "Isn't necessary. Only write that I remained with you three months. That will be my best recommendation."

SEE the man coming down the street. What has he got in his hand? It is a white fish. What is that on his shoulder? It is a fish pole. Where has he been all day? In the beer saloon around the corner. What will he do when he gets home? He will tell his wife that he has been out to the lake fishing, and caught the fish after a terrific struggle. Will his wife believe him? No, darlings, she will not, for she knows white fish are never caught on a hook, and besides she will smell his breath. What will she do? She will knock him down with the fish and go after her ma.

SYDNEY SMITH wielded the logic of wit with singular power. Curt, smart, and unanswerable fell his blows. Thus, on the wants of Ireland, "What," says he, "is the object of all good government? The object of all good government is roast mutton, potatoes, a stout constable, an honest justice, a clean highway, a free chapel. What trash to be bawling in the streets about the Green Isle, and the Isle of the Ocean, and the bold anthem of 'Erin go-Bragh!' A better anthem would be Erin-go-bread-and-cheese! Erin-go-cabins-that-keep-out-the-rain! Erin-go-breeches-without-holes-in-them!" This, to be sure, does not settle the Irish question, but the logic of wit is usually the logic of common sense too.

A FASHIONABLE young lady visited a cooking school the other afternoon, where her attention was equally divided between a new dress worn by an acquaintance and the directions for making a cake. Upon returning home she undertook to write down the recipe for making the cake for her mother, and the old lady was paralyzed when she read:—"Take two pounds of flour, three rows of plaiting down the front, the whites of two eggs out bias, a pint of milk ruffled around the neck, half-pound currants with seven yards of bead trimming, grated lemon peel with Spanish lace fichu; stir well and add a semi-fitting paletot with visite sleeves, butter the pan with Brazilian topaz necklace, and garnish with icing and jotted passementerie. Bake in a moderately hot oven until the overakirt is tucked from the waist down on either side, and finish with large satin bows." Her mother said she wouldn't eat such a cake, and she thought these new fangled ideas in cooking ought to be frowned down.

GARDEN AND ORCHARD.

FROZEN GRAPE VINES.

People who have sometimes left their outdoor grape vines on their trolises all winter with impunity, wonder much that, after a comparatively mild winter like the last, so many refuse to bud. The fact is, that a mild winter is often more destructive than a severe one. Warm weather starts the sap, and if frost catches the wood full of moisture, it is sure death to the vine. The only safe course is to lay the vines every fall; then, whether the winter be moderate or severe, they will come out all right in spring. A correspondent of the *N. Y. Tribune* emphasizes this good counsel in a recent issue of that journal. He says:—

"There is a 'howl all along the line' from people who left their grape vines upon the trelises the past winter. In this locality vines not laid down are seriously damaged, and a short crop is the inevitable consequence. Apparently the roots are not materially injured, new shoots are pushing out, and growers are flattering themselves that by another year their vines will be all right. I think they will be disappointed, as my experience convinces me that it will require from three to five years to get their vines in good condition again. People say to me, 'You are lucky that your vines were covered;' while the fact is there is no luck about it. My vines are protected every winter to secure them against injury, just as one insures his building or feeds his cows well to insure a good flow of milk. Grape vines, if left unprotected, may escape injury for years, but it is wise to, as far as possible, guard against all contingencies. Said a follower of Mahomet: 'I am so weary that I will not hobble my camel, but will commit him to God.' Mahomet replied: 'First hobble your camel, and then you can commit him to God.'

VINE-CLAD TREES.

Mr. W. Falconer, in reference to this subject, writes pleasantly in the *Rural New Yorker*.—"How suggestive are the old apple trees, over-spread and draped with grape vines, that we meet with now and again on Eastern farms: the vine-clad trees that skirt our woods and waysides, and grow by rivers, creeks and ponds. I never saw the trumpet creeper appear so beautiful as in the Southern States, where, on the outer edge of a river bottom timber belt, it almost hid from sight the tree it grew on. I never saw the wild clematis look so fine as in a wood in New Jersey, where Mr. Taplin pointed out to me a tree literally covered with the vine, which hung in massive drapery to the ground, and was then in bloom.

"It is a common thing to train Jackman's and other kinds of garden clematis up among the branches of trees, where, when in bloom, they have a fine effect. The Virginian creeper is sometimes treated in same fashion for the brilliant effect of its foliage in the fall. The Chinese wistaria is one of the best of vines for this use, and the periploca, akebia and honeysuckle may likewise be used to good advantage. The Canada moonseed and climbing waxwork will enjoy themselves exceedingly among the lower branches of the trees; and the Dutchman's pipe delights in such liberty. Bare stems of trees may be covered with Japanese ivy—*Ampelopsis tricuspidata*. On many a farm is a wooded ravine, and this is just the place for vine-clad trees.

"I remember, when visiting Robert Douglas, at Waukegan, Ill., with what glowing pride the veteran 'Forty-niner' brought me in front of a wooded ravine near his house, that I might see the splendid effect of the trees upon the distant

bank, whose limbs were bending with the load of drapery which they supported, and with what a gleam of satisfaction he pointed out the many trees—big trees now he had planted there, the vines that he had encouraged to grow up upon them, and the undergrowth, both herbs and shrubs, that he set out there. He had snatched from desolation an unsightly, gloomy chasm, and planted it with trees, and shrubs and vines, and thus secured what is to-day one of the prettiest ravines or glens in Illinois."

SUMMER PRUNING.

J. C. Plumb, in *Western Farmer*, says: "This should now be attended to promptly—both in nursery and orchard. Lawn and street trees may now be shaped up to suit, but no tree more needs this than the silver maple or white soft maple. Its tendency to be broken down by high winds when in full foliage may be overcome by a good heading back every five years. This tree is often badly infested with woolly aphis, and becomes disgusting and sickly. Now, the best remedy for this insect is to cut back one-half to three-fourths of the top, and thoroughly spray the remainder with a weak lye, or solution of caustic potash. This will clean off the young scale insect, and the tree will soon renew its beauty and health. This cutting back of all trees, both of evergreen and deciduous, is one of the most ready ways of adapting them to the requirements of the garden, lawn or street, not appreciated nor practised half it should be—and now is the time, if not already done, to give least shock to the tree and keep healthy wood unless it be done in October."

BARE PLACES IN LAWNS.

By "lawn" we mean any piece of grass kept solely for ornamental purposes. It may be merely a front yard, or on large places it may include many acres. These may from some cause show thin and poor places here and there. These may be mended by several methods. If the bare places are large, the surface may be worked over with a sharp rake, to take out dead stems and roots, and then, after fertilizing, be sown with grass seed of a kind similar to the rest of the lawn. If the bare patches are small, the quickest way to mend them is to lay in turf. In England a method is in use not only for restoring bare places in established lawns, but also for starting new ones, called "m-oculating." The ground being well prepared, bits of good turf (sod), about three inches square, are inserted a foot apart each way. These will take root and spread, soon covering the whole surface. In making or mending a lawn, recollect that the work is to last for years and that a good supply of fertilizing material will be a good investment.

AN UNEXPECTED RESULT.

Mr. Rice, at a meeting of the Western N. Y. Farmers' Club, said farmers often do things without thinking or considering what the results may be. He knew a man once who had a steam saw-mill, and a large pile of ashes and saw-dust had accumulated. He hired a farmer to draw them away in winter, who drew them on an old orchard, spreading them three or four inches thick. The orchard became very productive, and for seven years bore heavy crops of very fair fruit.

CUTTING ASPARAGUS.

Another of the mistakes of our ancestors which it is difficult to get rid of, is the belief that asparagus should be bleached, and to do this it must be cut several inches beneath the surface. I never see a person in vain endeavour to extract a little nourishment from such masses of tough woody

fibre without experiencing a desire to invite him to test a specimen of my luscious tender shoots out exclusively above ground. To procure the desired end, the old-fashioned plan was to bury the roots so deep that very many of them met a premature death, but I plant rather shallow than otherwise, and so far am satisfied with my system.

GARDEN LABELS.

If one must use labels upon trees and shrubs, the simplest we have found is sheet-zinc cut in the shape of a triangle. Let it be six or eight inches long, an inch at the broad end, and taper to a point. Write upon it, near the large end, with a common lead-pencil; coil the small end around a twig; it will expand without injuring the tree, and last for twenty or more years.

DANDELIONS have become the fashionable greens in all parts of the United States. They are being cultivated by market gardeners in the vicinity of all the eastern cities, and are served up in the leading hotels and restaurants.

MULCHING may be applied to such young trees as cannot be cultivated with a horse. A few inches of old straw, cut grass, long manure or sawdust, spread in a circle about newly set trees, will keep the ground moist, smother grass and weeds, and prevent injury by the drouth and hot sun. It is especially useful to young cherry trees.

THE most extensive and most experienced celery grower in the vicinity of Boston once said to me: "Take well-grown celery, and a man in the dark while eating it cannot tell whether it is blanched or unblanched." Of course when raising for market we must blanch, because customers demand it; but when for our own use, why take the trouble? *J. J. H. Gregory, in Country Gentleman.*

WEEDS should never be permitted to get an inch high. Go over the garden beds with a steel rake as often as once a week. The labour will be more than repaid by the increased growth of the crop, and the weeds will never make their appearance. The labour will be far less than is required to clear out weeds after they have grown several inches, and have checked and partly spoiled the crop.—*Country Gentleman.*

At the New Jersey Horticultural Society meeting at Vineland, the importance of enough room between asparagus plants was discussed. Among the different distances recommended was one foot by four, which is too near, three by four, which is much better; and four by six feet, which is best for all extensive culture, if plenty of manure can be applied. Shallow planting gave small shoots, and "there was more in the feed than in the breed." One plantation of three acres realized \$1,500 in a single season at wholesale prices.

I HAVE been in the habit of mulching my currant bushes with a liberal supply of barnyard manure, late in autumn, and forking it in the first of April, but last spring, owing to press of business, a part of the mulch was left undisturbed, and to my surprise the neglected bushes had no currant worms, while those where the manure was carefully forked in had their usual crop. The currant worms can be easily destroyed with white powdered hellebore and water at the rate of one tablespoonful to two gallons of water, mixed a few hours before using. The best time to apply is when the worms are very small, which can be ascertained by examining the lower leaves; if any are perforated with small holes be assured the worms are at work, and one thorough application will exterminate them. I should disagree with Mr. J. M. Smith in allowing Light Brahma hens and chickens to run the year round among my currant bushes; though they might devour the worms, mine would as readily eat the fruit.—*Cor. N. Y. Tribune.*

BEES AND POULTRY.

THE DARK BRAHMAS.

Both the Light and Dark Brahma breeds of fowls have their admirers and advocates, but the preference is very much a matter of taste, as their intrinsic merits are quite similar. Both are good layers, patient sitters, bear confinement in small yards well, and furnish a large carcass for the table; birds fattened for Christmas often weighing eighteen pounds the pair. They mature early, and, like all fowls, are at their best estate for eating purposes while young. The hens are apt to get dull and broody if allowed to become too old, and, unless choice breeding specimens, should not be kept beyond the second year. Many excellent crosses have been made with the Brahmans. A cross with the Games increases the hardiness and vivacity of these breeds, but sometimes has the effect of developing too much pugnacity. The best cross probably is with the Dorking, which gives a large bird, with an excellent quality of flesh for table use. The Brahmans are among the best winter layers we have. Kept in warm quarters, and well fed, they will yield a regular supply of eggs even during the coldest weather. The accompanying illustration well represents the general appearance of the dark variety of the Brahma family.

RIPENING OF HONEY.

Honey is not manufactured, but is simply gathered by the bees from flowers or other sources. When first gathered, honey is thin and watery, and has to be "boiled down." The manner in which the bees do this is thus described by Mr. Doolittle, a well-known bee-keeper:

"All bee-keepers can tell whether their bees are getting honey or not, by the roaring made by them at night, as bees only make this roaring while reducing their honey. Let two or three days of rain succeed a plentiful honey harvest, and all roaring ceases with the night of the third. Our experiments have led us to the conclusion that all honey brought in from the fields by the outside labourers is given to the young bees, taken into their honey sacks, and if more is gathered than their sacks can contain, it is deposited in the cells till night, and then evaporated down; although the evaporation is going on to some extent during the daytime. At night all hands join, from the outside labourers with jagged wings down to bees only a day or so old, and the honey or thin sweet is taken into the honey sack, thrown out on the proboscis, drawn back in again, and so on until by the heat of the hive these small particles of honey are brought to the right consistency, when it is deposited in the cells. In order to do this the bees hang loosely, so that when the proboscis is thrown out it shall not hit another bee or the combs or hive. Many a night have we watched their operations, and by the light of a lamp the little drops of nectar sparkle as they are thrown out on the proboscis and drawn in again. When honey is coming in slowly this process is not

likely to be seen. All, doubtless, have observed that when bees are getting honey plentifully it shakes readily from the combs at night, while in the morning, before the bees go into the fields, not a particle can be shaken from the combs."

When the honey extractor was first introduced, many bee-keepers extracted honey before it was "boiled down," or sufficiently ripened, and put it immediately upon the market, and, as a result, the honey fermented, burst open the packages in which it was put up, and daubed the grocers' shelves. The market for extracted honey was considerably injured by bee-keepers unwittingly offering this "green" honey for sale. The bees do not seal honey until it is thoroughly ripened; hence, many bee-keepers have strongly advised that no honey should be extracted until it is sealed, while others assert that the bees are stimulated to greater activity by removing the honey as fast as it is gathered, and that by ex-

necessary, more stories can be added in the same manner, and the honey left in the hives without extracting until the flow of honey is over. Managing an apiary upon this "tiering up" method requires less labour, and the honey is thoroughly ripened when first extracted; but where the apiarist has only a limited number of hives and combs, and does not wish to purchase more, or use comb foundation, he cannot well do otherwise, if he runs his apiary for extracted honey, than to extract the honey as fast as the bees gather it, and then let it ripen by allowing it to stand in open vessels. Comb honey should never be allowed to remain in a damp place, but should be stored in a room having a warm, dry atmosphere. Especially is this necessary when the honey is first removed from the hives, in order that the honey in any unsealed cells may thicken so that it will not run out and daub other boxes. Comb honey stored in a warm place requires close watching for several weeks after it is taken from the hives, in order that the hatching of the bee moth's larvæ may be discovered, and, if necessary, the honey fumigated with burning sulphur. —W. Z. Hutchinson, in *Country Gentleman*.

CROP-BOUND.

When you see one of your fowls going around with a crop that looks twice as big as it ought to, catch it, and if the crop is hard and swollen, you may conclude that there is some obstruction in the passage from the crop to the stomach. Pour some warm water down the throat, and then knead the crop gently until the contents seem soft; then hold the head down and the bill open, and work at the crop a few minutes longer. Next give a tablespoonful of castor oil and shut the fowl up without food for twelve hours or more. If this course of treatment does not benefit the fowl, cut open the crop, and remove the contents with a teaspoon handle. Make the cut, which should be about an inch long, near the



DARK BRAHMAS.

posing the honey to the open air the excess of moisture will evaporate, and the honey become thoroughly ripened. In California, sun evaporators are used to reduce honey to the proper consistency. A sun evaporator for honey is simply a slightly inclined plane of tin, over which the honey slowly flows in a shallow stream, exposed to the direct rays of the sun, which evaporates the water. I have frequently extracted honey before it was sealed, and stored it in large tin cans holding about 300 pounds each. The cans were placed in a room through which the kitchen stove-pipe passed, and in which there was a free circulation of air. To allow evaporation, and yet exclude dust and insects, each can was furnished with a cover made from a circular piece of muslin, around the edge of which, in a hem, was a rubber cord that held the cover in place. Standing in these open cans, thin honey would become thoroughly ripened in three or four weeks.

When the apiarist has plenty of hives and combs, an upper story can be raised when it is full, and another story filled with empty combs placed between that and the lower story; and, if

top of the crop. After the crop has been emptied, oil the finger, and pass it carefully as far as possible down the passage to the stomach. Lastly sew up the cuts, but don't sew all the edges up together; take two or three stitches in the cut in the crop, and then sew up the outer skin separately. Once upon a time your correspondent sewed the edges of both cuts all up together, but somehow that hen didn't get along very well—in fact she up and died. Keep the fowl on soft cooked food, and but little of that, and away from the other fowls for a week or so. Give no drink for two or three days after the operation. In making the cut take care not to injure any large blood vessel.

EGG-BOUND.

When a hen mopes around with hanging wings, appears in distress, and goes often to the nest, but does not lay, she is egg-bound, and the first treatment should be a large dose, say two tablespoonfuls of castor oil; if this does not give relief within a reasonable time, inject sweet oil into the oviduct.

HORSES AND CATTLE.

TROCAR FOR SHORTHORNS.

Present Shorthorn prices are very low alongside of those of ten years since, partly owing to aggressive competition of other worthy breeds, but mostly as a direct consequence of the degenerating influence of persistent and long-continued devotion to "pedigree." A well-informed correspondent of the *Farmer's Review* maintains that all the good native stuff in this celebrated family will not be able to save it from being "wiped out of existence by other equally valuable breeds," unless respect is paid to the principal consideration that actuates the great mass of cattle feeders—the desire for profit is beef production. Some further expressions of his are perhaps too strong, but they may serve the purpose of warning to infatuated leaders, and of timely hint to the unsophisticated:—

"The practical farmer desires to improve his stock; he looks over his agricultural paper and finds (owing to the greatness of the Shorthorn interest) seven-eighths of its cattle department filled with matters pertaining to Shorthorns, he concludes that he will get a Shorthorn bull, and sets out for the nearest breeder. Nine-tenths of the time he finds a lot of scrawny bulls, and at first is disgusted, but the proprietor will almost invariably say, 'My cattle have had little or no grain all winter,' and pointing to one of his scrawny animals, will remark, 'There is not a finer bred calf than that in this State,' and reciting the pedigree, will astonish the visitor with the prices that have been paid for the ancestors of said calf. Perhaps in the end a sale is made, and, although far from satisfied with the merit of his purchase, the farmer's mind is still consoled by the idea of the great pedigree which is attached to his calf. The result of a cross with this bull on common cows is far from satisfactory, and yet, reading time and again the value of Shorthorn bulls for grading purposes, we have known farmers to continue to allow just such bulls to be palmed off on them. Now then; having made a plain statement of facts, I desire to say to those who are about to buy bulls: When a man harangues you with a pedigree, let it pass from your mind unheeded; find an animal with a strong, vigorous constitution, ascertain that he is pure-bred and entitled to registry, and be careful to have him well developed in all points most profitable to beef animals, remembering distinctly that in the economy of production and value of product lies the profit in all farm stock."

This writer looks for "a revolution in Shorthorn breeding in ten years," and predicts that "we shall see Shorthorns on a permanent and solid basis—that is, bred for individual merit." Let us hope so. Let us hope also that the recent demonstration to the contrary in Chicago was merely a galvanic spasm of a dead craze.—*N. Y. Tribune*.

STOCK WORDS AND PHRASES.

We have often wondered that some high authority did not have something to say on the novel and often far-fetched language which is fast coming into use in connection with the cattle trade. At length this has been done. Referring to the Shorthorn nomenclature which has been invented and brought into use by "fashion-breeders," the *Mark Lane Express* observes that "to read an account of some nobleman's herd, one might often be excused for thinking some one had been giving a rather free description of the nobleman's family," and our contemporary cites a reported case where the harassed make-up editor, by a natural mistake, mixed an ornate puff of cer-

tain of these blue-blooded cattle with a report of a high-toned concert, much to the consternation of some ladies, who thus appeared in print as of "rich red colour, dappled with white," and "finobodid and tight-limbed." Writing of the same matter, a quietly sarcastic correspondent of the *English Agricultural Gazette* gets in the following sample point below the fifth rib of a gushing chronicler who spoke of the "sea-otter touch":

"The phrase, 'a sea-otter touch,' to convey the meaning of one who would describe the heifer's skin, is pedantic and unreal. The question to be settled by 'T.' is not whether there be such a thing as a sea-otter skin or no, but whether the people who read agricultural papers and take interest in cattle are so familiar with sea-otters and the 'fe' of their fur that a reference to it conveys any increase of enlightenment into their minds, and enables them the better to appreciate the quality of cattle."

ORIGINAL HOME OF THE HORSE.

There is no doubt that the original home of the horse is not Europe, but Central Asia; for since the horse in its natural state depends upon grass for its nourishment and fleetness for its weapon, it could not in the beginning have thriven and multiplied in the thick forest-grown territory of Europe. Much rather should its place of propagation be sought in those steppes where it still roams about in a wild state. Here, too, arose the first nations of riders of which we have historic knowledge—the Mongolians and the Turks; whose existence even at this day is, as it were, combined with that of the horse. From these regions the horse spreads in all directions, especially into the steppes of Southern and South-eastern Russia and into Thrace, until it finally found entrance into the other parts of Europe, but not until after the immigration of the people. This assumption is, at least, strongly favoured by the fact that the farther a district of Europe is from those Asiatic steppes—i.e., from the original home of the horse—the later does the tamed horse seem to have made its historic appearance in it. The supposition is further confirmed by the fact that horse-raising among almost every tribe appears as an art derived from neighbouring tribes in the East or North-east. Even in Homer the ox appears exclusively as the draught animal in land operations at home and in the field, while the horse was used for purposes of war only. Its employment in military operations was determined by swiftness alone. That the value of the horse must originally have depended on its fleetness can easily be inferred from the name which is repeated in all the branches of the Indo-European language, and signifies nearly "hastening," "quick." The same fact is exemplified by the descriptions of the oldest poets, who, next to its courage, speak most of its swiftness.—*Popular Science Monthly*.

BEEF FOR THE ENGLISH MARKET.

Mr. A. B. Matthews writes an interesting letter to the *Kansas City Commercial Indicator*, giving some of the results of his recent observations in England, particularly with regard to American beef in the Smithfield market at London. He says that one objection made to our beef is that there is too much fat in proportion to lean, and suggests as a remedy—

First, selecting animals for breeding purposes, the fat and flesh of which are well intermingled and not patchy. Second, by judicious feeding. We must use that class of feed that will produce flesh as well as fat. We use too much corn and not enough roots and grass. Cattle having free access to abundance of blue grass and fed with corn will put on flesh as well as tallow. This is

not only the way to make the best, but also the cheapest beef. Our farmers should sow more blue grass and plant less corn. Another objection to American beef is that it has more bone than the English beef. Especially is this true when compared with the polled cattle of Scotland, and it is also true when compared with the crosses, and I think it is also true that our western cattle have a little more bone than English. It is needless to point out the remedy, which is to discard all rough-boned bulls and breed only from small-boned, well-fleshed animals. It is a well-established fact that limestone soil is calculated to make bone, and to counteract this we must judiciously select small boned animals.

POLLED CATTLE.

The largest polled cattle are the Scotch Black, called Angus, and sometimes, though improperly, Aberdeen. The next largest are called Galloway, of the same shape, colour, and general characteristics; although not so fine and highly improved as the Angus. Both breeds are hardy and thrifty, and make the best beef, properly fattened. The cows generally being only moderate milkers, this stock is more profitable to rear for the shambles than for the dairy. The next in size are the Red Polled Norfolk and Suffolk cattle of England. The cows of this breed are generally large milkers, and when well fattened make a prime quality of beef. They are thus alike excellent for the dairyman and butcher. They are also hardy and thrifty, and, being the most generally useful, are highly deserving to be bred numerously in our country; and for the ordinary farmer would be the most profitable of all cattle.—*A. B. Allen, in N. Y. Tribune*.

FEEDING YOUNG COLTS.

The best possible substitute for milk of the dam is cow's milk. It should be sweetened at first, as the milk of the mare is sweeter than that of the cow. A little patient effort will soon result in teaching the colt to drink milk readily, but be careful not to give him too much at a time. A half pint is quite sufficient for a colt of a week old, but the ration should be repeated often—not less than six times a day, the idea being to give the colt really all it will drink, but to feed so often that it will not require very much at a time. As the colt grows older, the ration should be increased, and grass with oats should be added as soon as the colt is old enough to eat. No ration is better for a colt than cow's milk with these adjuncts. After the colt is two months old, skimmed milk should be substituted for the fresh cow's milk. Should there be any trouble from constipation, it will be well to add about one pint of oil meal per day to the ration; in fact we would recommend the use of oil meal in all cases, as it furnishes a large proportion of muscle and bone-forming food. If the oil meal is not obtainable, flaxseed may be used. A half pint of flaxseed boiled with two quarts of bran will make two good feeds for a colt, and this ration may profitably be alternated with the other food.—*Breeder's Gazette*.

Mr. MILTON BRIGGS, Kellogg, Iowa, who has done his State much service by devotion to improvement of stock, well says, in Governor Gue's *Homestead*, that "investing money in any one breed at high prices under the excitement of speculation will in the future, as it has in the past, prove disastrous." He adds that it is through "this humbug of fancy pedigree" that "many of our best cattle, as well as their owners, are being ruined, and passing off the records, leave no sign."—*N. Y. Tribune*.

SHEEP AND SWINE.

BERKSHIRE SWINE IN THIS COUNTRY.

The *Country Gentleman* gives the following table, showing the number and geographical distribution of recorded Berkshire hogs; it is from the report made at the last meeting of the American Berkshire Association. From the same report we learn that of the 776 Berkshires recorded in vol. I., 285 were boars and 541 were sows; of the 1,795 in vol. II., 528 were boars and 1,272 were sows; of the 1,850 in vol. III., 480 were boars and 870 were sows; of the 1,155 in vol. IV., 420 were boars and 785 were sows; of the 988 in vol. V., to date of report, 849 were boars and 584 were sows.

We find also that of the 541 sows recorded in vol. I., 819, or 59 per cent., have had produce recorded; of the 1,272 sows in vol. II., 611, or 48 per cent., have had produce recorded; of the 870 sows in vol. III., 848, or 40 per cent., have had produce recorded; of the 785 sows in vol. IV., 218, or 29 per cent., have had produce recorded; and of the 584 sows in vol. V., to date of report, 186, or 28 per cent., have had produce recorded. Before the final close of the volume, however, these figures will materially change, as the whole number which will appear in vol. V. will be increased by the addition of pedigrees now on file and being prepared for admission.

Where owned.	Vol. I.	Vol. II.	Vol. III.	Vol. IV.	Vol. V.	Totals.
Alabama	3	27	25	10	..	65
Arkansas	..	4	2	7	..	13
California	..	1	15	30	5	51
Connecticut	3	5	2	8	7	24
Dakota	..	..	..	2	..	2
Delaware	..	..	3	..	..	3
District of Columbia	..	..	..	2	..	2
Florida	..	..	..	1	1	2
Georgia	..	6	8	5	..	19
Illinois	411	712	264	292	165	1844
Indiana	29	67	77	20	50	249
Indian Territory	..	..	2	..	..	2
Iowa	64	166	74	53	26	383
Kansas	18	67	38	63	92	328
Kentucky	5	64	35	36	6	146
Louisiana	..	..	7	..	..	7
Maine	1	28	78	12	23	142
Maryland	9	13	24	33	43	121
Massachusetts	..	7	5	20	15	47
Michigan	..	31	14	21	15	81
Minnesota	..	34	20	1	4	59
Mississippi	..	2	6	14	1	23
Missouri	5	121	135	131	102	494
Nebraska	2	..	20	23	4	49
Nevada	..	..	1	2	..	3
New Hampshire	..	..	..	15	12	27
New Jersey	16	15	5	9	12	57
New York	42	34	41	29	60	206
North Carolina	5	..	..	..	..	5
Ohio	32	125	102	96	108	463
Oregon	..	..	1	..	..	1
Pennsylvania	54	78	129	81	70	418
Rhode Island	..	..	4	3	..	7
Tennessee	3	20	16	7	4	50
Texas	..	11	28	8	..	45
Vermont	..	..	..	1	..	1
Virginia	13	25	17	4	1	60
West Virginia	8	1	2	3	2	16
Wisconsin	12	18	22	41	11	104
British Columbia	..	..	..	1	..	1
Central America	..	..	..	2	..	2
England	..	9	42	14	32	97
Ireland	..	7	1	..	..	8
Ontario, Canada	25	72	35	54	47	233
Quebec, Canada	17	28	3	4	..	50
	776	1795	1850	1155	933	6009

LAMBS AT THE MODEL FARM.

The following record of some experiments made by Professor Brown in regard to the flesh and wool of lambs of various breeds and crosses, will repay careful study. It is from the last report of the Ontario Agricultural College:

CARCASS AND WOOL OF WETHER LAMBS PREPARING FOR SHEARLING MUTTON.

We have on hand, experimentally, a score of wether lambs in view for next Easter and Christmas. They are out of common Canadian ewes by our rams of the respective breeds named.

The wool and frames of these are an interesting study at the present time, and so, in preparation for next year's finishing, I have pleasure in submitting average weights of each kind, with lists of length of wool, in comparison with the pure breeds of the same age:

AVERAGE WEIGHTS OF GRADE WETHER LAMBS, CHRISTMAS, 1881.

Cotswold Grade	120 lbs.
Leicester Grade	117 "
Oxford Down Grade	131 "
Shropshire Down Grade	125 "
Southdown Grade	116 "
Merino Grade	110 "

LENGTH OF GRADE WETHER LAMBS' WOOL AS AT CHRISTMAS, 1881.













Cotswold Grade	6 inches.
Leicester Grade	6 "
Oxford Down Grade	5 "
Shropshire Down Grade	4 1/2 "
Southdown Grade	4 1/2 "
Merino Grade	3 1/2 "

In comparison with these, note those of the pure breeds from lambs of the same age:—

Cotswold	11 inches.
Leicester	7 1/2 "
Oxford Down	4 1/2 "
Shropshire Down	3 1/2 "
Southdown	8 "
Merino	2 "

As much of the manufacturing value of wool lies in the coarseness or fineness of fibre, or diameter of each plant, the following diagram shows this, being the average, as nearly as possible, of that for each of the lambs named. A large magnifying power was used:—

COMPARATIVE DIAMETER OF FIBRE OF TWELVE KINDS OF WOOL FROM LAMBS NOW AT THE ONTARIO EXPERIMENTAL FARM.

PURE		MERINO.
PURE		SOUTHDOWN.
MERINO		GRADE.
PURE		SHROPSHIRE DOWN.
SOUTHDOWN		GRADE.
PURE		OXFORD DOWN.
SHROPSHIRE DOWN		GRADE.
OXFORD DOWN		GRADE.
COTSWOLD		GRADE.
LEICESTER		GRADE.
PURE		LEICESTER.
PURE		COTSWOLD.

SLIM FARE.

The Morris (Man.) *Herald* of the 18th ult. has the following:—

"A pig belonging to Robert Lipsett, of Meadow Lea, burrowed itself under a straw stack for shelter about the 17th of April last, and while slumbering peacefully a blizzard sprung up and snowed his pigship in. When the pig was missed, Lipsett made a search of the premises, but failed to find his animal, so he gave it up for lost. Last week, however, when the snow began to disappear, one of Mr. Lipsett's sons heard a peculiar sound proceeding from the straw stack, and immediately instituted a search. After digging away a pile of snow and two or three feet of straw, the pig that had been given up for lost jumped out with a bound apparently as strong as it was before its adventure. The pig when first seen was lying in a cramped position, with the straw packed tightly all around it. It is supposed that the animal subsisted on straw, though there was no evidence to show that it had eaten anything.

WASHING SHEEP.

The old custom of washing sheep is now more honoured in the breach than in the observance. In theory it equalizes the quality, in practice it causes wider variation. A grower, if honest, will cleanse the fleeces fairly, if "indifferent honest," he will only make pretence. This trick would not avail, but for the equally wrong practice of buying unwashed wool at a uniform deduction for dirt, without regard to quality. It is a proffer of a Roland for an Oliver. Humane flockmasters oppose the washing of sheep because of their liability to take cold in subsequent changes of temperature, or continued rain; because if deferred to settled warm weather, discomfort and loss of condition follows the hot spells of later spring. In many parts of the country washing has been found impracticable for want of convenient or sufficient water. In the great ranges the practice is abandoned, and by large numbers of growers east of the Mississippi. It should be everywhere disregarded, and all wool sold on its merit.—*N. Y. Tribune.*

SELF-CLEANING PIG PENS.

The writer has placed pigs upon a slatted floor, which would allow the liquid and much of the solid to go through, and the balance was mostly trodden through. On one side of the pen was a strip of tight floor, four feet wide, with the trough placed upon it against the side of the pen, and upon these planks was placed bedding for the pigs. They soon learned the use of the slatted part of the pen, and would go there and drop. The slatted floor is elevated fifteen inches above the bottom, so that the excretion works through the slats, and the pen and pigs are kept clean. A door is hung on a hinge so as to be turned up and allow the manure to be cleaned from under the slatted part of the floor. The pigs, in this case, keep quite clean, without any labour being bestowed upon it, except to remove the manure once a month from under the slatted floor.—*Nat. Live Stock Journal.*

It is said that foot-rot and other diseases to which sheep are subject occur much less often among flocks which are pastured on rather rough ground, and particularly where they have to climb hills to get their grazing. In Scotland, the great sheep country of Europe, the sheep are always found in greatest numbers among the mountain ranges.

The noxious weed, "Long John," infests the meadows in Northern New York, and threatens injury to the dairy interest.

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The Rural Canadian.

EDITED BY W. F. CLARKE.

TORONTO, JULY 1st, 1882.

TREES IN FIELDS.

We have often observed, in the course of our travels, that while many parts of the country are very bare of trees, there are others in which there is a superabundance of them, only they are out of place, being miscollaneously interspersed through cultivated fields. The other day, when journeying through one of the finest agricultural districts of Ontario—that, namely, lying between the town of Paris and the city of Brantford—we were much struck with the large amount of land thus occupied. "The plains," as that section of the country is called, are thickly dotted with trees; and while it must be confessed that they add greatly to the beauty of the landscape, it cannot be denied that they diminish the crops to a very serious extent. If an accurate calculation were made in regard to this matter, the thrifty farmers of Brant county would be surprised to find how costly a tree tax they are unconsciously paying from year to year, in the diminished products from their fertile acres, owing to this cause. It seems a very common idea that trees make no demand on the soil; hence an orchard is not considered to occupy the ground, and so a crop of some sort—usually grain—is expected from land covered a few inches beneath the surface with a network of roots. But a little observation will suffice to show that this is a mistake. It matters not how liberally a piece of land may have been manured, a tree will monopolize the greater part of the resources of the soil, and leave a circle of half-starved grain all around its trunk. Suppose each tree standing in a field of grain to lessen the crop to the value of a single bushel of wheat—and we believe this estimate is far beneath the mark—then the tax is indeed a serious one. It is no exaggeration to say that in the particular district above mentioned there are farms that will average from two to four trees per acre. Calculate what this comes to in a year—in ten years—and it will be seen that it amounts to a considerable sum. Beside the loss in crops, there is the trouble of ploughing around trees, which is by no means a slight affair. It lessens the day's work of teams and men, beside being hard on implements and harness. We are strongly in favour of trees on farms, but we would have them in proper places: along the highway; as wind breaks; perhaps along the lines of fence—though, in truth, both fences and trees should be swept away as inconsistent with economical farming. A weed has been defined as a plant out of its proper place; and, strictly speaking, a tree in a cultivated field, unless in a fence corner, is a big weed. The convenience and comfort to cattle resulting from having trees here and there in pasture fields is often pleaded, but these are quite as well secured if the trees are confined to the lines of fence. In the good time coming, when cattle are mostly soiled, it will be found cheaper and better to provide sheds and yards than to keep up extensive pasture ranges sufficiently shaded with trees to protect stock from the noon-day sun. By all

means let the dwelling-house and farm-standing be embowered in trees; by all means let there be a reserve of woods well underbrushed and kept in a park-like condition, where cattle can roam and enjoy themselves; by all means let the exposed part of the farm be sheltered by a strip of forest and evergreen trees; but to have trees here, there, and everywhere is poor economy of land and labour. We do not advocate the wholesale destruction of trees in fields, but, by a judicious course of planting, the substitution of groves and rows of trees, where they will not interfere with farm work and farm-crops, for the miscellaneous growths which interfere with the productiveness of the soil and the straightforward and pleasant work of the ploughman.

THE ENSILAGE QUESTION

Discussions on the above subject continue to be "all the go" in our American exchanges, but we must confess that unfavourable opinions appear to be in the majority. The *N. Y. Tribune* summarizes a number of debates in the following paragraph, which is headed "Some Sayings about Ensilage:"—

"A misinformed person might easily imagine that the champions of the silo were all interested in the sale of an ensilage cutter or other patent in some way connected with the new system of storing fodder.—One impulsive critic has dared to maintain that the enthusiasts of the pickling process couldn't see anything against their hobby if it were written in letters as large as the broadside of the biggest barn in New England. Is the effusiveness thus parodied the effect of the alcoholic jumes of the 'cow kroust' on the human victim? If so, it suggests an added labour for the temperance advocates.—The *Farm Journal* has this caption to an incisive article against ensilage: 'A Bald Humbug Knocked on the Head.'—Secretary Russell, of the Massachusetts Board of Agriculture, says the use of ensilage lessens the amount of cream, and butter from it shows its flavour.—Messrs. Ephraim Chamberlain and Joseph H. Walker, Worcester, Mass., 'investigating and thinking men,' are quoted as opposed to ensilage.—The *Rural New Yorker* insinuates that there are 'crazy-heads' connected with the abating ensilage excitement.—A correspondent writes that he visited the Pompton silos a year ago, and was not greatly impressed with the system as seen there, nor with the proprietor's method of presenting the subject.—Secretary Russell is quoted in the *N. E. Farmer* as having said in a recent public address that he and others 'opposed the pretensions of the ensilage supporters at the outset, because they began by claiming what was impossible, and because there was an evident purpose of speculation on the part of some of its advocates.'—Meanwhile the search for truth at the bottom of the silo goes on, and there is labour still for the Gradgrinds; 'men of facts and calculations, men with measuring-sticks and multiplication tables always in their pockets.'"

"THE CATTLE FANCY."

The *N. Y. Tribune* is pursuing live stock jobbers with a very sharp quill. We have already copied one or two trenchant editorials from its columns on this subject, and hope they may have some influence in restraining speculation, and inducing people to have some regard to real rather than fictitious values. Under the above heading the able journal named had another spicy article in its issue of June 7th, in the course of which it said with much truth that "the high rates paid for blue-blooded Duchesses and the black muzzled among Jersey pets bear hardly any

more direct relation to the great practical dairy industry and the pressing question of oleomargarine than the outer gingerbread of house ornamentation bears to the solid basis of stone which sustains the structure."

Our worthy contemporary is not far wrong in thinking that the fancy prices obtained for animals with fashionable pedigrees are secured by means very like those which are used in the parlours of Wall street, on race-tracks, and in pool-rooms. It finds a crumb of consolation in the reflection that if the mania for speculation did not take this form it would be pretty sure to assume others, and concludes its homily with the following paragraph:—

"If gentlemen of wealth and leisure, or those who illustrate the old saw about the unwise and his money, wish, in the excitement of sharp competition, stimulated by 'hippodroming' and offers of expensive silver-plate, to pay fat prices for such an intangible substance as 'pedigree' (which they fondly think they see illuminating the tip end of each individual fawn-coloured hair of sleek and promising but untried heifers, and even showing itself in the delicate shadings of their hoofs and horns), there is no law—except maybe a moral law—against their doing so. If the disease didn't take this form it might break out in the rabbit aberration or the fancy for swell dogs or pet poultry or pouter pigeons; and if wholly repressed in such lines of activity it might even have to expend its force on the ill-fed and despondent of the sorrowful human race. But when agriculturists and well-informed practical people who carry the heavy weights of this present world, see accounts of such cattle sales, they recall the sure outcome of the folly as exemplified in many experiences in England and in our own country, especially at New York Mills, fifteen years ago, and they make the easy and convincing calculation that probably no cow ever lived that was really worth a single thousand dollars—much less five or forty thousand."

MANURE SAVING.

Saving manure is like saving money. "Take care of the pence and the pounds will take care of themselves," is an old adage in regard to money saving. A like principle applies to manure saving. A correspondent of the *Farmer's Review* gives an interesting account of the methods by which an old German, rigidly economical of all the fertilizing material he could scrape up, managed, with only one cow as a manure-maker, to raise on a small plot of land a quantity of first-class vegetables. There is a moral to the story which will apply to extensive farms.

"He took me to his little barn and showed me the inclined floor of his stable, which conducted all the liquid manure into a tank. In a little shed back of the stable, protected from the rain, he piled the other portions of manure. Every scrap was collected carefully. Nothing was allowed to be lost. Two or three times a week he cleaned the floor of the stable, and the water used was turned into the tank to dilute the liquid stored there. In a shed adjoining the one containing the coarse litter from the stable he piled up all refuse that could be made into manure. Leaves, straw, muck, the stocks of vegetables, all went into this pile, to be wet with the liquid from the tank. He turned it over frequently with a long-handled fork, and soon it became as rich in fertilizing power as the more solid portions of the stable manure. In this way the old German secured more than double the amount of manure that one cow would make, and the liquid in the tank, to which soapsuds and all other liquids containing any element of plant food were added regularly, supplied an invaluable stimulant for

young plants. If coarse manure were to be used, the results would not be so immediate. In using liquid, the nutriment was taken up at once by the soil. It was in shape to make all its fertilizing power available as soon as applied, and the plant with whose roots it came in contact received vastly more benefit from it in its early stages of growth than it would have received from manure which must undergo some chemical change before it becomes a part of the soil. 'This,' pointing to the manure in the sheds, 'for by-and-by. This,' pointing to the tank, 'for to-day.'

COW-MILKING BY MACHINERY.

Various devices have been tried with a view to dispensing with the slow and laborious method of hand-milking. Tubes have been inserted in the teats, and rubber imitations of the grasp of the calf's mouth have been attempted, but though these plans have been partially successful, so far as drawing the milk is concerned, they have in the end proved failures. Either they do not strip clean, or they inflict injury on the udder. Most experienced dairymen have but slight expectation that milking by machinery will ever be accomplished. Still, in this wonderful age, it is difficult to tell what is impossible.

OVERTOIL FOR WEALTH.

It is difficult to understand for what object many people—and there are some farmers in the number—are working so hard. They have enough and to spare, both for themselves and those who are to come after them. Dr. Dio Lewis, in the *Golden Rule*, sketches the history of a man who began life poor, struggled successfully to get on, and died at sixty worth half a million. Few men ever worked so hard, and few were ever so worn out at threescore. Dyspeptic, nervous, wretched, he constantly longed for rest he could not obtain; and death was not unwelcome, he had become so weary of life. A dissipated son and two gay, helpless dolls of daughters are doing their best to squander their father's hard-won wealth. The doctor wishes this "poor rich man" could rap out or otherwise convey his present opinion of his earthly career.

SKETCHES OF CANADIAN WILD BIRDS.

By W. L. KELLS, LISTOWEL, ONT.

THE CANADIAN MOCKING-BIRD.

The vocal and imitative powers of the mocking-bird have long been a theme for the poet and the admiration of the naturalist. There are several varieties of the mocking-bird species, but the one common to this country, and usually called the cat bird, is about ten inches in length, the tail being remarkably long. Its plumage is sooty-black, except the wings and tail, which have a deeper hue, the bill and eyes also are deep black. It frequents thick shrubberies, vineyards, and the willow-covered margins of creeks, and seeks the most concealed spot for its resting place, though it often visits gardens, orchards, and the borders of the woods in search of food. The female builds her nest near the ground, among thick bushes or evergreen shrubs, where it is well concealed from observation. It is constructed of brambles, dry weeds and leaves, cemented with mud, and lined with fine roots and dry grass. The eggs, four in number, are of a deep green colour, and two broods are sometimes raised in the season. They are strongly attached to their nest, and the affection which they exhibit towards their young is unsurpassed by any of the feathered race. They are very diligent in supplying them with food, and should they be exposed to danger they will,

in trying to defend them, encounter the utmost hazard, seeming almost strangers to fear, and exercising all their arts to drive or draw off the invader. The vocal powers of the male bird are great. The notes of the blackbird, the song of the thrush, the robin, the grosbeak, and the warble of the canary, the call of the snipe, as well as the solos of other birds, and even the cries of some animals, are all successfully imitated, intermingled with other notes peculiarly its own. It not only sings and imitates with deceptive exactness, but seems to dance at the same time, hopping from branch to branch, as if keeping time to the music of its voice. It often deceives persons by imitating the mowing of a kitten in pain, and as soon as it is approached, either darts off through the thick brushwood, or begins to warble some other notes, apparently delighted in thus deceiving the human ear. It also seems to take pleasure in teasing other birds by imitating their love-calls or notes of distress, and as soon as they approach terrifies them by the scream of some of the hawk tribe. While hay-making is in progress, it sometimes visits the meadows near its haunts, and occasionally startles the farmer by its cat-like calls and other peculiar notes. This species is in general solitary in its habits, its movements are quick, its flight rapid, but short, and it feeds on insects, berries and seeds. It makes its appearance in Ontario in May, and disappears again in September.

THE AMERICAN ROBIN.

This interesting and familiar bird is generally regarded in Canada as the harbinger of spring, although, in some parts, the blue bird makes an earlier appearance. In the central parts of Ontario it does not, as a rule, arrive until the early part of April, but it is often seen in March, and even in February, on the banks of the St. Lawrence and the shores of the great lakes. In the summer season it is found throughout the greater part of the temperate regions of North America, being tolerably abundant from the regions south of the Ohio river to those around Hudson's Bay. It has been found to nest as far north as the fifty-sixth degree of north latitude. "The first bird seen by me," says Audubon, "when I stepped upon the rugged shores of Labrador, was the robin, and his joyful notes were the first that saluted my ear. Large patches of snow still dappled the surface of that wild country, and although vegetation was partially renewed, the chilliness of the air was so peculiarly penetrating that it brought to the mind a fearful anxiety for the future. The absence of trees properly so called, the barren aspect of all around, and the sombre mantle of the mountainous distance that hung along the horizon, excited the most melancholy feelings, and I could scarcely refrain from shedding tears when I heard the song of the robin, sent there as if to reconcile me to my situation. That song brought with it a thousand pleasing associations of the beloved land of my youth, and soon inspired me with a resolution to persevere in my hazardous enterprise."

The robin is a constant and beautiful singer. His lays are modest, but lively, and often of considerable power; the vivacity and simplicity of his song cannot fail to cheer the mind of the listener, and fill it with pleasing emotions. Immediately upon his arrival here in spring, while the air is still cold, and patches of the garb of winter still linger around the fences, and sparkle like diamonds in the brilliant sunshine, the soft and tender but animated melody of the robin is heard echoing through the woods, or issuing from the orchard trees, causing a thrill of delight in the heart of the listener. Everyone knows the robin and his song; he is generally cherished by old and young; and should be protected by all

with anxious care. Few atmospheric changes interrupt his song, in wet and cloudy weather, as well as in the clear sunshine, while the female is forming her nest and incubating her eggs, perched on a fence-top, or some detached tree in the fields, he gives vent to his happy feelings in the sweet tones of his ever-welcome song. In May, when the leeks, cow-cabbage, and wild flowers are peeping forth in every part of the reanimated woods; when the leather wood is covered with yellow bloom, and the dog-berry and elder are in blossom; when the sap of the maple tree has ceased to flow, and its red buds are expanding into leaves, and many other plants, assuming their summer livery, have banished the dismal aspect of winter, and the thundering sounds of the creeks and water-courses have sunk to a gentle murmur as they ripple onward towards their parent ocean, and nature in all the varied and charming beauties of spring promises pleasure and abundance to the whole creation, it is then, especially in the early morning hours, that the song of the robin is heard to the best advantage, as if he were anxious to show the human family his gratitude for the shelter afforded by the fences and the surroundings of their dwellings, where he often takes up his summer residence, in preference to the wild scenery of his native woods.

The surveyor and the pioneer find the robin in the backwoods, and though the progress of civilization may cause a treeless farm or busy town to occupy the site of the trackless forest, yet it does not, like others of its race, forsake its native homestead, but year after year returns at the voice of spring to the same vicinity, and makes its nest as readily on the farm fence or in the shade trees of the populous town, as it does in the wild woods, where the foot of man may have never trodden. The robin, when taken young and carefully supplied with suitable food, is easily domesticated, and sings well in a state of confinement. A Canadian writer, speaking of the robin as a song bird, says: "A gentleman informed me that he had one of these birds in a cage, which not only sung exquisitely, but rendered quite perfectly a number of airs, executing the different and rapid passages in an easy, graceful style, putting in the variations and modulations with fine effect. He told me that he had always been fond of singing birds, and before coming to this country had a number of larks and thrushes, but he did not hesitate to say that this bird was the best singer that he had ever heard or seen." The robin, notwithstanding its innocent and peaceful character, has to reckon man among its worst enemies; for often while the poor bird is warbling perhaps his first song after his return from his winter exile to his native land, he is shot down by some heartless gunner. Laws have been enacted in Canada in order to prevent the destruction of useful birds, but to a great extent these laws are disregarded. Besides man, owls, hawks, crows, jays, cats, squirrels and other animals conspire in diminishing the number of the red-breasted songsters, and at the migratory periods often appear in large flocks. In October these birds begin their migratory movements towards the south, and during the winter months they are found in all directions and in great numbers in the Southern States. Some few, however, are still found in Ontario, until the first fall of snow and the cold blasts of November proclaim that winter has finally set in, and instances are known in which solitary individuals have been seen in the woods as late as the New Year, and as early as February. The flight of the robin is pretty rapid, at times greatly elevated, and capable of being long sustained. At the period of their general migrations they move in loose flocks over a space of several hundred miles, and at a

considerable height. If the weather is calm, their movements are continued during the hours of darkness, and at such times the noise produced by their wings is sometimes heard at a considerable distance.

The nest of the robin is composed of leaves, straw, moss, wool, cotton rags, paper, and grass, plastered inside with mud, and lined with fine dry grass. The eggs are generally four in number, and of a light green colour. It feeds on various kinds of worms, insects and their produce, as well as on various species of seeds and small ripe fruit; and at the time when currants and cherries are ready for use, it must be admitted that it is not friendly to the interests of the farmer in either town or country. But in the spring it may often be seen in the fields following the plough, and feeding on those lower forms of animal life which, if left to remain and increase, would be very detrimental to the interests of the agriculturist. The following sketch will convey to the mind of the reader a lively and natural description of the robin when searching for its morning meal in the early summer hours:—"Watch an old robin pounce down on a lawn or pasture moistened with dew or rain. At first he stands motionless, apparently thinking of nothing at all, his eye vacant, or with an unmeaning gaze. Suddenly he bends his ear on one side, makes a glancing sort of dart with his head and neck, gives perhaps one or two hops, and then stops again, listening with attention, and his eye glistening with animation. His beak almost touches the ground; he draws back his head, as if to make a determined pick. Again he pauses and listens, and again hops a few steps, scarcely moving his position, then is once more motionless as a stuffed bird. But he knows well what he is about, for after another moment's pause, having ascertained that all is right, he picks away with might and main, and soon draws out a large worm, which his fine sense of hearing had informed him was not far off, and which his hops and previous picking had attracted to the surface, to escape what the poor worm thought might be his underground enemy, the mole." The robin is nine inches in length, and its plumage, though not the most attractive, is nevertheless not devoid of beauty. The breast of the male is of a beautiful red, the lower parts are whitish, or ash colour, and the upper parts of the wings, body, and tail are of a light brown, or earthy hue, the head is blackish, the eyes are encircled with a ring of white, and the beak is yellow.

The wire-worm has made a raid upon a ten-acre field of White Russian wheat, owned by David Henry, of Ramsay, Lanark county, and entirely destroyed one-half of it.

It is remarkable that more pears are not planted. They are easy of culture, and always command ready sale at high prices. It is not often that they go lower than \$1 or \$2 per bushel, and they usually bring from \$4 to \$10 per bushel, if choice.

An Illinois farmer has found a way of getting three prices for his pork. He has built a curing house, and created a market at his own door for the smoked meat, at fifteen cents per pound. Of course the curing process is managed so as to turn out first-class bacon and hams.

"I see the collars of your new harness are too large for your team." "Yes, but I have eight horses of different sizes, and when I buy a harness I must get collars that can be used on the entire herd of eight." As I observed the scars on the shoulders of his team I wondered how his family of boys would like to wear the same sized boots, from Johnny, six years old, up to William, ago thirty five. *Charles A. Green, in N. Y. Tribune.*

CURRENT NEWS ITEMS.

TRACTS of land have been allotted to the Scottish, Ontario and Manitoba, and the Primitive Methodist Colonization Company.

A SKUNK hunt is an innovation amongst sportsmen at Rat Portage. The attire is a novel one, being an oilskin suit. The hunt got on the wrong scent in a chase last week.

MR. JOHN McQUEEN has sold his farm, lot 22, 3rd con. of Stanley, to Mr. Peter Campbell, of Clinton, for the sum of \$6,000. This is an excellent farm, containing about sixty acres cleared and forty of bush.

THREE children in the township of Grey climbed into an oat bin on the 17th ult. The lid closed upon them and got fastened, and when the hired man opened the bin to feed the horses, he found the children dead.

THE *Stirling News-Argus* says: "Mr. James W. Butler has left at this office a potato leaf which measures no less than 6½ inches in length, exclusive of the stem, by 5½ inches in breadth. It is from an Early Vermonter vine, and would feed a family of bugs nearly the whole season."

A FARMER on the fourth line of Nottawasaga is the owner of a ewe which recently dropped a lamb. The lamb grew and waxed in strength for nearly two weeks, when lo! another lambkin came to share his pleasures. The farmer expects that the ewe will keep on, and that he will have a large flock before the fall.

THE Midland District correspondent of the *Lindsay Post* says: "A trio of young men went fishing the other Sunday on the Nottawasaga river, and captured one sturgeon; the bait they used is new to all anglers, and ought to be put on record, being a silver half-dollar. The bait has to be renewed every fresh fish hauled in."

THERE was great destruction of property caused by tornados in several States of the Union, especially in the State of Ohio, recently. Half the town of Grinnell, Iowa, was laid in ruins, sixty-four persons being killed, and over 146 wounded. There was great destruction of life and property also in several other towns in the State, as well as in several other States.

A YEAR eccentric man was Andrew Herster, who has just died in Easton, Pa. He never saw a steamship or a large sailing vessel; he never rode either by rail or on street cars, but he made over \$250,000 by cattle dealing. In death his eccentricity remained, for he left four-fifths of his property to one son, and cut off his other five children with next to nothing.

MR. GEO. BURNETT, of the 16th concession of Howick, sold seven head of cattle lately weighing as follows: 1,615, 1,550, 1,520, 1,480, 1,265, 1,355, and 1,950 pounds.—Also Messrs. Wm. Wallace and James Sudden, of the 17th concession, sold four head; the former three head weighing 1,545, 1,400, and 1,805 pounds, and the latter one head weighing 1,865 pounds.

A NEW YORK butter and egg firm has just got into trouble through counting its eggs before they were laid. It calculated on a big egg crop, and contracted to deliver 100,000 dozen eggs at 14½, 16, and 16½ cents per dozen. But the weather went back on the hens, and the hens went back on the eggs, and the firm went back on its contract. Now all parties are laying around cackling about the weather.

A ROOSTER was missing from a farmyard in Virginia for nearly three weeks. At last the cook said. "He in de well; I hear him crow down dar." A man went down with a light and brought up a rooster so thin that the light shone through him—feathers and all, but he was alive, and though scarcely able to walk, was around

next day as chirk as ever. He stood on a jutting rock in the well, unable to fly out.

A SHORT time ago a wood pile near the residence of W. H. McNeil, Lansdowne, was discovered on fire early in the forenoon. As no fire had been burning anywhere near the wood, it was quite a mystery how it started; but investigation proved that it was caused by the heat of the sun reflected from some milk pails standing outside the kitchen door near the wood pile. To make the matter sure, the reflection was thrown on another part of the pile, and a fire soon started.

A FRENCH officer of hussars quartered in the east of France, recently rode his mare from garrison to Paris, 100 miles, in twelve hours. After resting two hours, he took her to the show grounds of a large exhibition, and she pranced around the arena, apparently nearly as fresh as if she had not gone through such a severe performance. This is most extraordinary—her not seeming subsequently much fatigued by so long and quick a race. Horses have repeatedly been ridden or driven 100 miles within the time named, and even a shorter one; but they showed great exhaustion afterward, and sometimes were ruined or even killed by it. At best it is a hazardous and cruel force-put.—*N. Y. Tribune.*

From the Monthly Weather Review for May, issued by the Dominion Meteorological Society, it seems that there was more sunshine at Winnipeg during that month than at any other place in Canada. Constant sunshine is represented by 1, and the following is given as the mean proportion for the month at the principal points of observation:—Winnipeg, 0.58; Woodstock, 0.45; Toronto, 0.51; Montreal, 0.48; Fredericton, 0.52; Sydney, 0.46. The maximum daily amount of sunshine was:—Winnipeg, 11th, 0.95; Woodstock, 15th and 29th, 0.85; Toronto, 29th, 0.94; Montreal, 7th, 0.99; Fredericton, 6th, 0.97; Sydney, 6th, 0.95. The number of days completely clouded was:—Winnipeg, 2; Woodstock, 7; Toronto, 5; Montreal, 4; Fredericton, 4; Sydney, 8.

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THE DAIRY.

ITEMS IN DAIRY MANAGEMENT.

Prof. Sheldon, the eminent English dairy authority and lecturer upon dairy management, has recently been delivering a series of lectures at South Kensington. We notice that he was profuse in his references to the way dairying is carried on in this country, a knowledge of which he gained during his visit here a few months ago. Of the influence of food on the butter product he says that the proportion of butter in milk is much more easily influenced by changes of food than is the proportion of casein; so that it followed that the nitrogenous is more constant than the non-nitrogenous matter. Thus the improvement of milk is more in the direction of an increase of fatty matter, and less in that of an increase of cheesy matter; therefore the high feeding of cattle is more advantageous when the milk is used for butter than when it is used for cheese. On the Derbyshire hills it is a common saying that "the poorest land made the best cheese." Paradoxical as this might be, it is absolutely true; although it assumed that the poor land is sound—i.e., that it requires no artificial drainage. Cheese produced upon such land as this, if properly made, would be better than that produced upon richer soil. The quantity per acre is less, but the quality is superior. The reason of this is supposed to be that the grass grown on rich land contained a much larger proportion of the elements which go to form fat, while that grown on poor land contains a larger proportion of the elements which go to form flesh, from the latter of which cheese is made. Another consideration is that it is a much simpler and an easier thing to make good cheese on sound poor land than upon rich land.

He had known dairymaids make cheese successfully for years, and then utterly fail, without any apparent reason. One of the principles which should be borne in mind was, that the composition of milk might be raised or lowered by the composition of the food given to the cows. Mr. Sheldon impressed upon his students the extreme importance of keeping all vessels and appliances scrupulously clean. He then said it had been estimated by a German friend of his that in a pan of milk containing four per cent. of butter, there were forty thousand millions of cream globules. These rose to the surface simply because their buoyancy was greater than that of the milk which contained them. Their density, however, varied a good deal, for while some came to the top others remained stationary, and yet others sank to the bottom. It was still an open question whether they had any covering, but the consensus of opinion was in the affirmative. In shape they were generally oval, but never angular. He had no doubt the open pan system was the one that would ultimately prevail, and it was upon this principle that the finest butter he ever saw in his life was made. The Swartz system of raising cream was not undeserving of commendation, but it was not likely to come into general use, because of the difficulty of scouring ice just when it was wanted, viz., in the height of summer. The American Cooley creamer was an ingenious arrangement, and might be relied upon for keeping cream perfectly cool in hot weather, but in neither of these contrivances did the cream separate so well as in the open pan; and it was, therefore, always very thin. In America, he might mention, they made two or three qualities of butter from the same milk by skimming off the cream and then leaving the milk to stand until a fresh layer had formed. Another objection to the two machines he had mentioned was that the cream in rising was exposed neither to the atmosphere

nor to the light, the latter of which was necessary to the development of colour in butter.

Whether either of these is destined to become a popular and permanent institution, he should leave it for time to disclose, but he might be permitted to say that the centrifugal cream separator, which was one of the most wonderful inventions of modern times, would in all probability supersede all other methods in large dairies. He did not think the invention would come into use in small dairies, because a steady motive power, like that of steam or water, which would not often be available under such circumstances, was needed to drive it, hand-power being insufficient, while horse-power was too irregular. By means of this separator, perfectly sound cream could be obtained from perfectly fresh milk, no matter how hot the weather. It also extracted a larger proportion of cream from a given quantity of milk than any other process, only one-quarter of one per cent. being left behind, while frequently the percentage was as low as .15; and it was said further that a quart of cream obtained in this manner produced eighteen ounces of butter against sixteen ounces obtained from cream under the open pan system. Dr. Voelcker had said that the finest butter was made from perfectly fresh milk, and with a little modification this was no doubt right. It was true that perfectly fresh milk would make perfectly fresh butter, but then perfectly fresh butter was a little insipid; that was to say, the flavour, which was a product of incipient decomposition, was not fully developed. The Americans attach a great deal of weight to what they called the ripening of the cream. The cream should not, therefore, be churned directly it was skimmed, but should be allowed to stand a little while, the flavour being acquired better at this stage than after the butter had been made. The white flecks sometimes seen in butter were either the remnants of casein, or were caused by strong rays of light falling upon the cream. Each day's cream should be kept separate until the time came for churning, but before churning the various accumulations should be well mixed together, and be allowed a little time to amalgamate. Inferior butters were now being thrust out of the market by oleomargarine. This was made from the fat of animals, melted down, and divested of all the fibre or stringy matter, the fat being churned with milk or buttermilk. As a matter of fact it was not butter at all, but he preferred it to inferior butter.

So far, butter factories had not succeeded in England, but in America they were very common, and were conducted in the same way as the cheese factories. The farmers sent in their milk or cream, and the butter was made upon the most approved principles, and in immense quantities, so that a large quantity could be supplied of one uniform quality, by which a difficulty was obviated that had to be encountered by our butter sellers, who complained that the butter of no two farmers was ever alike. Having recommended the use of cream gauges, and stated that he had known the milk of a Jersey cow to register twenty-five degrees, while sometimes the figure was so low as seven, the lecturer came to speak of cheese-making, in relation to which he said cleanliness was even more consequential than in butter. It was matter of common notoriety that the making of cheese in England was rapidly declining, and probably the time would come when it would cease almost entirely. It was not far from the truth to say that they made only two-thirds the quantity they made ten or fifteen years ago, and by those who were able to make the comparison it was alleged that the cheese of the present day was decidedly inferior to that of fifty years back. If this were so, it was to be traced in the first place to high flavouring, and in the second to less pains.—*Prairie Farmer.*

THE CHEESE TRADE.

Bradstreet's says of the cheese trade. If prices are low, we may expect an increase in the percentage of exports. If cheese remains high, we must rely more largely upon our home demand; and, so long as home markets will take and consume it, they certainly form the healthiest and most substantial basis for trade. The make of cheese is rapidly increasing every year, the amount manufactured last year being estimated by good judges as something like 400,000,000 pounds. The shipments from New York amounted to about 183,000,000 pounds, and, if we add to this 27,000,000 for exports from Boston, Portland and other ports, it will make forty per cent. sent abroad, leaving sixty per cent. to be consumed at home. This estimate is probably not far from correct. So long as this proportion of home consumption can be maintained, it is possible that prices may be maintained also. But in a year of tremendous production, like that of 1878, our factories would be largely dependent upon the foreign trade, and in that case a break in prices would be inevitable.

BUTTER TESTS.

Reports of butter tests of Jersey cows begin to come in. The value of the little butter cow can be shown in no more convincing way than by thus proving what she can do. W. B. Montgomery, of Mississippi, reports that his cow Maggie 9255, gave, from March 21st to the 27th inclusive (seven days), 235½ lbs. of milk, which made 14 lbs. 2½ oz. of butter. She is Southern bred. Sire, Nelusko 479; also sire of Gilt Edge 2nd 4426, record 14 lbs., dam, Lucky Belle 2214, daughter of Albert 44 and Pansy 6th 38. R. McMichael, Lexington, Ky., reports a butter test of two Jersey heifers. Almah of Oakland 11102, dropped March 14, 1880, by Pandors of Staatsburg 3rd 6497, sire Thorndale 2582. Almah dropped a fine h. c. March 6, 1882, and up to the time of calving gave between one and two gallons per day. In seven days in the latter part of March she made 14 lbs. 5 oz. of butter. Gold Princess 8809, dropped May 4, 1879 (out of Goldie C. 8104, sire Charley Kitteredge 1247), dropped a b. c. Feb. 5, 1882, and in seven days, near the close of March, made 14 lbs. 12 oz. of firm and well worked butter. She weighs 560 lbs.—*Breeder's Gazette.*

WHAT a man can do in North-western Iowa raising cattle, is exemplified in the case of John Lemp. In 1865 he moved from Michigan to Sac County. That year he bought one cow of Jno. Alexander. From that cow he has raised \$1,200 worth of cattle, and has now fifty-three head, worth, at a low estimate, \$1,100, making \$2,300 worth of stock; and during that time he has sold \$1,000 worth of butter, making altogether from one little scrub cow in fifteen years the snug sum of \$9,800, besides supplying his family with milk and butter, and sour milk for the pigs.—*Sac Sun.*

Two farmers were recently comparing the yield of milk from their respective herds for the past season. The receipts of one were about a third more than those of the other, and the latter said: "I cannot understand this—my feed, my water supply, and my cows are as good as yours." The reply was—"Yes, but when my milkers go into the milk barn to milk, they understand that it means business. I tell them my milking barn is no place to tell long stories and spunk the hired girls. I won't have a poor milker around at any price, and if I catch a man striking or maltreating a cow, 'off goes his head.'"

HOME CIRCLE.

A WASTED LIFE.

"I have tickets for the concert to-night, Abba," said James Henley, coming into the sitting-room, where his wife was running a sewing machine with a busy whirl.

"Oh, James, how I wish I could go!"

The light died away from her husband's face in a second.

"Wish you could go, Abba! Why, of course you will go."

"I can't, James. I must finish these three dresses before Sunday, and it will take every minute."

"Three dresses!"

"For Jennie, Susie, and Lotta. It is Easter Sunday, you know, and all the spring things are ready but these dresses."

"But this is only Wednesday."

"I know, James, but look at the work. There are overskirts to each, and ruffles on all the waists. Jennie has three flounces."

"I suppose it is useless for me to repeat what I have said so often, Abba: that you are foolish in your choice of work. Little girls do not require the finery you put upon your children."

"But all the children in the congregation are well dressed, James. You cannot afford to put the sewing out, so I must do it."

"Let the children dress more simply, then. Come, Abba, stop that buzz for once and go to this concert. I think we can all survive the disgrace if the children wear some of the dresses they have, on Sunday. It is seldom that any really good music is in our reach at L—, that I hate to miss hearing it."

"Can't you go?"

"And leave you here? I should not enjoy it if I knew that you were stitching here. Come!"

With a heavy sigh, as if James was expecting a sacrifice instead of giving a pleasure, Abba left the room, and went to her own apartment to dress for the concert. While she dressed she was calculating closely the time she must save to make up for her evening of pleasure. By rising an hour earlier and retiring an hour later, she might be able to finish the dainty silks that were to excite the envy of all the mothers of L— on Sunday. All through the evening, while her husband drank in all the sweet sounds in which he delighted, Abba, with her face all polite interest, was thinking of the unfinished work.

"Was it not delightful?" James said, as they walked home in the soft spring moonlight.

"Delightful! I am so glad I went, James. Mrs. Gordon had on her new spring suit, and her dresses all come from New York. The trimming on her basque is quite a new style, and I am sure I can put Jennie's on in the same way."

So the talk went on, and the sewing machine whirred for two hours after James slept, so that Abba might not forget how the trimming was put upon the new basque she had seen.

Sunday morning shone clear and cloudless. Mrs. Henley had put the last stitch into Lotta's dress as the clock struck twelve, and she awakened with a pain in her chest and a headache, but with a feeling of triumph. Her children would wear their new spring suits, that had cost nothing but the material.

Nothing! Mrs. Henley did not estimate the hours spent over the machine, the weariness, the neglect of many little duties. There had been no actual money laid out in dressmaking, so it was clear gain on material.

Very pretty the children looked when they were ready for church. Jennie and Susie, twins of ten years old, were dressed alike in delicate pearl colour, trimmed with blue, and hats of the newest shape with blue ribbons. Lotta wore cerise colour with cerise trimming, for Lotta was a brunette of seven.

The charges at starting for Sunday school were:

"Be sure you lift your overskirts when you sit down, don't lean back upon the streamers of your hats, and walk where you will not soil your light boots. Don't strain your gloves, and lift your flounces when you kneel down."

"It is such a relief that they are all dressed," said Abba, as the children started, their little parasols jauntily held, and their whole air showing their appreciation of their new finery.

"Over-dressed, Abba!" was the reply. "Your own dresses are not more elaborate."

"It is the fashion now to cut children's dresses like ladies'. But you ought to be proud of your children, James. Everybody compliments me upon the taste with which I dress them."

"Abba!" Mr. Henley said suddenly, leading his wife to the mirror, "look at your own face."

"Well?" she said, wondering what he could mean.

"Your cheeks are white as chalk, there is a heavy line under your eyes, and your whole air is that of a woman worked to death."

"James, what nonsense!"

"It is not nonsense. I wish it was. Five years ago you had the complexion of a child—as clear and rosy as Susie's. Your eyes then were bright—full of animation. You had young children, a house to keep in order, and just half our present income. Yet you could find leisure then for a daily walk, could enjoy an occasional evening of social pleasure, or some entertainment. I had a wife then."

"James! What do you mean?"

"I mean that in place of my happy, healthy wife, I have a sickly, over-worked seamstress. These dolls that have just gone out have none of the grace of childhood. They are becoming little pieces of vanity, all absorbed in their finery. Their underclothing would do for signs in an emporium of linen, with embroidery, ruffles, and tucks."

"But I do it all myself, James."

"Exactly. You are stitching your life into the garments of children who would be far happier, healthier, and better in the simple clothing suited to their years."

"You are so old-fashioned, James. You would not have your children look like frights?"

"You know as well as I can tell you that I like to see them neat and clean, but I do not like to see them dressed like fashion plates at the expense of your health."

"Oh, I am well enough. I am pale to-day because I sat up late last night. But I must dress for church, or we will be late."

The glad Easter service passed over Mrs. Henley with but little impression. To her chagrin, the little Goodwins, who had all of their dresses direct from New York, had an entirely new style of overskirt, that made Susie and Lotta look quite old-fashioned in the eyes of their mother. While the sermon was read, Mrs. Henley was trying to contrive some way of remodelling the obnoxious skirts. All the triumph of the morning in the really beautiful dresses was gone, gone. The Goodwin girls outdressed the Henley girls!

Summer came, and the long spring days were spent in preparing a seaside wardrobe for the children, for Mr. Henley, by the advice of his physician, was going to take his wife to the ocean air.

The pain in the side had become very troublesome, and there was a little cough that meant wakeful nights. The pale cheeks were seldom tinged with a healthy colour, and the eyes were languid and heavy. People spoke pityingly of Mrs. Henley as "quite an invalid," and her husband mourned over the alteration of his wife.

He insisted upon having a physician, who advised fresh air and exercise, and a tonic. Abba obediently swallowed the tonic, took a daily walk, and then made up for lost time by stitching far into the night. For were not the Goodwins, the Wilcoxes, and all the leading fashionables of L— going to the same hotel where Mr. Henley had taken rooms? and could Jennie, Susie, and Lotta have one inch less ruffling than they possessed?

Mr. Henley protested in vain. If he sent a seamstress to help his wife, it only gave an excuse for a dress or two more to be made, and he finally gave up the attempt to bring Abba to a reasonable ambition. He was an affectionate husband, a kind father, liberal in providing for his family, but his salary was not sufficiently large for him to rival the expenditure of the fashionable friends that Abba had made. It was entirely vain to tell him that it was in his wife's favour that she could, upon smaller means, dress herself as well as any in L—. He obstinately maintained that his wife's health, her companionship, her interest in his pursuits, in the books he read, her music, and her sweet voice in singing were far more valuable than twenty-seven flounces upon Jennie's dress, or fifty tucks in Lotta's skirt.

Still he endured as patiently as might be the loss he deplored of Abba's bright interest in what had in-

terested both. He tried to admire the really exquisite specimens of needlework brought for his inspection.

He only shrugged his shoulders when his little girls minced along with dainty, fino-lady airs, instead of bounding with the freedom of childhood. He bore the steady whirr of the sewing machine in the evening, instead of the voice or music of his wife.

But when Abba's health began to give way he exerted his authority, and found he had been silent too long. The love of dress had grown stronger, and the ambition that had taken so deplorable a path could not be put aside. Abba submitted to all James' directions while he was beside her, and worked doubly hard when he was away.

But the summer wardrobes completed, the dainty bathing-dresses trimmed, the Saratoga trunks packed, Abba faithfully promised James to rest during their summer sojourn at the seaside. With a sudden consciousness of growing weakness, there came to her an appreciation of her husband's love and patience that had been numbed. She began to realize that she had let her ambition for dress overshadow her love for her husband, and that she had wronged him in depriving him of the companionship he had prized so highly.

"I will rest while I am gone, and when I come back, James, I will give my evenings to you, as I did when we were first married."

This was a parting promise never to be enacted. Only a few days' rest were allowed her, before an acute attack of lung fever prostrated her. James left his business to hurry to the seaside, a nurse was engaged, and medical skill did its utmost. But the constitution weakened by confinement, and while the summer days were in their full beauty, Mrs. Henley knew she was dying.

It was a bitter thought. Life held so much that was precious; her kind, loving husband, her beautiful children, her happy home—all must be left.

"A mysterious dispensation of Providence," said Mrs. Goodwin; "such a good mother. And those children are just the age when they most need a mother's care."

But Abba Henley, in the dread hour she bade farewell to hope, wound her arms about her husband's neck, and sobbed:

"If I had only listened to you, James, I might have been a guide to our children, a companion to you for many years, and when I died have left loving memories instead of a trunk of fine clothing. I have wasted my life."

And James Henley, in his widower's weeds, with his three little girls in sombre black beside him, wonders mournfully how many of the mothers of the land are wasting their lives in the same struggle for appearance.

LIFTED SHADOWS.

Shadows o'er each pathway linger,
Rest a moment, then pass on;
But more brilliant seems the sunshine
When the transient gloom is gone.

So the shades of earth still hover,
O'er life's river, drear and dark,
And our wearied hearts discover
No safe haven for our barque.

Rays of glory, gleaming brightly
From the Saviour's starry crown,
Circling round the brow of mercy
Whence the anguish'd drops flow'd down,

Scatter swiftly all the shadows,
Darkening o'er the waters wide,
Lighting up the peaceful harbour
Into which our barque may glide.

Toronto.

E. A. S.

ONE OF LIFE'S INCIDENTS.

"A message for you, sir." And the servant handed in a small folded paper and withdrew, while the master of the house walked to the window, and sought by the fast falling twilight to decipher the almost illegible scrawl, "Will mother come to 28 Barker street?"

"Who is it from, Henry?"

A delicate-looking woman, with soft brown eyes, and a smile on her sweet, pale face, came to her husband's side, and leaned on his broad shoulder, as she glanced at the paper he held in his hand. So different they looked as they stood together, and yet so like; even a casual observer might see that between them was an affection which had triumphed

through sorrow, and over which time had no power. But the smile vanished as she read the contents of that rudely written missive, and, with an almost agonized expression on the now sad face, she gasped out—

"Oh, God, my child!"

"Hush, Mary!" The husband's voice tried to be stern, but it quivered a little. "Hush! I must speak to this man."

He stepped into the hall as he spoke, and confronted the waiting messenger.

"You will tell the person from whom you received this message, that there is nothing here for such as she; that she is not known here, not acknowledged—that she—" the speaker's brow darkened, and his voice grew hard—"that she long ago cast away the love of father, mother, home, and she has no longer any claim upon them."

"But—she is dying, sir."

"Dying!" The voice shook for a moment, but only for a moment; a moan from the inner room roused him, and, walking to the door, which he had left partially open, he drew it sharply to. "Take my message," he said, harshly, to the waiting man, "and, mind you, do not let me ever see you here again."

"What is it, Mary?" The voice was tender enough now, and the manner anxious, as he bent over his weeping wife, and took her in his arms. "Hush, hush, my darling!" as sobs shook the slight frame, and she wept passionately on his breast. "Mary, Mary, what is this? Is your husband so little to you that you can forget him to mourn for the ingrate who has broken both our hearts?"

"Oh, husband, husband! she is our own child, our little child!" sobbed the stricken woman. "The only one God sent us, the only one we ever had to love."

There was silence in the room for a long time, broken only by the half stifled sobs of the mourning mother as she wept on her husband's breast. He held her closely in his arms, with his face pressed to the sunny hair; but his brow was working, and his lips were very pale. So they sat, in the deepening twilight—the bright fire in the grate casting a glow upon them, and upon the luxurious appointments of the room, so cosy and comfortable, and such a contrast to the wild storm without, and to what might be taking place in that other home. The mother shuddered as she thought of it; she calmed herself, and raised her heavy, drooping eyes to her husband's face; his were cast down, but he clasped her more closely to him.

"Husband, darling—" she put her arms around his neck, and drew his face down to hers—"it was but yesterday we were speaking of our wedding day—let us talk of it now. Twenty-three years to-night since I left my home for yours—left father, mother," she continued, half musingly, while tender recollections gathered around the lips, and filled her eyes with a soft mistiness. "Twenty-three years to-night! Shall I go on, Henry? Shall I speak of that happy time? Ah, we were happy! Poor father and mother, they were angry at first, but they forgave us after. Time went on, and a little child was born to us; she grew up to be our light, our joy—the father hid his face—and then—the voice faltered, and tears fell faster, "she did what her mother had done before her—she loved another more than father, mother, or home, and she left them for him. She has lived to repent it, as"—and the wife clasped the hand she held with both hers—"her mother has never done. Husband, is she more to blame than I was? No, no! not more to blame—more to be pitied—more to be loved. Darling, there are furrows on your brow which time cannot claim—there are furrows in both our hearts—we can trace them to the same cause. Let us forget them! Let us only remember the one who is suffering for what we can give her—the heart which is breaking, that we can relieve. Oh, my little child—my little child!"

"Mary"—the father raised a pale, sad face—"you have conquered, as you always do; act as you wish in this matter—I will not go against you—I cannot see her—no, no!" as his wife raised a pleading look to his face. "There are some wounds too deep to be reopened, and this is one of them. Go to her, if you wish—say what you will to comfort her—give her my love, my forgiveness"—he paused and pressing a trembling hand over his eyes—"my blessing."

An hour later, a graceful, quiet form, clad in deep black, passed up the rickety stairs of No. 28 Barker

street, and paused before a half-opened door, and the visitor entered the poorly furnished apartment—entered, and looked upon the scene around. Upon a shabby bed, and covered by a patched and well-worn quilt, lay a sleeping form—not calmly sleeping, with the peacefulness of health, but fitfully, with nervous starts, and low, moaning whispers. The long dark hair lay unbound upon the pillow, and formed a strange contrast to the white, worn face. "Mother!" the sleeping girl whispered, and a faint smile gathered on the faded lips. "Mother—father!" She was dreaming something of her childhood's home, and whispered of flowers and birds; and then a spasm of pain contracted the white brow, and she commenced to cough painfully. Her mother's arms held her during the paroxysm, and on her mother's bosom the aching head rested; but she did not seem to recognize her. She lay for a few moments half sleeping—half-exhausted.

"Lena!" a gentle voice whispered, and a loving kiss was pressed upon the damp brow. "Lena, my child!"

"Mother!" It seemed to come to her suddenly, and the wide-open eyes looked fixedly into those from which the tears were falling upon the upturned face. "My mother!"

Ay, home once more—home upon her mother's breast—the tired girl lay all night, and in starts and gasps told her the history of that sad parting—told her how he had left her, he for whom she had given up all that woman holds dear. For a little while they were happy—a very little while—and then he left her; and for two years she had struggled and suffered alone—alone, excepting for the baby boy, born one month after his cruel father had gone. For him she had lived—for him she had struggled and suffered—not daring to go to her father's house when she thought of his proud, stern face, fearing she knew not what, until the hand of death had sent her a suppliant to her father's door, not for herself, but to plead for her innocent child.

"See, he sleeps."

With a feeble hand she drew down the coverlid, and revealed the face of the sleeping child. Calmly, sweetly, without a thought of coming ill, the boy slept on, his long lashes resting on a flushed cheek, and the little head crowned with light golden curls.

"He shall never want a home while I live, darling," whispered the weeping mother, "and father will say the same. He forgives, and loves you still; and we will give him a place in our home and our hearts."

"My place," whispered the dying girl. "Let him have my place, my room—tell father I am so sorry—love—forgive—"

It was early morning when the visitor who had entered that dreary-looking house on Barker Street the night previously, and passed up the rickety stairs, passed down them again, this time with a sleeping child in her arms. She was weeping quietly, but her close veil screened her from the peering curiosity of the few stragglers around at that early hour.

The daughter she had gone to comfort in her last hours had passed away calmly and happily with her parents' forgiveness in her heart, and a mother's kiss upon the pale weary lips.

"Who is it, Mary? Whose child have you brought with you?" And Mr. Lane cast a strange, anxious glance at the beautiful boy, who clung, half-frightened, half-willingly, to his grandmother's dress, as she entered her husband's room. "Did you see our—Lena?"

"I did, husband; she has gone to that home where we shall all meet her so soon." And the mother's tears fell fast as she told the sad story. "Gone and left this dear child to be in her place, the comfort of our declining years."

The father took him in his arms and hid his face in the bright curls; when he looked up, there were marks of tears on the ordinary stolid cheek, but the kiss he pressed upon the upturned, wondering face of the child showed how willingly he accepted the charge.

LITTLE girl: "Please shut your eyes a moment, mamma." "Why?" "Because you said you never wanted to see me take any sugar, and I am going to take some now."

LILL'S SEARCH.

It was a dull, cloudy day, but Lill put on her hat.

"Where are you going?" asked her mother.

"I am going to find the silver lining of the clouds," said she.

"You will have to travel far, child; you will get wet to the skin."

But Lill thought she could run between the drops, at a pinch; and away she went, over hills and through the woods and across little rivulets, without finding it. Once she thought she saw it gleaming in the distance, but when she reached it, it was only a mud-puddle. She asked of every one she met, "Have you seen the silver lining of the clouds?" but few had been so fortunate; many had never even heard of it; some thought she ought to borrow Jack's bean-stalk, if she was going after it, and others advised her to inquire of the Man in the Moon.

"I have seen it often," murmured the little stream that tumbled over a rocky bed. "In the summer-time, after the drought, my waters are often too scant to turn the mill-wheel, and the miller can grind no grain, and the little children go hungry to bed, till a great cloud comes up and shows its silver lining."

"We have seen it, too," whispered the trees together, "when our roots were thirsty and our leaves withered." And all the grasses sang its praises.

"I will spin you a silken ladder, to go in search of it," offered the garden-spider.

"If I could find out where the rainbow begins," said Lill, "that would carry me to cloud-land."

"Can you tell me where the rainbow begins?" she asked, knocking at a farm-house door.

"Yes, indeed," said the old farmer, looking over his spectacles; "it begins in neighbour Goodwin's meadow, yonder. I've hunted for it myself, when I was a boy and went bird-nesting, but I never caught up with it. Every year I meant to look it up, but now I'm too lame. But I've seen it, over yonder, these forty years."

Lill pushed on along the highway, without seeing the rainbow or the cloud's silver lining. But she met a peddler, who said he had them both in his pack, and would sell them cheap.

"As I was coming down the valley this morning, singing to myself, some saucy girl began to mock me. Tell me her name, and I'll show you the silver lining of all the clouds."

"Oh, dear!" cried Lill, "but I don't know the girls about here. Maybe I can find out, though. What else have you got in your pack, please?"

"I've a good stock, let me tell you; none of your tinsel gowags, but a serviceable lot nobody can afford to do without. Here's the seasons, to begin with. Here's your rainbows, single and double, and your showers, your fogs, and your frosts. I've a rare invoice of frost-work embroideries, just imported from the North Pole; and here are your northern lights, and your Christmases, and your Fourth of July, and your Thanksgivings, all stowed away in my pack."

"Are the yesterdays there, too?" asked Lill.

"I've got all the to-morrows."

"And the silver lining of the clouds?"

"Plenty of it; only find out the name of that wicked girl who dared to mock at old Father Time, and you shall see it."

Lill went on more quickly than before; she climbed the mountain and reached the valley, but she met no girls, only an old woman gathering faggots and a wood-chopper felling trees. "Hallo!" said he, and somebody answered, "Hallo!" but it was not Lill, and yet there was nobody else in sight.

"Have you seen the girl who mocks at people in the valley here?" asked Lill.

"Have I seen her?" repeated the wood-chopper.

"The oldest inhabitant has never seen so much as her shadow. She's nothing but a voice."

"What a queer person!" said Lill. "Where does she live?"

"In a castle in the air, perhaps."

"It's growing dark; they'll be looking for me at home," said Lill. "I came out to find the silver lining of the cloud."

"You'll be just as likely to find it at home as anywhere," returned the wood-chopper.

And sure enough, when Lill opened her eyes next morning, there it was, shining on the hedges, sparkling on the meadows, hanging on the boughs of the plum-trees, in great white garlands of snow.—*Mary N. Prescott, in St. Nicholas for June.*

YOUNG CANADA.

OUR DARLING.

Bounding like a foot-ball,
Kicking at the door,
Falling from the table top,
Sprawling on the floor;
Smashing cups and saucers,
Splitting dolly's head;
Putting little pussy cat
Into baby's bed.

Building shops and houses,
Spoiling father's hat;
Hiding mother's precious keys
Underneath the mat.
Jumping on the fender,
Poking at the fire,
Dancing on those little logs—
Logs that never tire;
Making mother's heart leap
Fifty times a day;
Aping everything we do,
Everything we say.

Shouting, laughing, tumbling,
Roaring with a will;
Anywhere and everywhere,
Never, never still.
Present—bringing sunshine;
Absent—leaving night;
That's our precious darling,
That's our heart's delight.

ANECDOTE OF WEBSTER.

When Daniel Webster's father found that his son was not robust enough to make a successful farmer, he sent him to Exeter to prepare for college, and found a home for him, among a number of other students, in the family of "old Squire Clifford," as we of a younger generation have always heard him called.

Daniel had, up to this time led only the secular life of a country farmer's boy, and though the New Hampshire farmers have sent out many heroes, as firm and as true as the granite rocks in the pasture, there cannot be among the hard and homely work which such a life implies, the little finenesses of manner which good society demands.

Daniel was one of these diamonds of the first water, but was still in the rough, and needed some cutting and polishing to fit him to shine in the great world in which he was to figure so conspicuously.

None saw this more clearly than the sensible old Squire. The boy had one habit at the table of which the Squire saw it would be a kindness to cure him.

When not using his knife and fork, he was accustomed to hold them upright in his fists, on either side of his plate.

Daniel was a bashful boy, of very delicate feelings, and the Squire feared to wound him by speaking to him directly on the subject; so he called aside one of the other students with whom he had long been acquainted, and told him his dilemma.

"Now," said he, "I want you this noon, at the table, to hold up your knife and fork as Daniel does. I will speak to you about it, and we will see if the boy does not take a hint for himself."

The young man consented to be the scapegoat for his fellow-student, and several times during the meal planted his fists on the table, with his knife and fork as straight as if he had received orders to present arms.

The Squire drew his attention to his position, courteously begged his pardon for speaking about the matter, and added a few kind words on the importance of young men correcting such little habits before going out into the world.

The student thanked him for his interest and advice, and promised reform, and Daniel's knife and fork were never from that day seen elevated at the table.

When, after a vacation, Daniel's father brought the lad for a second term to Exeter, he put in his saddle-bags a good fat turkey from the Franklin farm, which he gave to the Squire as an expression of his gratitude for Daniel's improved manners.

HELPING MAMMA.

"I'm going to help you, mamma,"
Said dear little May;
I mean to help you
All I can to-day."

Then running softly
She picked up the broom,
And swept and dusted,
And tidied the room,

Her dusting finished,
She took a seat,
And hemmed a towel
So smooth and neat.

Her work all done,
She went out to play;
Oh may you be happy,
Little, sweet, helpful May.

GOOD WORK OR NONE.

It is a rule that a workman must follow his employer's orders, but no one has a right to make him do work discreditable to himself. Judge M—, a well-known jurist, living near Cincinnati, loved to tell this anecdote of a young man who understood the risk of doing a shabby job even when directed to. He had once occasion to send to the village after a carpenter, and a sturdy young fellow appeared with his tools.

"I want this fence mended to keep out the cattle. There are some unplanned boards—use them. It is out of sight from the house, so you need not take time to make it a neat job. I will only pay you a dollar and a half."

The judge then went to dinner, and coming out found the man planing each board. Supposing that he was trying to make a costly job of it, he ordered him to nail them on at once just as they were, and continued his walk. When he returned the boards were all planed and numbered, ready for nailing.

"I told you this fence was to be covered with vines," he said angrily. "I do not care how it looks."

"I do," said the carpenter, gruffly, carefully measuring his work. When it was finished, there was no part of the fence as thorough in finish.

"How much do you charge?" asked the judge.

"A dollar and a half," said the man, shouldering his tools.

The judge started. "Why do you spend all that labour on the job, if not for money?"

"For the job, sir."

"Nobody would have seen the poor work on it."

"But I should have known it was there. No; I'll take only a dollar and a half." And he took it and went away.

Ten years afterward the judge had the contract to give for the building of several magnificent public buildings. There were many applicants among master builders, but the face of one caught his eye. "It was my man of the fence," he said. "I know we should have only good, genuine work from him. I gave him the contract, and it made a rich man of him."

It is a pity that boys were not taught in their earliest years that the highest success belongs only to the man, be he a carpenter, farmer, author or artist, whose work is most carefully and thoroughly done.

A BOY-TRAP.

A boy-trap? what is that? We have read of man-traps; but what is a boy-trap? Read the following narrative and see:

A few years since I was remonstrating with a confirmed inebriate—one whom I had known from boyhood—and I said to him: "Wellington, how is it that a boy brought up as you were by pious parents, and in the midst of churches and Sabbath-schools, learned to drink?" He replied, "Mr. —, now I will tell you just how I learned to drink. Do you remember Smith, that used to keep the big white tavern on the corner in the village some twenty years ago? When I was about twelve or fourteen years old, I with other neighbour boys would come down to the village of an evening, and we soon found our way into Smith's bar-room. It was not long, however, till Smith began to invite us into a back sitting-room, where he first brought on cards and dominoes and taught us to play; and then brought wine and beer and treated us till we liked it and wanted something stronger; there is how I learned to drink."

"But," said I, "can you not reform yet? can't you give it up?" He replied, "No, it's too late; I'm a goner!"

And this is what hundreds—yes, thousands—of our licensed taverns are doing to-day! The traps are set—whose boy will be caught?

A BOY'S COMPOSITION ON HENS.

Hens is curious animals. They don't have no nose, no teeth, nor no ears. They swallow their vittles whole, and chew it up in their crops inside of 'em. The outside of hens is generally put inter pillars and into feather dusters. The inside of a hen is generally filled up with marbles and shirt buttons and such. A hen is very much smaller than a good many other animals, but they will dig up more tomato plants than anything that ain't a hen. Hens is very useful to lay eggs for plum pudding. Skinny Bates eat so much plum pudding once that it set him into the colery. Hens have got wings, and can fly when they are scart. I cut my Uncle William's hen's neck off with a hatchet, and it scart her to death. Hens sometimes makes very fine spring chickens.

SORROW is only one of the lower notes in the oratorio of our blessedness.

Scientific and Useful.

TO RESTORE CRAPE.—Skim-milk and water, with a bit of glue in it made scalding hot, will restore old rusty black crape. If clapped and pressed dry, like fine muslin, it will look as good as new.

COCOANUT CAKE.—One and a half cups of sugar, half a cup each of butter and milk, one cup of cocoanut grated fine, two cups of flour, three teaspoonfuls of baking powder. Bake in pans, with dry cocoanut sprinkled over the top.

SCALLOPED POTATOES.—Scalloped potatoes make a nice dish for tea. Prepare in this proportion: Two cups of mashed potatoes, two tablespoonfuls of cream or milk, and one of melted butter; salt and pepper to taste. Stir the potatoes, butter, and cream together, adding one raw egg. If the potatoes seem too moist, beat in a few fine bread crumbs. Bake in a hot oven for ten minutes, taking care to have the top a rich brown.

STEWED TONGUE.—Cut up a slice of bacon as for larding; sprinkle the pieces with salt, pepper, chopped parsley and a little allspice. Lard an ox-tongue with these, and lay it in a saucepan with two slices of bacon, four small bunches of parsley, two sprigs of thyme, two carrots cut into small pieces, two small onions, a few cloves, salt and pepper. Cover with stock to which has been added a glass of sherry. Simmer five hours, keeping the saucepan well covered while serving. Strain the sauce over the tongue.

SOFT SOAP.—To one pound of potash add three gallons of water. Boil the potash until it is all dissolved, then add three pounds of any kind of soap-grease—the cleaner the better—to the lye, and set it to boiling; it usually becomes soap after boiling from one to five hours. Let it boil slowly, so that it will not boil over. If it boils down before it becomes soap, add sufficient water to keep the same quantity in the kettle until it is soap, then add nine gallons of water, and stir well together. When cool, this will be beautiful white soap if the grease was clean.

CHEESE FRITTERS.—Put a pint of water into a saucepan with a piece of butter the size of an egg, the least bit of cayenne and plenty of black pepper. When the water boils, throw gradually into it sufficient flour to form a thick paste; then take it off the fire and work into it about a quarter pound of ground Parmesan cheese, and then the yolks of three or four eggs and the whites of two beaten up to a froth. Let the paste rest for a couple of hours, and proceed to fry by dropping pieces of it the size of a walnut into plenty of hot lard. Serve sprinkled with very fine salt.

BREAD PLUM PUDDING.—One pound of bread crumbs, one pound of raisins, one pound of currants, one pint of milk, six eggs, four ounces of butter, and one pound of sugar. Pour the boiling milk on the bread crumbs, cover with a plate, and let it remain for an hour; then add the butter, currants, raisins (stoned and cut a little), and the sugar; mix all well together, adding candied fruit, a little grated lemon-peel and spice and the eggs well beaten; boil four hours in a buttered basin or mould, and serve with sweet sauce. If it be requisite to add a little flour, boil an hour longer.

BLACK BEAN SOUP.—Black bean soup is made of one quart of black beans and three quarts of water. Wash the beans, then boil them until they are tender; take from the stove, turn off the water, and throw it away; rub the beans through a colander, put them back in the soup kettle, add one quart of fresh water and some stock made the day before; add pepper and salt, and any herbs you choose for seasoning. Put the herbs in a little clean cloth bag. Hard-boiled eggs cut in thick slices, and dropped in the soup just before serving, are thought to be a welcome addition; little balls of chopped beef, put together with flour, and fried brown in butter, can be dropped in, in place of the eggs.

MUTTON CUTLETS, STEWED.—Cut a quantity of carrots, turnips, and potatoes, all to the size of olives. Trim some cutlets, and toss them in butter, with a sprinkling of pepper and salt till they begin to colour; put them in a stewpan with the carrots, about a pint of stock (free from fat), a spoonful of French tomato sauce, and a faggot of sweet herbs, and let them stew gently for fifteen minutes, then add the potatoes, and lastly the turnips; let the whole stew gently till the meat and vegetables are quite done; add a piece of butter rolled in flour, a small piece of glaze, and more pepper and salt. Remove the sweet herbs, and serve the cutlets round the vegetables, with as much of the gravy as is required.



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TORONTO WHOLESALE MARKETS.

OFFICE RURAL CANADIAN, Toronto, June 28th, 1892.

CATTLE.—During the last two weeks the supply has been steadily increasing, and is now about equal to the demand. Prices have consequently fallen slightly. To-day's prices for grass-fed beef were 5 1/2c. to 5 3/4c. per lb. Mutton, \$10.50 to \$12 per 100 lbs. Lamb, \$13 to \$14. Veal, \$8.50 to \$10. Hogs, \$9.50 to \$10.

FLOUR.—Flour continues dull, and prices purely nominal in absence of demand.

GRAIN.—During the past week there has been considerable activity in options at the leading wheat centres, and the movement has increased. Prices have been somewhat irregular, but the general tone has been strong, and at the close quotations are higher. A car of No. 1 spring sold on track at \$1.32, and No. 2 sold at about the same price yesterday. No. 2 fall is nominal at \$1.27. Barley dull, with none offering, and prices nominal. Oats are in fair demand and firm, with car lots worth 49c. on track, Peas quiet and steady; No. 2 are worth about 82c. The following are the latest quotations from the street market: Fall Wheat, \$1.21 to \$1.23. Spring Wheat, \$1.30 to \$1.33. Barley, 62c. to 65c. Oats, 48c. to 49c. Peas, 80c. to 85c. Rye, 70c. to 75c.

PROVISIONS.—Butter and eggs are in large demand, and the supply, especially of the latter, falls short. Hams are getting very scarce, and prices are correspondingly high. Choice lots of butter bring 17c. to 18c. per lb. and ordinary qualities 15c. to 16c. The price of roll butter is 19c. to 22c. per lb. Eggs go off easy at 16c. per doz. in case lots, and 17c. to 18c. in small lots.

WOOL.—Wool is easy at 18c. to 20c. per lb. The Boston wool market shows a very light business of 1,321,560 lbs., against 1,710,520 lbs. the previous week, the decrease being partly due to the holiday. The largest sales have been of Texas and Spring California. New Kansas wool has been arriving freely and is in good demand. The tone is good, and conservative dealers prefer the market at this time in its present condition than to have any excitement. New clips are coming forward freely. Reports from Ohio are conflicting, both as to quality and price. The Michigan clip is not fairly opened yet. Good increases are the rule in the clip, but the quality is not surely any better than a year ago. In California prices are weaker, also in Texas; but such weakness in the latter is denied in some quarters. The improved tone in woollens continues. The receipts of wool continue large, and foot up since January 137,930 bales domestic, against 120,252 bales a year ago, and 25,599 bales foreign, against 12,044 bales a year ago. The increase has been 17,678 bales of domestic, and 13,555 bales foreign. The sales since January continue more than for the same time last year, but the excess is being gradually reduced, and, without the market becomes more active, last year will soon catch up with this. They now foot up 49,871,466 lbs. this year, against 48,227,171 lbs. last, or an increase this year of 1,644,295 lbs. A week ago the increase for this year amounted to over 6,000,000 lbs.

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