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Vol. VIII., No. 1.
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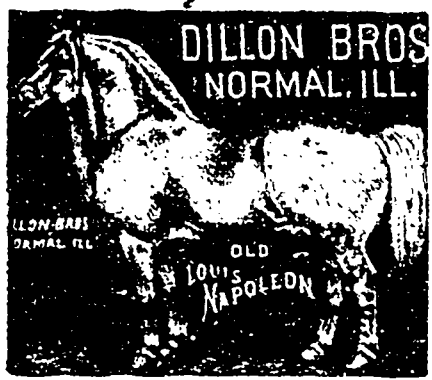
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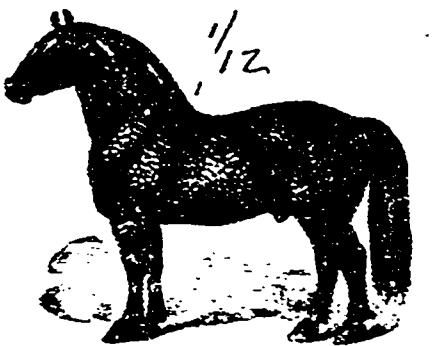


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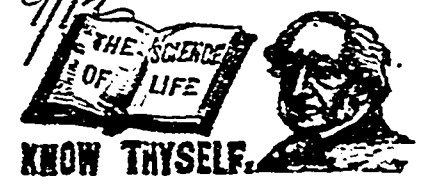
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Rural Canadian and Farm Journal,

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THE CANADIAN FARMER AND GRANGE RECORD.

Vol. VIII, No. 1.
Vol. IV., No. 1—New Series.

Toronto, January, 1885.

\$1.00 per annum, in advance.

RURAL NOTES.

SALT is one of the best of all solvents of plant food, and therefore it is a sensible thing to sow the manure heap with salt. But unless the heap is under cover the salt should not be applied until the manure is ready to be drawn to the fields.

It pays better to grow 200 bushels of potatoes per acre and sell them at 25 cents, than seventy-five bushels per acre and sell them at 50 cents. And on most lands there is no reason why, with proper manuring and cultivation, a crop of 200 bushels per acre should not be easily grown.

A dairy bull with points is well enough in his way, but we prefer a beast with a record. A Jersey bull of one of the foremost families, in his native isle was sold three years ago for \$3,200, but because his daughters are poor butter producers he was knocked down last summer for \$140.

TURNIPS, when fed to milch cows a short time before milking are almost sure to flavour the milk. For this reason many dairymen prefer to feed beets and mangolds, and considering how cheaply mangolds can be raised it is not surprising that they should be steadily growing in favour.

CHURNING in winter is often a difficult and troublesome task, owing to the low temperature of the cream. The churn may be worked in vain unless the cream is warmed to the proper temperature, and in order to know when work may begin with a hope of success a thermometer is almost indispensable.

OWING to the extreme drouth of 1883, which by cutting off feed destroyed many millions of sheep, the wool crop of Australia last year was 80,000,000 pounds short. Yet such is the overstocked condition of the woollen goods trade that the shortage had scarcely any effect on the wool markets of America.

THE fat stock show of the Provincial Agricultural Association was held this year at Guelph, in the heart of the best feeding district of the Province. The number of fat cattle exhibited was not so large as last year, but the animals were of superior quality and good judges were unanimous in expressing admiration of them. The display of fat poultry, dressed, was also remarkably good.

DR. THOMAS TAYLOR of the United States Department of Agriculture, has found sulphuric acid to be one of the best of all tests for oleomargarine. A few drops on a small quantity of pure butter will first change the butter to an opaque whitish yellow colour, but after the lapse of ten minutes it will turn to a brick red. Oleomargarine of beef fat when treated in the same way changes first to a clear amber, and in about twenty minutes to a deep crimson.

A FEW cents a month spent in paying for an agricultural paper will often give us information worth many dollars. The most intelligent and observant farmers in the country are regular contributors to the farm journals, and the value of the

experience of such men to their brother farmers can hardly be computed in money. It is a common thing to sneer at book farming, but there is a great deal of useful knowledge in books and newspapers which costs little and is worth a great deal.

CATTLE housed in warm but well-ventilated stables will thrive on much less food than they possibly could in cold ones, and cows especially require warm quarters. The dairyman who would at the same time diminish the supply of fodder and increase the milk product must have a careful eye to the comfort of his cows. A few dollars expended for lumber and labour in double-boarding a stable would be repaid in the economy of food and the increased milk product in the course of one season.

To get hens to lay in winter it is desirable that they should be kept in warm quarters and that plenty of nourishing food of the right quality should be provided. It is a mistake, however, to make life too easy for the hens. They should be made to work for their living hard enough to give them bodily exercise, otherwise their health will become impaired and the laying of its eggs can't be looked for. In every instance the food should be supplied them in the scratching heap, among straw, chaff, gravel, etc., or if an exception be made it should be with the evening meal. Whoever knows the price of eggs in winter need not be reminded of the profit which lies in the proper care of hens.

CANADIAN exporters of apples should endeavour to establish a commission house in Liverpool, where all Canadian apples could be sorted and then placed for examination and sale. English consumers know the value of Canadian apples now, but they are so often imposed upon by the shippers from other countries, and even by the carelessness of the packers of Canadian apples, that some such prevention as we have mentioned appears to be necessary. One of the recent causes of complaint is that apples shipped from Canada have been very poorly packed—sufficient allowance not having been made for shrinkage—and the consequence is that the fruit is bruised and injured in the passage. With a commission house in England for re-sorting this evil might be speedily cured.

THE winter months cannot be better employed for the peace of the household than by laying up a good store of wood for the year. A year's supply, cut, split and piled under cover, will keep the women folks in good humour day in and day out, and how much this means no farmer requires to be told. We have actually known instances in which the farmer was called from his harvest field to cut the wood needed for cooking his dinner. Such gross neglect deserves to be punished with a compulsory fast, and perhaps no better punishment could be meted out to such a farmer than to let him go without a dinner now and then. The most economical way of providing fuel is to cut it and put it under cover during the comparatively slack time of winter, and a year's supply so laid up gives a feeling of comfort and security equal to money in the bank.

THE pure-bred Shorthorn steer, Clarence Kirk-livington, bred at the Bow Park farm, has left a splendid record as a prize winner at fat stock shows. He was dropped February 1st, 1881, and at the Chicago show of 1882, when 615 days old, his weight was 1,620 pounds; at the show of 1883, when 1,009 days old, his weight was 2,045 pounds; and at the show of this year, when 1,972 days old, his weight was 2,400 pounds. He won the first prize in his class as a yearling, took first honours in four classes as a two-year-old; and at the late show took the sweepstakes' prize for Shorthorns, the grand sweepstakes as best animal in the show, and when slaughtered the sweepstakes for the best carcass. As an instance of early maturity the record of this animal is deserving of study, for a breed that can be brought up to 1,600 or 1,800 pounds in two years is the one that feeders will favour.

THE *Boston Cultivator* makes some sensible suggestions on the buying of fruit trees, and now that agents are busily beating the country for orders, farmers require to be on guard. Here is what the *Cultivator* says:—1. Buy of responsible dealers of whom you may expect to get trees just as they are represented, and true to name. 2. Other things being equal, it is better to buy of nurseries nearest your own home to save cost and dangers of transportation and to secure trees grown in your own climate. 3. Select crown-grafted or budded trees in preference to root-grafted trees. 4. Do not buy second-class trees; they are nearly always more expensive in the end. 5. Do not purchase too old or too large trees. A peach tree one year from the bud, an apple or pear one or two years, are preferable to trees twice as old. 6. Do not purchase too many varieties. Five varieties are worth more than twenty. 7. Be sure before making your selections that your varieties are adapted to your climate and to your wants.

A WRITER in one of our exchanges makes the following sensible remarks on a subject that farmers do not think upon as often or as seriously as they should: "You may have fine cattle, pigs and poultry that you can justly be proud of, but do not compel your wife and children to live with them. Do not force them to have a pig-sty so near the house that they must see the dirt and smell the offensive odours as soon as a door is opened, or a window lifted for fresh air. Do not bring up your children to make play-mates of your pigs, and to spend a good share of their time in keeping them and the chickens off your front door step. Such surroundings are not calculated to inculcate habits of order and cleanliness, and I doubt if they can leave pleasant memories of home in the minds of such children when they shall have become men and women. I beg of you, banish all this disorder and unpleasantness to a suitable distance from your dwelling, put up one of the inexpensive but effective fences now in use, and then plant a hedge to screen the barn and yards from view." The man who will put the above in his pipe to smoke it—providing he is one who needs the prescription—cannot fail to soon learn that he has made an important and valuable discovery.

FARM AND FIELD.

FOR THE RURAL CANADIAN.

WALKS AND TALKS AMONG THE FARMERS.—NO. VIII.

I had a whole evening's talk with a gathering of farmers not long since. After addressing them for about an hour, we had a "free and easy" conference, which became so interesting that the meeting was prolonged until quite late. Usually, it is difficult to get farmers to speak freely in a public meeting, but these men took part readily, and discussed things with great intelligence and animation. The reason was that they have had a grange in operation for some years, which has schooled them into the use of their tongues. Public speaking is an art only to be acquired by practice. It has been said of poets that they are born, not made. The reverse is true in regard to orators. They are a manufactured article. Of course there must be the "raw material" in the shape of brains, and gift of expression, but these are possessed in a greater or less degree by most people, and it is astonishing how rapidly the art of public speaking is acquired when there are opportunities for practice, and advantage is taken of them. A large amount of useful information was elicited in the course of the evening, and all felt that they had enjoyed "a good time."

It is now the season of the year for holding meetings in the country neighbourhoods, and every locality should have its grange or Farmers' Club in active operation. While all other classes of the community are in the habit of banding together in associations of various kinds, farmers are strangely prone to stand aloof from each other as though they had no interests in common, and were in no need of mutual co-operation. Of late years, there has been a growing conviction on the part of intelligent agriculturists that this is an evil demanding correction, and strenuous efforts have been made to induce a better state of things. These efforts have been attended with some success, but the great mass of the farmers has not yet been reached, and, so far, only a small minority have been induced to organize. As a means of counteracting the isolation and loneliness of country life, promoting sociality and friendliness in rural neighbourhoods, and awakening the spirit of improvement, such associations as those referred to are of great value. The Ontario Government has done well in starting Farmers' Institutes the present winter, and, it is to be hoped, that one aim and result of these meetings will be, the multiplication of local organizations among farmers all over the country.

Among the many noteworthy things that were said in the course of the evening to which allusion has been made, I was greatly struck with some remarks that fell from one of the speakers in regard to the long working hours kept by farmers. He said mechanics in towns and cities only worked ten hours a day except there was an extra press of business, while some only worked eight hours per day. Farmers have no regular hours. They work from early in the morning until far on into the night, and that when there is no urgency except their own eagerness to accomplish as much as possible. Over-work is the bane of many farmers, especially in the earlier part of their lives, when they feel strong and vigorous. Excessive labour early in life brings on premature old age, and compels men to retire from their farms long before they would need to do so, if they took proper care of themselves. The speaker said he had long since made up his mind that this was a huge mistake, and had resolved to take life easier, to work less with his

hands, and more with his head. He found that by quitting work before he was "tuckered out," he laboured with more spirit and pleasure, while by taking time to read, think and plan his business, he could get far more into a short day than he used to do into a long one. There is much truth in these observations. Why should a man drive himself like a hard task-master until he becomes dull and spiritless, and loses all zest and pleasure in his daily toil? Nature is a strict account-keeper, and will bring us to a reckoning in spite of all our endeavours to cheat her out of her just demands. There are occasionally times when we must "push things," but there is no need to make life a monotonous drudgery from one year's end to another.

There is not the excuse now for over-work that there used to be. Labour saving implements are abundant, and since cattle feeding has become general, the labours of the year can be more evenly distributed. Winter used to be considered a leisure time for the farmer, but, in the altered state of things, it is as busy a season as any other with the exception of seeding and harvest. The great mistake people make on the farm and elsewhere is that of working without a plan. They just rush at the first thing that attracts their attention, though perhaps it is less urgent and important than some other job they overlook for want of reflection. When the more pressing claim looms up, they leave the other half-completed, and so on until their work becomes a confused "mix," and all is chaos. If we learn to systematise our work, we shall do more in a year, and do it better, than if we go at it helter-skelter and haphazard. As a good packer will get more into a trunk and in better condition than one who crams things in without thought, so a wise planner will get more into a given space of time, and have the added satisfaction of feeling that what is done, is done well and thoroughly. We must not try to do everything at once. "Home was not built in a day." Steady, systematic work is what tells in the long run.

Among the many jobs to be done on the farm that require plan and arrangement, one of the most important is the yearly supply of firewood. What an amount of household inconvenience and domestic misery are caused by neglect in regard to this matter! The slipshod, hand-to-mouth way in which many country families are supplied with fuel is, at once, a disgrace and a lamentation. The stock becomes exhausted—then chips must be picked up, stray boards split to pieces, or mayhap fence rails taken, to provide for present emergencies. Or, perhaps, there is plenty of wood, but it is green, and alas for the sorrows of house-keepers who have to keep up fires with green wood! The true way is to provide a year's stock of wood in advance, cut it with a saw, reduce it to stove-length blocks in the woods, haul it home, split it the proper size for use, and then stack it in the wood-shed. There is no method of seasoning firewood comparable to that just described. It makes a quality of fuel that is A 1, while it is in every respect the most economical plan, for the superfluous moisture goes out of the fibre without decay, leaving the wood hard and solid. How nice it is always to have plenty of wood on hand ready for use! When work presses, or you are all ready to go to market, or start on a journey, it is not pleasant to hear a shrill, pleading voice, entreating not to be left without wood. But it is pleasant to hear that same voice in its most musical accents extolling the careful provider who "never lets his folks get out of wood."

I HAVE BEEN SURPRISED TO FIND HOW MANY WELL-

to-do, intelligent farmers take no agricultural paper. On asking what farm journal they take, the majority say, "O we don't take any;" or "We took the — for a while, but the subscription ran out, and we have not renewed it." I know a very prosperous, thrifty farmer, who takes the daily *Globe*, but has no paper devoted to his own calling. It would be better if he took the weekly *Globe*, for then he would get the benefit of its really good agricultural department. But a mere department of a weekly, however excellent, is not sufficient. In this enlightened age, when investigation and experiment are being directed upon every branch of farm work, a man will fall behind in the race who attempts to earn his livelihood at agriculture, without the aid of a good agricultural journal. It is coming to be more than ever the fact that farming, to pay, must be carried on by cultivated brains as well as industrious hands. I was startled recently by the statement made in the *Canadian Stock Journal* to the effect that there are 300,000 farmers in Canada, who take no agricultural paper! I thought at first it must be an exaggeration, but on sober, second thought, and judging by my own observation of the rarity of such papers in the country homes I have visited, I am disposed to believe the statement is not very wide of the mark. Now is the time to subscribe for these periodicals, and there is no better way of promoting the agricultural advancement of the country at large than by trying to induce others to do likewise.

W. F. C.

THE WASTE OF MANURE.

While manure is the most important adjunct of successful farming, it is the one thing most freely wasted. Farmers build sheds to shelter old wagons, carts, sleighs, hay-rigging, etc., all of which have an uncertain cash value, and can always be readily supplied in case of loss; but how many of them make any provision for protecting their manure from waste by weather during the parts of seasons when it is accumulating and cannot be applied? While some do, the number that do not is far in excess, and one of the most difficult of all farm problems seems to be to convince them that a wise care may be exercised in this matter.

The trouble is due largely to the apparently innate disposition of men to adhere to old customs without any other "why or wherefore" than that they are old.

What is a barnyard for, primarily? Merely as a place of temporary detention, not as a place of shelter nor for feeding, because to feed animals when they are loose is to incur great waste of food. They have no sense of fairness toward each other, little of self-control, and the strong always tyrannize over the weak. They can only be economically fed where each is forced to respect the rights of others, and that is in the stall. Then again, the barnyard, being open to the rain, the sun and winds, the manure wastes immensely. This ought to be plain from observation, but tens of thousands of farmers refuse to heed it, and cling to it, as the Arab does to tent life, because it was the custom of his fathers. To add to their objectionable features, most barns and sheds are without gutters, so that all or most of the rain water from them is discharged into the barnyard, which increases the waste, filth and unsightliness of these cattle pens. Though "cleanliness is next to godliness," these sinks of nastiness are maintained intact summer and winter, with no other excuse than that they are the agricultural fashion, and cost less in cash to establish and maintain than good roomy stalls in cattle-barns, over cellars, where the manure can be sheltered during the periods when it was not

be wisely spread on the land. It is regarded as cheaper to waste several hundred dollars a year in the loss of manure than it is to invest a few hundred during one year in a proper building where the animals can be themselves protected from heat and cold, their food economized, and their droppings protected from waste. So in spite of sense, argument, waste, or anything else, the barnyard, with little mitigation of its uselessness, is maintained.

And of course, being maintained, it is almost invariably supplemented by waste elsewhere on the farm, and especially as regards manure. There may be thousands of loads of swamp muck to be had for the digging at odd times, which, mixed with the excrements, would vastly increase the manure supply and save much of the soluble parts which now go to waste, but thousands of non-reading farmers look upon such work as of less importance than going to a circus. The opportunity to compost hundreds of loads of vegetable matter is often neglected. All potato tops, straw, bog hay, forest leaves and other vegetable matter is overlooked or rejected, even though tons of patent fertilizers may be bought and applied. There probably has been no instruction or example on this point, and the subject may never even be thought of, as men not trained in youth to look after such matters are apt to despise newspapers which aim to give such instruction. The carcase of a dead animal or of a fowl is never treated as of any value, and is allowed to decompose where it does no good to the land. Bones may be strewn about the house or lawn, or in the barnyard, and the untrained eye fails even to notice them for years, much less to bury them where they can do some good to trees, vines or grass. The land is poor, yields poor crops, and the owner and his family are poor also, and complain bitterly, perhaps, against their "hard luck" and the insurmountable difficulties they experience in the attempt to get on in the world, and yet are ready to take it as an insult if told that they misuse their opportunities for advancement!

There is probably no better way to meet and mitigate this evil than to continue to talk and write against it, and practice a better way. Thousands will live on without change, and finally die firm in the faith that they know and practice all that is of value in agriculture; but their children or their successors will do better. They learn something when the old do not. There are few neighbourhoods in the land which have not shown some agricultural advance in the course of a generation. Endless iteration and example have done it. The new race is more enquiring than the last, and every year sees some improvement, hence those most anxious for improvement can afford to work on in faith and hope.—*N. Y. Examiner.*

UNDERDRAINING.

1. It prevents drought.
2. It furnishes an increased supply of atmospheric fertilizers.
3. It warms the lower portion of the soil.
4. It hastens the decomposition of roots and other organic matter.
5. It accelerates the disintegration of the mineral matters in the soil.
6. It causes a more even distribution of nutritious matter among those parts of the soil traversed by roots.
7. It improves the mechanical texture of the soil.
8. It causes the poisonous excrementitious matter of plants to be carried out of reach of their roots.
9. It prevents the grasses from running out.

10. It enables us to deepen the surface soil by removing excess of water.

11. It renders soil earlier in the spring.

12. It prevents the throwing out of grain in winter.

13. It allows work to be done sooner after rains.

14. It keeps off the effects of cold weather longer in the fall.

15. It prevents the formation of acetic and other acids, which induce the growth of sorrel and other weeds.

16. It prevents, in a great measure, the evaporation of water, and the consequent abstraction of heat from the soil.

17. It admits fresh quantities of water from rains, etc., which are always more or less imbued with the fertilizing gases of the atmosphere, to be deposited among the absorbent parts of soil, and given up to the necessities of plants.

18. It prevents the formation of so hard a crust on the surface of the soil as is customary on heavy lands.

19. It prevents, in a great measure, grass and winter grains from being winter killed.

The first care of the farmer, that on which the success of his future crops almost entirely depends, is the removal of unnecessary supplies of water—whether arising from the tenacity of the surface retaining too much, or from springs exuding to the surface. For it is evident that as different crops require very varying quantities, so the cultivator must adapt the moisture of the soil to the crops he proposes to produce; the supply which is necessary, for instance, for the profitable growth of the rice plant would destroy the grasses; and again the damp soils, which are so favourable to the growth of grasses, would be much too moist for the cereal crops. The nature of the climate, the soil and the subsoil must all be taken into account. The plants growing on sandy soils, of course, will bear a much larger proportion of water than those vegetating on clay soils. Underdrains commonly vary in depth from two and one half to four feet, and in peat soils, on account of the very material settling which takes place as they are brought into cultivation, from this to six or seven feet. The first operation necessary upon a field intended to be drained is the examination of the strata, or veins of earth, of which it is composed, and this is commonly effected with the boring auger, or by digging small pits or open drains, as by this means the oozeings or weepings will speedily display themselves, and indicate pretty correctly the source whence the superabundant water proceeds. This being ascertained, the direction of the underdrains will be the more easily decided. If the soil is of such a description that the subsoil plow can be used with advantage, then the tops of the stones, bricks or tiles by which the drain is formed and preserved, should not be less than two and one-half feet from the surface of the soil. In the formation of these drains the workman always commences on the lowest extremity; by this means, besides other advantages, the water, as he arrives at it, drains away from him, and shows him, by its escape, that he is preserving a proper fall. When the drain is cut to the proper depth it is filled up with the materials through which the drainage waters are to flow, to within such a distance only as is out of reach of the plow, and then the earth is shoveled back again over the drainage materials.—*Andrew H. Ward.*

Mud stains are usually hard to remove from white skirts, and it may not be known that oxalic acid applied to the soiled place and afterwards rinsed thoroughly will generally take out all the trace of them.—*Harper's Bazar.*

HOUSEHOLD HINTS.

CHARCOAL has been discovered to be a cure for burns. By laying a piece of cold charcoal upon a burn, the pain subsides immediately. By leaving the charcoal on one hour, the wound is healed.

WARM mustard water should be given to one who has accidentally swallowed poison. This will cause vomiting, after which a cup of strong coffee should be given to counteract the remaining effects.

AN English lady vouches for the goodness of the Welsh rarebit. Grate some cheese and pepper it with cayenne pepper. Fry some slices of bread on one side with a little butter, until quite yellow, then spread the grated cheese thickly on the fried side of the bread, place the slices in a hot oven taking out as soon as the cheese melts and serve hot.

To make oil cloths look bright and fresh, take of milk in the proportion of three tablespoonfuls to one of molasses. After mixing thoroughly apply with a soft rag to the oil cloth, having it perfectly clean. If the carpet is sticky after drying use less molasses. The quality of molasses varies, and an experiment on an inch or two of surface will test the quality of the compound. If well proportioned the dust will not stick to the floor more than on new oil cloth.

THE art has come into considerable vogue in giving a beautiful red colour, in varied and brilliant hues, to the naturally white woods, maple, linden, etc., by means of some of the aniline preparations, or corolin, rosein, etc.; the wood is first soaked in, or washed with Marseilles soap, after which a dilute alcoholic solution of the aniline colour is applied, which is repeated until the desired shade is realized. If the wood is impregnated with any pigment, it is first bleached for about half an hour, in a bath of chloride of lime and soda, a bath of dilute sulphuric acid being then used to remove the chlorine. A thorough washing in pure water after this necessarily precedes the dyeing treatment.

SPICED beef tongue is a good dish for supper. Make a mixture of half a pint of sugar, a piece of saltpetre the size of a pea, and a tablespoonful of ground cloves; rub this into the tongue. Then make a brine of two quarts of water and three-quarters of a pound of salt, put the tongue into a jar and pour the brine over it. See that the tongue is entirely covered, and is kept well under. Let it lie in this pickle for two weeks; then take it out, rinse it in several clear waters. Make a thin paste of flour and water, wrap the tongue in this, and put into a dripping pan to bake. It must bake slowly, and it should be basted frequently with lard and water, or with half drippings and water. When done remove the paste and the skin; let it become cold, then cut into slices, and not too thin slices, either.

IN preparing turkey stuffing many great cooks make extra trouble in preparing a force meat stuffing of veal, ham, bacon, onions, potatoes, or bread-crumbs and all sorts of things. But the ordinary old-fashioned stuffing for a turkey is generally liked the best. Take the soft part of good, light bread (not the crust) and do not wet it as is usually done, but rub it dry and fine, and work into it a piece of butter the size of an egg. Season with salt, pepper, and summer savory. Add to this a dozen or more oysters whole, and it will be very fine. Some good cooks, who are ruled by taste and not by books, add to a stuffing like the above large chestnuts boiled. The chestnuts are put on a fire in a saucepan or spider to burst the skins; they are then boiled in very salt water or stock, then mixed with the stuffing whole. Serve with a chestnut sauce.

HORSES AND CATTLE.

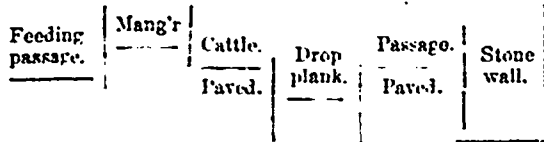
FOR THE RURAL CANADIAN:

A CHAPTER ON STABLE FLOORING.

When the early settlers closed in a part of the shed under the straw stack with a few rough boards in order to make a stable in which to fatten a few steers or dry cows, they were not very particular as to what the floor was like, cedar blocking was never thought of. Generally the ground behind the cattle was dug out about six inches deeper than that where the cattle stood, a flat pole was staked down against the face of the drop to keep the earth from being tramped down level and a few boards were thrown down to make the work of cleaning out the stable more easy, and when neatly done this made a very tolerable floor. After a space, as times got better, the farmer got up a neat frame stable to accommodate both horses and cattle, this building had a good plank floor, which, for substantiality and neatness, was far ahead of its predecessor under the straw stack. But the most popular and certainly the most comfortable horse and cow stable of the present day is that under the barn with a good stone wall on at least three sides. The floors of these stables are generally of two kinds, viz., stone paving, and cedar block paving, and a few remarks on each of these methods may not be out of place at this season of the year, when a great many farmers are making preparations to build during the coming summer.

In order to make a good job of stone paving you must have suitable stones, these should be egg shaped, not more than four or five inches long, set with the large end down, a good many use larger stones than this, but they never make a neat floor. The Scotch stone-masons are generally all good paviors. For cow stables it is better to form a drop behind the cattle, with oak plank fourteen inches wide and two inches thick, as shown at figure one.

Figure 1.



The edges of the drop may be formed of good flag stones, which the mason will dress to suit. The stones should be large enough so that there could be at least an inch more of the stone going perpendicular into the ground under the plank than is intended to stand above it.

In cedar block paving the cedar is sawn off evenly, squarely and equally four and one half inches long and are laid on their ends in sand, to a straight-edge, the same as stone paving. The quantity of sand required will vary according to the quality of the stones or blocking and according to how equal the ground has been levelled off; but a load to every 200 square feet of paving might be a fair average to compute by.

It has been urged as an objection against the stone paving that it is bad for dulling the points of dung forks and for dulling sharp shod horses in winter, but I have now used all the four kinds of flooring mentioned above and I decidedly prefer the stone paving as the most *durable*, the *cheapest*, the *safest*, and the *healthiest* for stock. In most parts of the country cedar is coming to be pretty expensive, and although it may last a long time it certainly cannot last as long as a well laid stone pavement, and in a short time the cedar gets saturated with the urine of the horses and cattle, and continually emits a strong ammoniaical vapour, this, especially in hot weather, will be anything but conducive to the health of the stock. I will admit that dung forks will get prematurely blunt by being used on stone floors,

but by keeping sharp shod horses well littered with straw I never had any difficulty on that score.

SANDIE TAMSON.

Thamesford, December, 1884.

BREEDING AND CLASSIFICATION OF CLYDESDALES.

My attention has, in various ways, been recently drawn to the above subject. I have nothing whatever to do with Clydesdales peculiarly, but I must confess I am a great admirer of them; nor do I expect that my ideas will find favour in every quarter, but I claim, as I give to others, the right of entertaining my own opinion.

So far as I can gather, one of the great objects of breeders in the past has been to obtain horses with plenty of hair on their legs—"well feathered," in other terms; and I would ask at once, of what benefit is this superabundant growth of hair on the lower part of the extremities? If horses were like Cochon-Chama fowls or pouter pigeons, required for no more important purpose than to strut about in a dignified manner and to please the eye of their owners, I could understand the anxiety of some breeders to increase—even by questionable artificial means—the quantity of this hirsute appendage; but seeing that horses are intended to subsolve a useful purpose, I fail to see wherein they are advantaged by the possession of a plentiful supply thereof on the posterior aspect of their limbs. Indeed, considering the great disadvantages it entails upon animals in hard work and in dirty weather, I marvel that men can be found to advocate its production. That a large quantity of hair on the legs improves the appearance of an animal I have yet to learn; and if this were the case, how is it that the absence thereof in the legs of light horses is accepted as a mark of beauty and a sign of good breeding.

Bushy hair is also a splendid harbourer of dirt, and an effectual screener of laziness; moreover, being very retentive of moisture, it predisposes to sloughs and hocks of the pasterns and coronets and leads to excessive irritation and itching.

Another great point aimed at by some breeders, is the production of plenty of bone. This in itself is laudable enough, but I would suggest that if a little more attention was given to quality of bone, a greater and more valuable desideratum would be obtained than can ever be got by mere quantity. Quality of texture, not excess of texture, is required, and I would prefer the Cleveland Bay, with his flat shanks and cannons, before the round-boned, heavy cart horse we so frequently meet with, for fatiguing and straining work. A broad, flat cannon bone is usually associated with well developed tendons, the whole measuring between five and six inches in width. In conjunction with such conditions as these, we want what are frequently overlooked, big joints and well developed muscles: greater care in the production of big arms and big thighs.

In regard to the shape of the pasterns, opinions seem to differ very widely, some minds favoring a comparatively straight and consequently short pastern; others a very oblique and consequently a long pastern. In both extremes there is danger, and in every case a happy medium should be aimed at. If the pastern is straight and short, it favours concussion and the production of ring-bone and side-bone, and predisposes to strain of the check ligaments at the back of and below the hocks and knees, while opposite extremes most certainly do not, as a rule, add to the strength and traction power of the limbs. Personally, however, I prefer the latter extreme.

In the estimation of some judges, I am afraid, gross condition counts for more than do good

points; and I suspect that many a horse which appears in our show yards as a splendid creature, would be only of use for the purpose of a clothes horse, if reduced in condition to the level of a working animal; and this abuse and absurdity will continue to the disadvantage of the horse, until those interested begin to recognize that fat is not power, and that it hides a multitude of sins of conformation.

Excess of fat and a forced condition predispose to disease, especially of the liver, and to give an animal a poor chance of battling against adversity when it comes upon him, and in the case of mares (as of cows or ewes) is very apt to interfere with impregnation and the nutrition of the fetus. Not only does high condition swamp sins of conformation and tend to produce sterility, but it more seriously and very largely distracts the attention of judges from the one point of importance in connection with breeding animals, viz.: soundness.

If there is one thing which has caused me more amazement than another, in connection with the awarding of prizes to Clydesdales, it is the utter neglect of all ordinary precautions to ensure that the prize is given to animals of reasonably sound constitution.

I must most emphatically declare that, in my opinion, no animal, be he Clydesdale or any other breed, should be awarded a prize as a stock producer, if he has the slightest trace of constitutional disease about him, and that every batch of judges should not only be accompanied in the ring by an attending member, but by a skilled veterinarian or two, more preferably in large shows.

I know that an objection is sometimes entertained against the breeding of big horses from their, theoretically, greater liability to become roasters, and to develop side bones, etc., but this objection would not in any sense be valid, if strict attention were paid to soundness and conformation. In speaking of big horses I do not necessarily refer to mere height, but rather to a large, well-developed, bony frame work, with plenty of room for the respiratory, circulatory, and digestive organs; plenty of muscle, good shoulders, haunches, arms, and thighs; big joints, and short shanks and cannon, and good, open feet. The animal that is required for heavy town work can be described in the single sentence—a mountain in a mole heap. We don't want long-legged-narrow-chested, flat-barrelled animals with long thin necks and heads set on an acute angle. They are neither useful nor ornamental, but are deficient in constitutional stamina, and as a rule are the first to fall victims to enzootic and epizootic affections. For town work big horses are required, not only on account of the great weights that have to be drawn, but also on the score of economy.—Prof. Waller, V. S., in *North British Agriculturist*.

TEACHING A CALF TO DRINK.

The following from the *Irish Farmers' Gazette* will touch a responsive chord in the breasts of many readers on this side of the Atlantic who have gone through similar experiences.

Those who have had the mournful experience know that there is nothing more trying to the temper than the operation of teaching a young calf to drink. The process is familiar to every man who has brought up a young calf from infancy. You seize a pail of warm milk, go into the stable, catch the calf by the ears, back him into a corner and bestride his neck. The idiot rather likes this, and while you are reaching for the pail he employs his time in slobbering the lower corners of your jacket. You discover what the blockhead is about and box his ears. You can't

help it. You feel that way and let him have it. But the calf can't tell for the life of him why he has been struck, and he gives a sudden and unexpected "founce." He believes he will go and stay on the other side of the stable, but he doesn't announce this beforehand. He starts on the impulse of the moment, and you can't tell just when he arrives there. You ride along with him a little way. But the laws of gravitation are always about the same. Your legs, one on each side of the critter, keep up with the calf for about a second, but your body doesn't. You slide over the calf and your back kisses the floor. Your head is soaking in a pail of milk. When you get up you are mad—uncommonly so. Milk runs from your hair and imprecations out of your mouth, and you solemnly declare that you will teach that calf to drink or break his neck. The calf doesn't know of this resolve, and glares at you in a stupid fright across the stable. He was not aware that he was the cause of your downfall, and wonders ignorantly what is the matter. You don't try to explain it to him, but furiously catch him by the ears, look back over shoulders at the milk pail, and back up towards it, dragging the calf after you. The calf is out of wind, and you haven't a particle of grace left in your heart. You are astride the calf's neck, and jamming the fingers of one hand in the calf's mouth, you place the other on the back of his head, and shove his nose into the pail, fully resolved to strangle him if he don't drink. The calf holds perfectly still—ominously so—and there is silence for the space of half a minute, at the end of which time the blockhead, who hasn't drank a drop, suddenly makes a splurge, knocks the pail over, you are again reduced to a horizontal from a perpendicular, and when you arise the excitement is intense. You have been soaked with milk, "slobbered" on, and hurt. Not a drop of milk has gone down the brute's throat and there he stands glaring at you, ready to furnish you with another free ride whenever you want to go. With an affidavit you seize the empty pail, and hobble out of the pen, fully resolved to let the four-footed fool starve; and thus endeth the first lesson.

FEEDING CATTLE.

It has been claimed that the methods of breeding and feeding cattle have been so much improved of late years that the period of maturity has been hastened more than one-half. That is, a sheep or a pig which matured at three years, or a steer which was ready for slaughter at five years formerly, is now ready for the butcher at less than half these ages. Pigs are said to be ready for pork at nine months, wethers for mutton at twenty months, and a two year old steer is ready for the block at that age. It is to be feared that these claims are greater than can be justly allowed. No doubt, some animals by excessive forcing are made as fat and reach as heavy a weight in these premature ages as others used to do in twice the time, but it is a question if this forcing is profitable either to the feeder or the consumer. On the one hand, the animal is forced to consume as much food in two years as was formerly spread over four years, so that on the whole there is no gain but in time, while on the other hand the consumer has very immature or half-grown meat, which is devoid of flavour and nutritive quality, and the meat is over-loaded with fat, which is waste. Physiologically, it is a matter of doubt if the muscular growth of an animal can really be hastened by any process of feeding. Fat can be produced, no doubt, but fat is a diseased condition of the system, and an excessively fat animal would soon die under continued feeding. But if we examine the meat of one of these young, over-grown animals

it is found to be in very great disproportion to the fat. It is quite common, for instance, for the nine months old pigs which weigh 800 pounds to be turred wholly into the lard kettle because the few pounds of flesh under the fat is not saleable or useful as food. On the whole, it certainly does appear as if we had carried the forcing system of feeding to an unprofitable extreme. Every year the losses of swine by disorders clearly traceable to over feeding increases in number, and although we are told that the dread diseases have been overcome and have disappeared, yet the feeding season no sooner begins again when the hog cholera breaks out as plentiful as at any time before. It is a question if we can safely follow English precedents in this respect of forcing animals to prematurity. Certainly, if we are to suffer the pains and penalties, the diseases and losses among our live stock, which English farmers are complaining of, it is very clear that we cannot afford to do it, and had better make haste more slowly.—*New York Times*.

An exchange is clearly of the opinion that the weight of a horse is an important item in estimating his value for draft purposes. The fine-boned horse, with well-developed muscle, may do as much work as the heavier one for a short time, and is even better for road purposes. But in plowing, or other heavy, steady drawing, the light weight horse quickly wears out and becomes useless.

If your horse gets frightened at any unusual sight or noise, do not whip him, for if you do he will connect the whipping with the object that alarmed him, and be afraid of it ever after. If he merely shies at an object, give him time to examine it, which, with some encouraging words from the driver, will persuade him to pass it. You get frightened, too, sometimes, and would not like to be whipped for it.

The purchasers of horses for the French army always endeavour to obtain a first look at the animal when he is tranquil and in the stable; noting if the animal supports itself equally well on all its legs. The eye ought to be more dilated when in the stable than when exposed to full light. If the hollow over the eyes be profound and temples gray, old age is to be concluded. Wounds about the temples suggest attacks of staggers, and when the end of the nose presents circular scars, it may be concluded the horse has been twitched with a cord to insure his quietness while being shod.

Beautiful form, superlative action and a kind disposition are what constitute the value of family horses. It costs no more to raise a high-priced horse than it does a low-priced mongrel. The difference in their relative value is more than the cost of production. The more good qualities concentrated in one family the higher will raise the market price of the produce of that family. If we can succeed in breeding docility into our steeds, a good kind, fearless disposition, and the absence of all vices that horse-flesh is heir to, the family could ride after such a model disposition without risk of life or limb.

Bors in horses are not easily destroyed. Their attachment to the stomach is mechanical, and they will remain there until the season for their escape arrives. Prevention in this case is more practicable than cure. To prevent them, let the eggs from which they hatch, and which may be seen, as yellow nits on the hair of the legs and other parts of the body, be removed, so that the horse by biting the part cannot get them into the mouth to be hatched, and then descend into the stomach. One of these nits may be hatched in a short time by placing it in the palm of the hand and breathing constantly upon it.

CREAM.

A SMALL boy, who slid down a tree pretty fast, and blistered the skin of his hands, said: "I guess I don't yearn for a hotter climb than this."

TEACHER. "Why are you writing in such a big hand?" Tom. "Why you see, my grandmother is deaf, and I'm writing to her."—*Golden Days*.

"Well, I declare!" exclaimed an editor, as he inspected the baby of an old newspaper friend. "If he isn't a marked copy of the old gentleman!"

THE Prince of Wales is colonel of sixteen different regiments. This is not a circumstance to Florida; there they have sixteen colonels to one regiment.

PROFESSOR (to class in mineralogy): "Can you recall a mineral occurring in the liquid form?" Philosophical student: "Milk; because it comes in quarts!"

"You are opposed to the use of slang, then Jennie?" he said. "Well, I should twitter!" she replied, and then he knew that he must not use slang any more in her presence.—*Somerville Journal*.

SAID an astronomer to a bright-eyed girl, when talking of rainbows "Did you ever see a lunar bow, Miss?" "I have seen a beau by moonlight, if that is what you mean," was the sly rejoinder.—*N. Y. Independent*.

"WHAT do you think of my mustache?" asked a young man of his girl. "Oh it reminds me of a Western frontier city," was the answer. "In what respect, pray?" "Because the survey is large enough, but the settlers are struggling."—*Burlington Hawkeye*.

What boots it to repeat
How time is skipping underneath our feet?
Unborn To-morrow and dead Yesterday—
Why fret about them if to-day be sweet?
—*Persian*.

A LITTLE girl of seven exhibited much disquiet at hearing of a new exploring expedition. When asked why she should care about it, she said: "If they discover any more countries, they will add to the geography I have to study. There are countries enough in it now."

A CRITICAL old bachelor, who firmly believes that all women have something to say on all subjects, recently asked a female friend: "Well, madam, what do you hold on this question of female suffrage?" To him the lady responded, calmly: "Sir, I hold my tongue."

"Yes, I have left my last place," said Mary. "An' what did you lave for?" "The mistress was too hard-hearted. She had no more sensibilities than an ox." "An' did she abuse you, dearie?" "Indade she did that?" "An' what did she do?" "She put an allarum clock right in my room, an' in the mornings it made such a noise I could not sleep another wink."—*Exchange*.

THE delights of a musical block are thus described by "Bob" Burdette:

Hark, and oh hear, the piano is banging—
(Sonnet and canticle, chant and glee),
The fellow upstairs his guitar is a-twanging,
The children are singing a jubilee,
Just over the way there's a banjo, I think,
With its "pink-a-punk pank, punk, pink, pank, pink:"
And down at the corner the man with the flute
Is rending the night with a tootle-too-toot.
And oom pah-pah, oom pah-pah, bra-s, bra-s, boom!
The brass band is practising in its room.

THE other day a darkey rushed into an Austin, Texas, express office, and asked excitedly: "Is dar any express package here for Major Jones?" "Have you got an order?" "No, sah." "You can't get anything out of this office without an order." The coloured gentleman went two miles and back on the double quick. Once more he stood before the desk, panting and blowing, and fanning himself with his hat. "Heah am de order, sah. Any package here for Major Jones?" "No."

HEEP AND SWINE.

HOW TO KEEP PIGS.

A well-bred, properly treated pig is the cleanest animal of all our stock.

If you only keep one or two, it will pay in every way to wash once a week, or so, and if you have a small yard attached to the pig's sleeping place, you can throw into it all the rubbish of the place, (except tin cans and hoop-skirts) such as garden rubbish, ashes, etc., and it will soon be worked up into capital manure.

If you provide plenty dry earth, or ashes, in and about the pen, you will not be troubled with any smell either, even in hot weather.

You cannot buy any pork, or lard, or hams, or bacon like that of your own growing, and it is made without feeling the cost, and in fact it costs but little besides the attention, for the material that this wonderful condensing machine (the pig) reduces to market products, could, probably, not be sold at all in the raw state.

The feed will largely depend upon the material you have at command—but nearly everything is welcome to the pig—but he cannot eat very much at a time, and, therefore, wants his food condensed, or rich, comparatively.

Green food of all kinds, grass, (cut or on pasture) roots, waste meat, (scrap, not rotten) table wastes, grains, beech and oak nuts, etc., peas, beans, fish, etc., and a plentiful supply of *pure, fresh water daily*.

His pen should have a raised platform, say twelve inches, at one end, under cover, and boarded off, large enough for him to sleep on, and have a good bed of straw on it; and his house should be wind and water tight, dry at bottom, and warm enough to prevent manure from freezing in it in winter.

The best floor for the pen is *beaten earth or clay*, with a slope to it sufficient to carry off the wet; then, by keeping plenty of litter in the pen, and the pen clean, and giving a free supply of ashes, charcoal, earth, etc., the floor will not be rooted up.

It may be useful to give here a mixture supplied to three pigs that were being fattened on cornmeal alone, as an experiment by Messrs. Lawes & Gilbert, at Rothamstead, England:

20 pounds finely sifted coal ashes.

4 pounds common salt.

1 pound superphosphate of lime.

Mixed and put in a trough for the pigs to take as they liked.

In six weeks the three pigs had eaten it all, and swellings and laboured breathing, that they had been affected with before taking the mixture, disappeared in two weeks after it was put before them.

Another question besides the pig's comfort, in having a warm and comfortable pen, is the far greater chance of saving the sow and litters, in cold weather.

In March, 1881, among a circle of seven neighbours, who had each a sow with litter, we were the only one who saved the litter, some went out in the morning and found the sow eating the last, others found the whole litter frozen stiff, and the sow so chilled that she was badly injured, and one lost sow and litter, while one found a small litter crushed to death by the excited mongrel sow.

And, curious thing, every one blamed the pigs, the weather, the feed, and everything but themselves—although none of them would leave their beds through the night to have a look at the sows, although they could see, if they chose, that their time was up.

Well, friends, how were we so successful? Well, although we ought to charge so much for

the recipe, and you'd value it more, we will give it free, and hope you will use it, and do likewise.

We watched the sow and by consulting the record of service, found the date due. She always had been allowed a large, dry, sunny, warm pen, had plenty nourishing food and correctives, (ashes and salt, charcoal, green food, etc.) and well supplied with pure, fresh water daily, with *chill* taken off.

She had never been struck or roughly treated, was handled and spoken to daily by some one, had an occasional wash and brush, and, a few days before due, had a new bed given her so that she could soften it.

She had two doses of castor oil, (one on each of the two days before pigging) and her food for these (and two more days) slightly reduced in quantity but not in quality, and made in liquid form, chiefly, and the teats watched to prevent trouble.

The reader says: "Pshaw! who's going to take all that trouble?" But I omitted telling you that this was done with a thoroughbred Berkshire sow, put to a thoroughbred Berkshire boar, and the young pigs sold weeks before born, (and even before service) at \$10 each at four weeks old, a very high price in a country where the average is \$2 at the same age.

Then, the night the sow was due, we settled into her pen at nine o'clock and stayed there until daylight, and about midnight began taking the plump, strong, little, black beauties as quick as we could handle them, dried them with the soft "meadow" hay, (placed at hand) and put them to the teats.

As soon as the last was done, and the sow rested, she got up, looking for a drink; a warm mash (two pails) was ready for her; she took it, laid down, was covered with a heavy horse-blanket, the whole squad, and they didn't stir until broad day.

Every one of a litter of eleven was saved; inside of five weeks they were gone, leaving over \$100 in their place, and the sow was again served.

And, as an instance of the effect of good feeding, this sow kept all these in splendid order, and took three more from a sow that had very little milk; and I estimated when the first litter was three weeks old, sow number one was milking *thirty-two quarts daily*.

The same care will apply to any good sow, not thoroughbred, and the same results be had, and the litters sell for much higher price.

SHEEP—THEIR POSITION IN AGRICULTURE.

Show me the sheep of a farm and I'll give you the character of their owner—for so sensitive are they to good or bad management that the effects are seen in a month, or less.

Mutton is a welcome and ought to be a cheap food for many hundreds of thousands who now seldom or never taste its healthy, nutritious particles.

It is contained in small space and readily useful; for on a farm with a staff of five to ten men, the carcass of a sheep or a lamb will be consumed, even in the hottest weather, before the question of preserving it can bother the house-keeper.

Were it only for its valuable meat, the sheep would occupy a forward place in our farm system, but it pays its yearly way—by a method purely its own—through its fleece, which is such an important factor in our comfort and wealth, and so universal, that it is well nigh impossible to imagine what we would do without it, and especially in this latitude.

It may seem strange to state that in a country like ours, so very well adapted to sheep-raising, and where the demand for its products is so

strong, that only about *one half* the quantity required, can actually be had; but such is the case, and the woollen manufacturers yearly import about half their consumption from foreign countries, though some of these same countries bring the rams used in their flocks from North America.

In looking into it, this subject becomes of immense importance to us as a nation, for by increasing the wool product to its proper extent, we lessen importations and encourage manufactures, thus lessening the out-pour of moneys and increasing the labour market.

We also get rid of a very large amount of cheap grains, or low grades, thus raising the price of the balance; and lastly, (though perhaps the most important point) the extensive cultivation of sheep hastens the adoption of the system of rotation of crops on the farm, or mixed farming, the only practice that can guarantee an agricultural country yearly recurring prosperity, while seed-time and harvest lasts.

THE SMALL BREEDS OF HOGS.

Although the majority of the farmers are partial to the large breeds, there are some advantages in favour of small Yorkshires and Suffolks, not possessed by the Poland Chinas or Chesters. Every one who raises stock must acknowledge that an animal which has ceased to grow, fattens more readily than one which is not matured. The tendency at the present day is to breed for small carcasses, (except in the neighbourhood of the large pork-packing cities) but unless the small hogs can be raised at a cost equivalent to the production of pork, the larger sizes will be preferred. Now if we consider that the small Yorkshire and Suffolk *mature early*, it at once becomes apparent that they are more easily fattened. While the large breeds require time to mature, the food consumed must contribute to bone and tissue, though a proportion will also be devoted to fat, and in the meantime a hog of smaller breed begins much earlier to convert nearly all its food into flesh. If we have a litter of pigs to farrow from a small breed, at the same time with a litter from a large breed, in proportion to cost of food, from April to December, the gain will be nearly the same, although the pigs of the larger breed may weigh more than the other, but the difference will not be very great. If the pigs are kept over to the second year, the larger breed will be much more profitable, but for the first year the profit will be the greatest from the smaller breed, and this may be verified by any farmer who will take the pains to keep an account of the *expenses*. The small breeds grow fast, fatten early, and are fit for the butcher long before the large breeds. The comparison is not made as to which will grow the faster, but which will yield the largest profit, the profit being that sum derived after deducting the cost, whether the pig weighs one hundred pounds or three hundred. If the boars of the small breeds are used on large, coarse sows, the pigs will be hardier, for the pure breeds are bred too fine for general farm purposes, but the crosses are excellent, and always give satisfaction.—*Farm and Garden*.

SHEEP require to be kept under cover in winter, but the ventilation of their houses should be of the freest kind. In fact it is advisable that the southern side of the house should be left almost wholly open, so that they may get sunshine in the day and plenty of fresh air day and night. It is only necessary that the sheep should have shelter from the prevailing winds and from the rain and snow. Another desirable thing in the construction of a sheep house is a wide doorway, for with a narrow one lambs are apt to be injured in the crush of exit or entrance, and the sheep are apt to be bruised and to lose tufts of their wool.

CANADA WEST LAND AGENCY COMPANY.

Those who have hitherto applied to this Company for copies of the FARM JOURNAL will notice the amalgamation which has taken place by which the JOURNAL becomes, in connection with the RURAL CANADIAN, a monthly publication. It will be the endeavour of the proprietors to extend the circulation still further, in Great Britain and the United States, so as to make it the most important medium of communication between these countries and our Dominion. Parties wishing to advertise lands for sale may obtain full information as to rates, etc., by addressing J. R. ADAMSON, Manager CANADA WEST LAND AGENCY COMPANY, 14 Adelaide Street East, Toronto.

NORTH-WEST LANDS.

We have just completed arrangements with the Manitoba and North-Western Railway Company, by which we are able to offer their lands for sale, situated on the line of the road now in operation, and in the very heart of the famous

Fertile Belt.

512,000 ACRES OF THE BEST LAND IN THE WORLD TO CHOOSE FROM. - FIRST COME FIRST CHOICE.

Cheap Prices; Long Credit; Low Interest; No Restrictions; Large Rebate for Cultivation.

BRANT COUNTY.—Onondaga Township.

742.—The "Onondaga Farm" is a magnificent property containing 200 acres, of which 190 are cleared and mostly free from stumps. 80 acres are covered with fine hardwood bush. The soil ranges from sandy loam to clay, and is very productive. It is well fenced with board, rails and trimmed stumps. The buildings comprise a solid roughcast house, 1½ storey, containing 8 or 9 rooms; 3 good horse barns, stabling for 35 head of cattle, with other outbuildings. There are 2 orchards, one old and one young, both bearing. It is conveniently situated to school, church, post office (½ mile) and railway station about 3 miles distant. Caledonia, where there are stations on the G. T. R. and the N. & N. W. R., is 7 miles distant. Brantford, the county town, 11 miles, and the City of Hamilton about 14 miles. Price, \$12,500, \$5,000 down, with interest at 6 per cent. The farm is very well being rolling, and Big Creek running through it, while the land is within 7 miles of "Bow Park Farm."

BRUCE COUNTY.—Carric Township.

2524.—A particularly nice farm of 115 acres, about 90 cleared, some fine sugar bush ash, cedar, etc. The soil is a first-class loam, rolling and easily worked, watered by a spring creek and wells. Fences are board and rail. Log house, frame barn, good orchards containing Apple, Pear, Plum and Cherry trees with grape vines and currant bushes all bearing. On a gravel road close to School, Churches and Clifford market town 2½ miles. Price \$5,000, terms easy. This is a bargain.

ELGIN COUNTY.—Malahide Township.

2445.—A splendid farm of 200 acres, 175 of which are cleared, 140 free from stumps, 15 in fall wheat, 15 in meadow, 50 seeded down, and 25 in bush, which affords good pasture; timber, oak, maple, and beech; soil is sandy loam, gently rolling and easily worked; there is a spring and a creek, a well at the house, and a cistern at the barn; good subsoil drainage; the fences are rail, board and pine stumps; the dwelling is frame, on stone foundation, 24x36, 2 storeys, with cellar size of house; outside kitchen, 12x18; woodshed, 18x18; frame barn, No. 1, 40x60 on stone corners, barn No. 2, 50x30; stable and shed No. 1, 45x34, stable and shed No. 2, 45x24; frame granary, 22x22, drive house, 24x36, stable, 24x36, pig-pen, 22x22, all in good repair; 8 acre orchard, containing all kinds of fruit—all bearing. The farm is ½ mile from gravel road, and a school is on the lot. English, Presbyterian, Methodist, and Baptist churches; post and telegraph offices, and market town at Aylmer, 2½ miles on the Air Line, G. W. R.; P. O., also at Jaffa; St. Thomas, 13 miles. Price, \$14,000; \$5,000 cash, balance in 10 years, at 7 per cent. Owner giving up farming. Will exchange for city property.

GREY COUNTY.—Sydenham Township.

2110.—A most valuable property, 600 acres; 53 cleared, 125 meadow; timbered with Maple, Birch, Cherry, Cedar and Elm, soil light clay loam, rolling and easily worked, watered by 2 springs and 2 creeks, cistern in back kitchen; fenced with straight cedar rails; dwelling of frame, on stone foundation, 36x24, 1½ storeys, containing 10 rooms; cellar, 16x16; also a large wood-shed, there is also a house for hired men—all in good repair; orchard comprised of a few fruit trees. Taxes amount to \$35.90 a year, with 14 days' road work. School 1½ miles, Church 1 to 2 miles, Post Office, Bogner, 2 miles, Telegraph Office 5 miles, and market town, Owen Sound, 11 miles, on the T. G. & B. R. Price, \$11,000; \$3,000 down, balance to suit, at 6 per cent.

HALIBURTON COUNTY

We offer in the Townships of Dysart, Dudley, Harcourt, Gilford and Harburn a large tract of land admirably adapted for stock raising. It is extremely well-watered, and raises even better grass and root crops than the high priced lands in the front. As the price ranges from \$1 to \$5 per acre, stock raisers can operate a much larger acreage than it would be possible for them to do in lands ranging from \$50 to \$100 an acre. In consequence of this low price the cost of raising animals is reduced to a comparatively very small sum. Intending investors would do well to inspect these lands thoroughly before buying elsewhere. Any practical man who understands his business can easily convince himself of the advantages of this district by personal inspection.

HALTON COUNTY.—Nelson Township.

2175.—That magnificent property known as "Limestone Hall," containing 200 acres 150 are cleared, nearly all free from stumps; 30 in permanent pasture, and 50 wooded with beech and maple; soil, limestone loam, slightly rolling, none stony, well-watered; fences cedar rails, and at the front pickets. The residence is a splendid cut stone two-storey building, 60x40, containing about 14 rooms; cellar, 30x30; summer kitchen and wood shed. A large barn, with stabling, was recently burned down, leaving the stone foundation and cellar—this has been partially rebuilt, and the stone foundation is still standing ready for building the remainder. The other buildings comprise a frame barn, 40x20, a large frame driving house, with stabling in connection, a stone smoke house, etc. There are 3 orchards, covering 15 acres, and containing 700 trees all bearing, and nearly all grafted fruit in various stages of growth, and all choice varieties. Distance 1½ miles from school; church 1½ miles, Lowville P. O., ½ miles, Zimmerman or St. Ann's Station on the H.

and N. W. Railway 3 miles, Milton 5 miles, city of Hamilton 15 miles, Burlington 8 miles. This is one of the best stock farms in the country, and cannot be beaten for raising any kind of crops. Price \$12,000, terms easy with interest at 6 per cent. A fine spring creek runs past the buildings.

HALDIMAND COUNTY.—Caledonia Village.

487.—That first-class foundry and machine shop known as "Scott's Foundry," comprising a large brick building, 2½ storeys, the ground floor of which is filled with expensive lathes, cutting and punching machines, etc., the first floor is a carpenter's shop and fitting room, and the upper flat is a pattern room. The foundry, with cupola, and powerful blast adjoints, and further to the east is the paint shop and store house for finished work. There is also a blacksmith shop with 4 forges; planing mill, 30 horse power engine, and 35 horse power boiler, and all necessary shafting and machinery for carrying on a large business. The lot covers half an acre of ground, and is very centrally located. The shipping facilities here are unsurpassed, the G. T. R., passing through the village, while the N. & N. W. R., gives access to the country north and south, and to the G. W. R., C. S. R., C. V. R., and T. G. & B. R. Price, \$4,500; terms easy. A dwelling house may be had adjoining the foundry at a moderate price. This foundry is celebrated for the manufacture of the Vibrator Threshing Machines, of which all the patterns are in stock, as are also horse powers, reaping machines, ploughs, saw mill machinery, engines, and a large lot of gearing patterns, stove patterns, straw-cutting box patterns, etc., etc.

MUSKOKA DISTRICT.—Stephenson Township.

2136.—The "Norcot Farm," containing 195 acres, 48 cleared, 40 meadow, 40 seeded down, 147 bush; no rocky or stony land timber, hardwood, a few pine, plenty of cedar, spruce, etc.; soil clay loam, rolling; there is a creek, and a well is near the house; the farm is well ditched; the fences are cedar rails (new); log dwelling, 20x16, 1½ storeys, 1 room and attic, small cellar, roofed with shingles, in very good repair; frame barn, 50x33, on cedar posts, log stable and loft, 24x15, both shingled, 3 years built, and in first-class condition; government road, post office, schools, and store, 400 rods away; churches, telegraph office, grist and saw mills, etc., 5 miles; market town, Bracebridge, 15 miles. Price, \$2,500; \$1,750 cash, balance to suit.

NORFOLK COUNTY.—Charlotteville Township.

2589.—Good farm of 100 acres, 90 cleared and free from stumps, 55 in meadow, and 10 wooded with excellent pine and white oak; soil is sandy loam; rolling and easily worked; fenced with rails; is watered by a creek, cistern, and two wells, situated one at house and other at barn; dwelling is frame, 26x36, roofed with shingles, 1½ storeys, 7 rooms; cellar and outside kitchen; good lumber bank barn, 30x52, with cow stabling underneath; also a shed, drive house, machine shed, with carpenter's and blacksmith shop, smoke, and bee houses, corn cribs, pig sty, poultry shed, etc.—all buildings in good repair; there is a very large orchard, containing 300 apple, 250 peach, 100 cherry, plum and pear trees, and some grape vines; good roads; school, 1 mile; English church, 4 miles; Methodist 2, and Baptist, ½ mile away; post office, Glenshee, 1 mile; market town, Simcoe, 8 miles, where are post and telegraph offices, and station on the G. T. R., also one at Delhi, 6 miles. Price (which includes live and dead farming stock), \$5,000, which is a bargain.

WELLINGTON COUNTY.—Luther Township.

625.—A good farm of 202 acres; 45 cleared, under cultivation and well fenced; balance, 125 acres, is excellent hardwood land, heavily timbered with maple, beech, elm, hemlock and basswood, and 30 acres of first-class cedar and valuable mixed timber; this is a particularly good lot; rolls slightly to east and south from the centre; it is a corner one, the 13th concession road being in front, and the 13th side line running along the easterly limit of the lot, rendering it easy of being divided into two farms of 100 acres each; good roads, choice neighbourhood; good rail fences; 1½ miles from Egerton post office, and one mile from school-house, there is a splendid new frame house, 30x32, containing 7 rooms, well finished, new frame barn, about 50x10, log stables on the premises. Price, \$3,500. This lot is only separated by the road from the following one.

626.—Valuable farm of 100 acres; 20 of a dry, luxuriant beaver meadow in the north-west corner, through which flows a never failing creek; 40 acres more are burned and ready for clearing and fencing; and 95 of heavy standing hardwood bush on rising ground, extending along the easterly and southerly boundary of the lot; no waste land; at a small outlay this can be made a most valuable farm; would make a very valuable stock or dairy farm; good roads; no buildings. Price, \$1,200, or 625 and 626 together, \$4,500.

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We can offer a few sections of excellent land in Manitoba in exchange for farms in Ontario, or other choice property.

House property in Toronto will be given in exchange for one or two good farms, well located.

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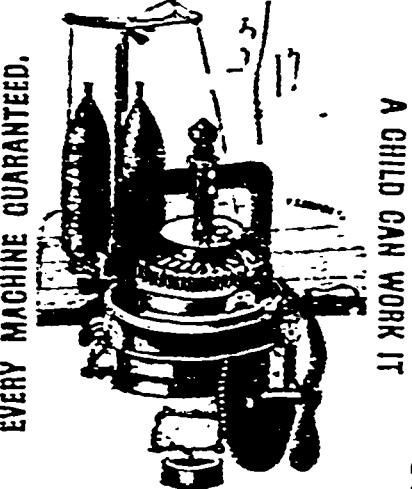
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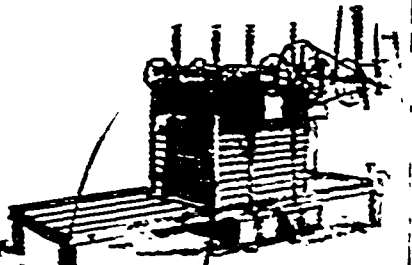
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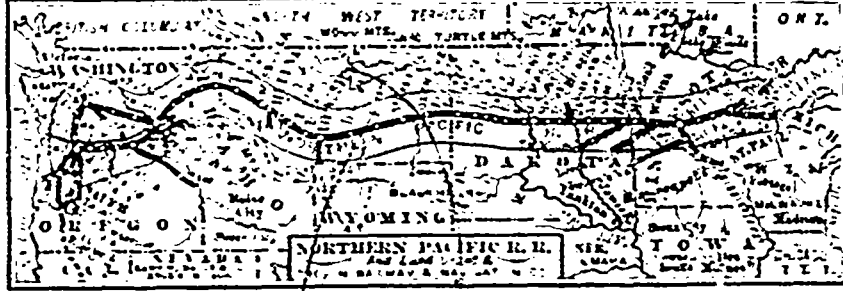


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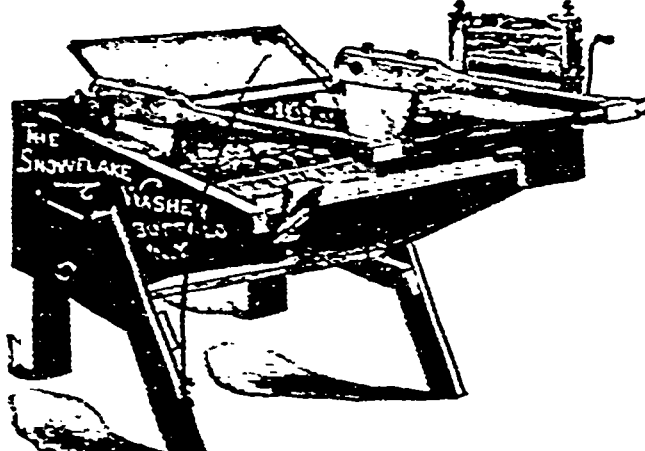
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Valancey E. & H. H. Fuller, Hamilton, P. O.

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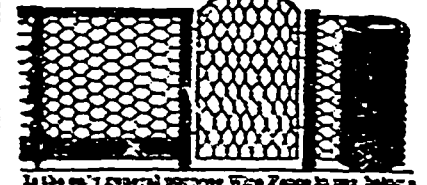
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- No orders will be received for letter heads, note heads, and envelopes of less than 100 100
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INTERNATIONAL & COLONIAL EXHIBITIONS.

Antwerp in 1885—London in 1886.

It is the intention to have a Canadian representation at the INTERNATIONAL EXHIBITION at Antwerp, commencing in May, 1885, and also at the COLONIAL and INDIAN EXHIBITION in London in 1884.

The Government will defray the cost of freight in conveying Canadian Exhibits to Antwerp, and from Antwerp to London, and also of returning them to Canada in the event of their not being sold.

All Exhibits for Antwerp should be ready for shipment not later than the first week in March next.

These Exhibitions, it is believed, will afford favourable opportunity for making known the natural capabilities, and manufacturing and industrial progress of the Dominion.

Circulars and forms containing more particular information may be obtained by letter (post free) addressed to the Department of Agriculture, Ottawa.

By order,

JOHN LOWE, Secy Dept of Agric.

Department of Agriculture, Ottawa, December 14th, 1884.



POST OFFICE DEPARTMENT, OTTAWA, 24th October, 1884.

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NOTE.—For purposes of remittance by Money Order, one dollar in Canadian money is equal to five francs and ten centimes.

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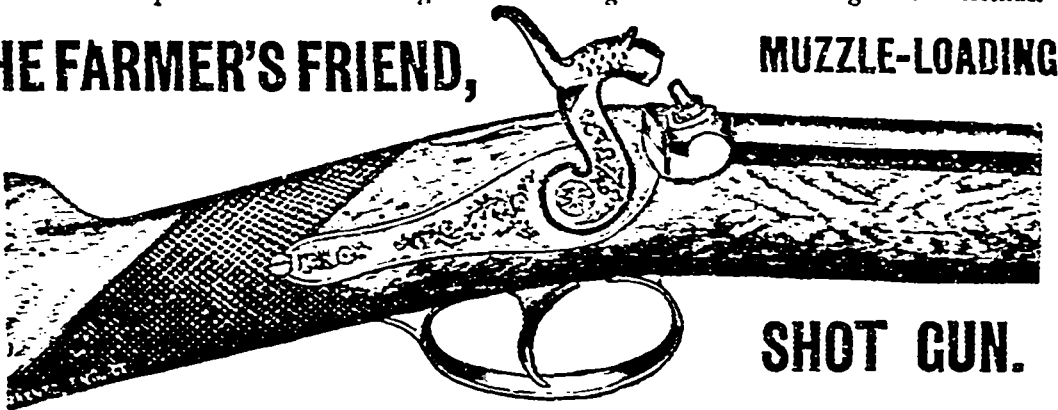
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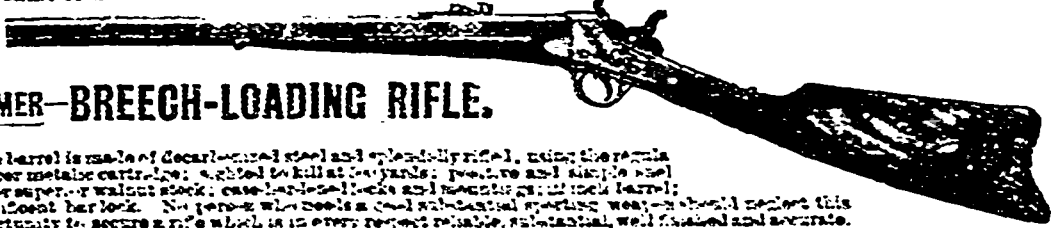


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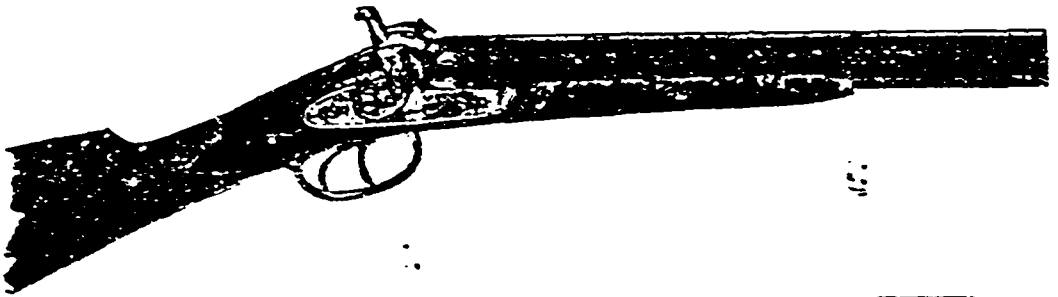
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The barrel is made of de-carbonized steel and splendidly rifled, using the Remington-Union metal cartridge, adapted to kill at 200 yards; positive and simple steel ejector; superior walnut stock; case-hardened locks and mounting; blued barrel; magazine bar lock. No person who needs a cool and accurate sporting weapon should neglect this opportunity to secure a rifle which is an every respect reliable, substantial, well finished and accurate.

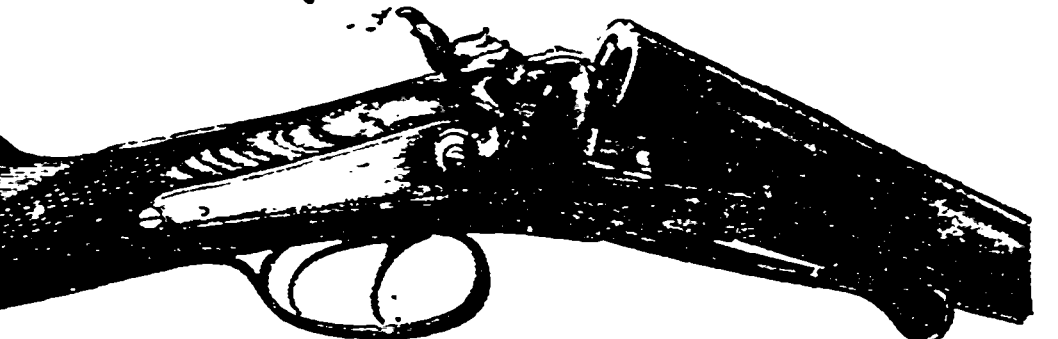
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THESE GUNS ARE FROM CHARLES STARK'S WELL KNOWN SPORTSMAN'S HEADQUARTERS, TORONTO.

THE DAIRY.

ABOUT JERSEY COWS.

RURAL EDITOR.—Will you please answer a question or two.

1. What is the average price of a Jersey cow?
2. What is the average yield of butter?
3. Would you advise a common farmer to get a Jersey cow?

JOSEPH GOODWIN.

[It would be very difficult to state the average price of Jersey cows in this country as the figures realized have been altogether fancy ones. As butter-makers Jerseys are unequalled; but all things taken into consideration, it is doubtful whether they are as profitable for the ordinary farmer as common or grade cattle. The advisability of our correspondent getting a Jersey cow will greatly depend upon the purpose for which he requires it. If for general use on a farm then we say, no. But if he wishes to start a herd of high-priced cattle to breed for sale, then he must follow his own inclination. Perhaps some of our readers who know will give the average butter yield of a Jersey cow.]

ODOURS ABSORBED BY MILK

Experienced butter makers are aware of the absorptive qualities of milk, and guard against injury from this source, never permitting milk to remain for a longer time than is absolutely necessary in an atmosphere laden with odours that are likely to impart a disagreeable flavour to the cream or butter to be made from it. But it is to be feared that far too many farmers who do not make a specialty of dairying are careless in this matter, and frequently have the freshly drawn milk standing in the stable or barn for some little time after milking, where it is exposed to the odours that are always prevalent in such places. When the milk is taken to the house and set for the cream to rise, it is also frequently placed in cellars where there are vegetables, or in rooms from which the odours from the kitchen are not rigorously excluded, as they should always be.

We will not say that a fair quality of butter cannot be made by those who have not at command all the modern appliances; but we do say that a first-class article cannot be produced from milk exposed to an atmosphere laden with foul odours of any kind. Outside of the best dairy regions, or where butter and cheese are specialties of the farmer, it is very difficult to find a really good article of butter; and in proof of the truth of this, we have only to examine that which is taken in trade at country stores and groceries, or is gathered by peddlers and small dealers throughout the country. We know that it is very difficult to convince the ordinary farmer's wife that the butter she is making from week to week is not really "salt edged," although she may admit that her milk room is often invaded by fumes emanating from cooking meat and vegetables in the kitchen, and that in the press of work she cannot always skim the milk or churn quite as often or regularly as she would like to, but even with these irregularities in the way, she is inclined to think that there are no good reasons for considering her butter anything less than first-class.

Upon this subject of the absorption by milk of various volatile substances, Dr. Dougall, of Glasgow, has recently published an excellent paper, a synopsis of which was given in the *Naturalist*. To test the absorptive powers, Dr. Dougall enclosed in a jar a portion of certain substances giving off emanations, together with a uniform quantity of milk, for a period of eight hours. At the end of this time some of the milk was drawn by means of a pipette from the lowest

stratum of the vessel exposed in the jar, with the following results: Milk exposed to turpentine, onions, tobacco smoke, creosote, and paraffine oil smelled very strong of these substances. Putrid fish gave the milk a very bad odour. Coal gas, cabbage somewhat decayed, stale cheese, and assafetida gave the milk a distinct odour, while ammonia, camphor, and chloroform only imparted a moderate odour.

From this experiment it would appear that the milk absorbed the emanations of all the substances to which it had been exposed, and, further, that all the specimens examined retained their distinctive odours for fully fourteen hours after their removal from the glass jar in which they had been exposed. According to Dr. Dougall, cream may be regarded as acting in much the same manner as milk; for while it contains less water than milk, it has special qualities of its own, which may perhaps make it even more liable to retain offensive and dangerous emanations than the parent fluid itself.

Abundant evidence has, however, been given to show that far more care is needed in connection with the storage of milk than has heretofore been regarded as necessary, especially where milk and cream are kept in apartments or wards occupied by sick persons. If the emanations to which the milk is exposed are of a diseased and dangerous quality, it is all but impossible that the sample can remain free from offensive and dangerous properties, and it should become an invariable rule to keep as little milk as possible in sick rooms, and never to allow a supply which has thus been exposed to unwholesome emanations to be used as food. Prof. L. B. Arnold, referring to this subject of absorption in his "American Dairying," says: "The influence of the air upon milk is not confined to the absorption of the spores which produce acidity. Spores of every other kind are taken in as well. Nor does the absorptive power of milk end with absorbing living germs. It takes in odours as freely as infectious germs. It is a fact which cannot be too strongly impressed upon the mind of every one connected with the care of milk or the manufacture of milk products that milk takes in every odour as well as the seeds of every ferment that blows over its surface."

All liquids, however, have absorbent powers, and if pure water is left standing in a vial in an atmosphere, it will soon show by its taste and smell that it has absorbed foreign substances. But milk, as Prof. Arnold says, being full of oily matter, and holding albuminoids and sugar in solution, offers to every species of ferment just what is most desirable for it to flourish in. Every odour that comes in contact with milk is grasped and taken in at once, and its grasp is never slackened.

WHEN THE COWS COME HOME.

Every afternoon I go down to see the cows come home. From the meadow to the milking, they come in rambling haste. Way down the shady lane a puff of dust arises. The cloud deepens until the view is closed. "The cows are coming home," calls some one. From the rolling dust emerges the horns, the head, the flanks of a Jersey. One after another the cloud gives them forth, embodying them rapidly until the herd stands revealed. Up the lane they come trooping, the dust cloud hanging about their flanks and still enveloping the centaur who speaks from the unseen with his pistol-like whip and hurries them on. A charming sight it is! Tudora, stately queen of the herd, leads the way. With head uplifted and swinging pace she wheels into the wide gate, the aroma of the elver hanging all about her and the peace of the meadow

beaming in her eyes. After her the herd—Jerseys all and every one a jewel—pressing in slow tumult through the gate, bringing in their rich udders the essence of the rifled pastures, as honey bees bring home the stolen sweets of the flowers. Once in the open lot the herd disperses and each cow wends her way to her special stall.

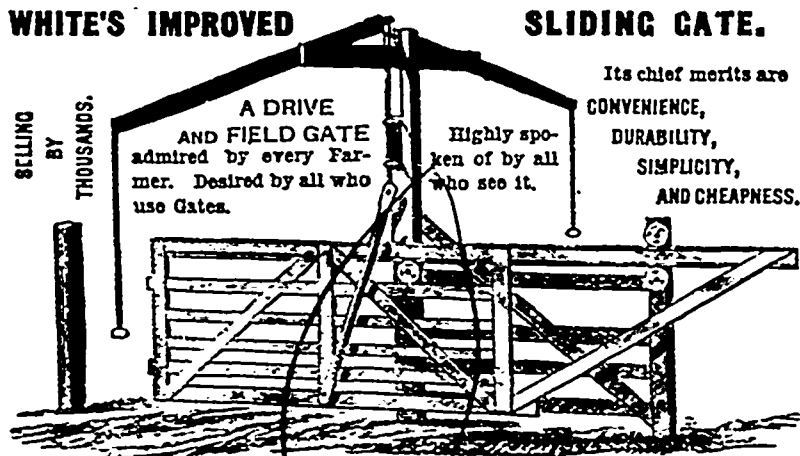
Then begins the milking. Osceola, a coloured man of great dignity and reserve, with his hair done up in cotton string curl papers, is in charge of the herd. For fourteen years he has been trusted and found worthy. He has his assistants who place the huge milk cans, each with the strainer, at convenient intervals through the barn. The assistants then with cans of clear water wash the dusty udders and respectfully retire. Then Osceola's time has come. Adjusting his white apron he leaves the crowd, whose questions he has been answering with caution and hauteur, and seats himself by the side of the first cow in the first row.

Milk! Well, I just wish you could see him! With two sinewy hands and a rotary motion, the head thrown back, the foot beating time, and the milk fairly hissing into the pail, in two big streams. Three minutes to the cow, and with fine energy and abstraction he moves from one stall to another, filling the big milk cans as he goes. Picking out half a dozen favourite cows he milked thirteen and a half gallons in fifteen minutes, on a test, and somehow or other left the impression that he hadn't half done his best. From 100 to 110 gallons is a day's milking, and it is cow's milk, too, and not milkman's milk.—*H. B. Grady in Atlanta Constitution.*

HOW TO MAKE GOOD MILKERS.

No matter what breed you have, something further is necessary in order to reach the best success in raising good milkers. Good blood, whether Short Horn, Jersey, Devon, Ayrshire, grade or native, is not everything, but lies at the foundation; something cannot come from nothing. Treatment in raising a milker should be somewhat different from that in raising a beef animal, or an animal for labour. Begin as soon as the calf is a day old; see that it has sufficient to eat, and is kindly treated and regularly attended to. Never pamper or overfeed, but give it good, generous food, to cause a regular, early and steady growth. Accustom it to be handled, but not to such an extent as to acquire objectionable habits as a cow, but rather to be fond of the presence of the keeper. Kindness helps to create a quiet disposition, so important in a dairy cow, and this education must begin when the calf is young. Any habits acquired when young are apt to cling to the cow when grown.

For a milker I would have a heifer come in at two years old. She is then old enough to become a cow. I would not, as a rule, allow her to go farrow, but milk her up to within a few weeks of calving, even if I did not obtain but little at a milking. A cow thus trained will give more milk and be more likely to hold out long in milk, if her after-care is judicious and liberal, as it should be. Such treatment tends to form the habit of giving milk, and as we know, habit is a sort of second nature. Couple the heifer with an older bull, one, two or three years older than she is, is preferable to a yearling, and better stock is likely to come from such. After the heifer has come in her feed should be regular and liberal. Good clover hay is the best of all, but we all may not have this for stall feed; then we must make up for what is lacking in some concentrated feed, such as oatmeal, shorts, oilmeal or the like; but great care and good judgment must be used not to overfeed or crowd, as the future cow may be ruined. Undue forcing shortens the useful life of the cow very rapidly.—*W. H. White in Country Gentleman.*



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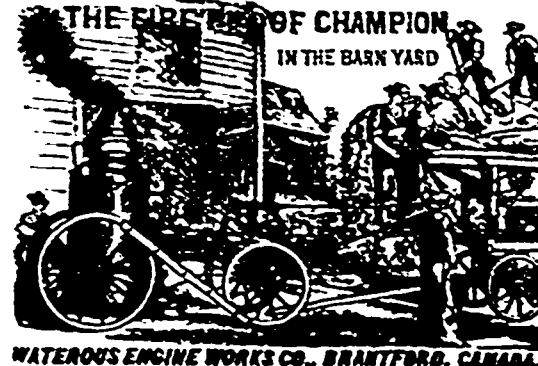
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THE publisher of the ILLINOIS AGRICULTURIST desires to secure 100,000 more subscribers. For 50 cents we will mail you a copy of our paper 6 months on trial, and immediately send you a numbered receipt, which will entitle the holder to one of the following presents. Its circulation is now 100,000. Only 50 cents needed before the distribution takes place, March 15, 1885. All these presents will be given to these new 100,000 subscribers.

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WHO WILL SEND THE QUICKEST!
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BUSINESS ANNOUNCEMENT.

TO CANADIAN FARMER SUBSCRIBERS.

There is a number of our subscribers who are behind in their subscriptions. We beg to intimate to these that such back amounts, whether for a whole year or years or for a part of a year, are due to the old publishers. We will shortly send to each one of our subscribers a statement of the amount due, when they will oblige greatly by remitting if convenient. All who have paid us for the present year or a part of the same will of course receive the paper up to the time of expiration of their subscription from the new publishers. Yours very truly,

W. H. MONTAGUE, Editor.

The Rural Canadian.

TORONTO, JANUARY, 1885.

BUTTER-MAKING by the creamery process has made wonderful progress in some of the Western States. Iowa, for instance, has 450 creameries, Illinois has 470, Wisconsin has 430 and Minnesota has 139. When will the dairymen of Ontario see that it is no less important to encourage the manufacture of butter than of cheese?

A good authority says that, if set for profit, an orchard of five hundred apple trees should not contain more than five varieties, and that four of the five should be winter apples. What should be aimed at is, to plant enough of each variety to pay for the hauling of them to market. Better one load of fifty bushels than five separate loads of ten bushels each.

It is quite true that the prices of farm products are now low, and that farmers find in them little money for their labour. Yet there is this to be said for the farmer, that his labour assures him a comfortable living. All the substantial of life may be grown on the land, and there is no one to deny to the farmer the leave to toil. It is far different with the great majority of people following other industrial occupations, or engaged in trade. The merchant may fail and the workingman may be thrown out of employment, and for those unfortunate ones there is no resource but to wait and suffer.

A QUARTER of a century ago the total value of Canada's exports of cheese was only \$1,500, and for last year it amounted to \$6,500,000. This shows a remarkable development of the cheese industry in our country, but one cannot fail to contrast the result with the kindred industry of butter. Our exports of the latter are not much more now than they were a quarter of a century ago. Surely if the Dairymen's Associations have done for cheese what they claim to have done, they might also have done much for butter. It is not too late for them to begin even now, and we trust that at the forthcoming annual meetings some practical scheme will be proposed and acted upon.

At the annual meeting of the Michigan State Horticultural Society, held at Ann Arbor on the 1st, 2nd and 3rd of December, Prof. William Saunders of London showed a head of wheat upon which was a grain of chess that apparently grew there; he also showed two apples, of different varieties, that grew upon the same twig. Upon a very close examination it was decided that the grain of chess had been accidentally caught in the head of wheat while it was green and growing, and a capsule of the wheat had closed around it, the connection between the grain of chess and its parent stock being broken when the grain was harvested. The explanation in regard to the apples was not so positive; it might have been caused by cross pollenization or by bud variation.

TO SUBSCRIBERS OF THE CANADIAN FARMER AND GRANGE RECORD.

The publishers of the above paper beg to intimate that they have disposed of it to Mr. C. Blackett Robinson, publisher of THE RURAL CANADIAN, with which hereafter the *Canadian Farmer and Grange Record* will be amalgamated. Having much other work upon their hands they felt that they could not do justice to the *Farmer*, without going to more expenditure than the enterprise would warrant or the stringency of the financial markets sustain.

In bidding the readers of the *Farmer* farewell, we have to thank them for the kind patronage in the past, and especially to thank some noble workers in different sections of country who have been very instrumental in adding to our list. Our policy at all times has been one with which every agriculturist could agree, and we, therefore, have nothing to regret on that score.

In handing our friends over to THE RURAL CANADIAN, we feel confident that we are giving them a very excellent journal in place of our *Farmer*. THE RURAL CANADIAN has rapidly become one of the best agricultural papers on the continent. Each department of it, as will be noticed, is fully up to the demands of the times, and Mr. Robinson, the publisher, will improve it greatly at once, now that the two papers are amalgamated; so that hereafter subscribers may expect to receive the best agricultural and home newspaper published in Canada. We wish all our friends to continue as subscribers to THE RURAL, and hope at various times to have a few words upon familiar subjects with them.

In bidding our patrons and friends adieu, we beg again to repeat our thanks, and to solicit on behalf of THE RURAL CANADIAN AND CANADIAN FARMER, the patronage that has been so kindly bestowed upon the *Canadian Farmer*.

W. H. MONTAGUE, Editor.

DESTRUCTION OF SHADE TREES.

There are continual complaints from farmers of the wanton destruction of shade trees by Telegraph and Telephone Companies. Whatever privileges have been granted in the charters of these companies to the right of way along our public highway, one thing is certain, the law for the encouragement of tree planting, passed by the Ontario Government, and the right assumed by those companies in cutting down valuable trees and mutilating others by cutting off limbs are conflicting. The question of tree destruction by Charter Companies is becoming a serious one, in as much as there is hardly a main road in the country but is now being netted in all directions by telegraph and telephone lines. All the cities and nearly every town and village of importance are having wire communication. The employees of these companies, we have no doubt, have not any accurate conception of what the limit of their charter is, and what privileges are granted to the companies with regard to the destruction and mutilation of trees; not only those belonging to our farmers, but also the public municipality or Government. It is time our farmers thought about the matter, for there is hardly a day that they may not be expected to have some trouble with men digging post holes near the middle of their gateway, or slashing down some shade tree. Only recently we saw a telephone pole stuck right on the sidewalk in a rural village, and midway between a gate!

Our country friends are often unsophisticated on these points, and are afraid to make a remonstrance about the intrusion. We think, however, that governments generally grant too many powers to companies, and the extent of these powers is

not sufficiently guarded to avoid misunderstandings. For the advancement of the business and commerce of the country we do not deny that governments should extend all their powers to encourage the general welfare of the country, but when the laws conflict with relation to the rights of private and public property, and that of charters granted to companies, it is time that our farmers looked after this phase of the rights of the latter to destroy trees that have been preserved for the advancement of the forestry of the country. From precedents in the Courts of Law, we have no hesitation in saying that neither telegraph nor telephone companies can intrude, intrench, or mutilate trees along public highways.

In the case of Marshall, of London Township, against the Montreal Telegraph Company, two years ago, for even cutting one tree down and trimming two more large willows, the Court of Queen's Bench awarded to Marshall the full demand, (\$175,) with costs against defendants.

As similar difficulties are liable to arise in running so many lines, we can assure our farmers that trees on public highways can not be cut down, where the Ontario Act for the protection and payment for tree-planting is in force.

But further in regard to this question, and to show how contradictory the statutes are: By an old law which has never yet been repealed, a pathmaster has the power of cutting down all trees within twenty feet of the road allowance—that is from the road twenty feet on the man's property. Of course this provision was made during the early settlement of the country, when the overshadowing trees often kept the road soft and muddy for weeks after a heavy rain, whereas if the heat of the sun were admitted it might be made thoroughly dry in two or three days.

The way the present companies are operating with regard to public and private property is anomalous in many ways. For instance, there are, first, pathmasters who have power, and their functions are defined by the various municipalities. The pathmasters, and with them the County and Township Councils, have full control of these roads, and no persons can claim possession for any purpose whatever unless granted by the Municipal Council. Now, none of the telegraph or telephone companies ever consult any municipalities in which they have placed their wires; and it is doubtful if by the powers conferred the municipal officials, which have never been changed, if they could not cut down every telegraph and telephone post in their jurisdiction.

Whatever governments do in the way of legislation, let them study clearness and simplicity in framing their laws, so that he who runs may read and understand; and not have the same governing body passing two laws which directly conflict with each other—as in the cases we have mentioned. Let them also, as far as the public interest will allow, protect the shade trees of our highways from the vandalism of the telegraph and telephone companies.

BETTER CULTIVATION WANTED.

It is just possible that one result of the present depression in agriculture will be to lead farmers to adopt a more thorough system of cultivation than now obtains among them. So long as prices are fairly good they are content to get a moderately good yield from their land, but with prices so low as they are this year it is impossible that farming can be made to pay well without getting from the land all that it is capable of producing. The British farmers were satisfied with a low yield as long as they were able to supply the demand of their markets, or as long as the fiscal policy of the country enabled them to compete successfully with foreign rivals. But during the

past forty years the grain-growers of the world have been their rivals, and the necessity of adopting the best methods of tillage has been forced upon them. An average of twenty-nine bushels per acre is now the standard of the English farmer, and until the competition of cheap labour in India began to be felt he was pretty well able to hold his own. Now, however, the whole situation appears to be changed, and it is not the English farmer only but also the American and the Canadian who requires to consider his methods of cultivating the soil and the kind of products he can deal in with a reasonable hope of success. A number of years ago the average yield of wheat in the United States was only nine bushels per acre, but for the last four or five years it has been increased to a little over twelve bushels. We can do much better than that in Ontario, not merely because farmers are more thorough farmers but because ours is unquestionably the finest grain-growing area of the continent. For the harvests of 1882 and 1884 our average wheat yield has been a little more than twenty-two bushels per acre. So far this is gratifying, but we should not be content until we have at least exceeded the English average. And there is no doubt that it can be done. We have the soil and the climate, and all that is required is thorough and intelligent tillage. There is a farmer in the neighbourhood of the Town of Clinton, in the County of Huron, Mr. Richard Ransford, who obtained from a field of ninety-five acres in 1882 an average of fall wheat cleaned for market of forty-three and one-half bushels per acre, and this year from thirty-three acres of the same land he has obtained an average of forty-three bushels. The soil is a stiff clay, but it was thoroughly worked. On each occasion it received three ploughings, and in spring he gave the wheat a top-dressing of 500 pounds of salt per acre. Now, what Mr. Ransford has done, thousands of other farmers in Ontario can do, and it is only by raising the average yield that they can hope to succeed in the face of present prices and the foreign competition.

CANADA SHORTHORN HERD-BOOK.

The following sales have been reported up to Nov. 20th, 1884, the name of seller in each instance preceding that of the purchaser:—

- B. Nelson [18481], by Baron Constance 6th [18480]—M. C. Campbell, Blenheim; James Chinic, Blenheim.
- B. Baron Constance 6th [12480], by 7th Lord of Oxford [17580]—John Gibson, Ilderton; Leslie English, Mull.
- B. Young Warlabby [12433], by Knight of Warlabby [1694], (29014)—John Burnett, Salem; Wm. Burnett, Hammond.
- B. Barney McCoy [12487], by Uncle Tom [12110]—D. S. Robertson, Wanstead; Neil McPhedran, Wanstead.
- B. Baron [12440], by The Sultan [7058]—Tilman Shantz, Waterloo; Jos. Boshart, Baden.
- C. Lady Laura (vol. 9), by Spotted Duke, [12-126]—Benj. Snyder, Bloomingdale; Mr. Frzn. Pennsylvania, U. S.
- C. Musio (vol. 9), by Bismarck [2750]—Hugh McMillan, Hillsburg; Jas. White, Erin.
- B. Nelson [12447], by Hanlan [11467]—Thos. Blanshard, Appleby; Geo. Douglas, Streetsville.
- B. Lord Dufferin [12451], by Duke of Bedford [8369]—Wm. Clark, Ayr; Jas. Dennit, Wolstein.
- B. Cleveland [12450], by Duke of Bedford [8369]—Wm. Clark, Ayr; John Fraser, Ayr.
- O. Leona Dare (vol. 9), by Roan Duke [11249]—Dan. Jarke, Tavistock; Robt. Webber, Tavistock.

B. General Grant [12459], by Prince [9100]—A. W. C. Rice, Pike River, Que.; E. Gibson, Stanbridge, Que.

C. Susan Jane (vol. 9), by Heart of Oak [7179]—Chas. Gracer, Linwood; Jacob Bricker, Hawksville.

C. Rosy 2nd (vol. 9), by Duke of Wellesley [6998]—A. Dammier, Hawksville; P. Mosser, Elmira.

B. Duke Imperial [12458], by 6th Duke of Kent [11653]—John Meyer, Kossuth; D. Scott, Kossuth.

C. Lily (vol. 9), by Wild Eyes Gwynne [9531]—Wm. Taylor, Weldon; John Grass, Weldon.

C. Beauty of Waterloo (vol. 9), by Duke of Bloomingdale [11988]—J. S. Snyder, Bloomingdale; J. S. Frain, Walker, Pa., U. S.

B. Blake [12402], by Duke of Bloomingdale [11988]—J. S. Snyder, Bloomingdale; J. S. Frain, Walker, Pa., U. S.

C. Sarah Jane (vol. 9), by Young Bismarck [4628]—J. S. Snyder, Bloomingdale; L. Bowman, Winterbourne.

C. June Rose (vol. 9), by Plutarch [9064]—C. Wilson, Caistorville; J. M. Lymburner, Caistorville.

C. Oxford Beauty (vol. 9), by The President [9456]—Thos. Hogg, Thamesford; J. Durand, Dorchester Station.

B. High Sheriff 6th [18469], by High Sheriff 5th [8711]—Thos. Walker, Wellman's Corners; R. A. Davis, Belleville.

C. Lizzie Linsley (vol. 9), by Huron Butterfly [7205]—Jas. Fisher, Hyde Park; J. W. Evans, Evelyn.

B. Howard Lad [12471], by Roan Duke [9240]—H. Cornwall, Morpeth; Jno. P. McDougal, Rondeau.

C. Rebecca (vol. 9), by Bruce [10624]—Jas. Miller, Paris; Henry Hammond, Cainsville.

B. Sampson [12474], by Duke of Kent [6410]—H. Hammond, Cainsville; John Cowin, Paris.

B. Cayuga Chief [12472], by Duke of Kent [8410]—H. Hammond, Cainsville; Wm. Richardson, Hagersville.

C. Lady Clara (vol. 9), by Marquis of Brighton [11978]—H. Glazebrook, Simcoe; H. Hammond, Cainsville.

C. Mabel (vol. 9), by Marquis of Brighton [11978]—H. Glazebrook, Simcoe; H. Hammond, Cainsville.

C. 9th Duchess of Moore (vol. 9), by Baron Newcastle 2nd [4591]—H. McCurk, Colinsville; B. McMechin, Sarnia.

C. Cara Rose (vol. 9), by Duke of Dufferin [9856]—S. G. Near, Hereward; John Thompson, Luther.

C. Lady Goldsmith (vol. 9), by Prince of Florence [9146]—Wm. Pollock, Warkworth; D. Douglas, Warkworth.

B. Rockway [12482], by Robin Hood [11987]—Wm. Parker, Stamford; G. W. Adams, St. Catharines.

B. Bard of Erin [12478], by Baron Barringtonia [12460]—Hon. M. E. Cochrane, Compton, Que.; Hon. John Simpson, Bowmanville.

B. Pickering Lad [12481], by Bard of Erin [12476]—T. S. Brant, Whitby; Geo. Bath, Dunbar.

B. Neptune [12479], by Bard of Erin [12478]—John M. Jones, Bowmanville; Wm. Wright, Bowmanville.

C. Clara (vol. 9), by Bard of Erin [12478]—John M. Jones, Bowmanville; Wm. Wright, Bowmanville.

STRAWBERRIES should not be mulched with coarse manure and litter until after the ground is frozen. If covered earlier the mulch often smothers the strawberries when the plants are not in a dormant condition. After a hard freeze there is no danger.

HOW TO UTILIZE BROKEN LAND.

It is well known to every one who has travelled to any extent through the Provinces of Ontario and Quebec that the close proximity of the Laurentian range to our southern boundary greatly prescribes the limits within which agricultural pursuits have been profitably carried on. Of course settlers are found living "in a kind of a way" even in the heart of the Laurentides, but it must be admitted that farming, as these settlers usually carry it on, is not a very lucrative calling. The great trouble is, not that large quantities of really excellent land cannot be found among the rugged, sullen-looking ridges of the Laurentian range, but that it is almost impossible to find a field of any size. The good land of these northern townships consists almost solely of very small valleys of extremely rich soil, while the hills, often of bare rock, are seldom clothed with more than a thin covering of light soil. Grain farming in such a "patchy" country cannot be very profitable. The fields are very small and scattering, and the hauling is often attended with serious difficulties. On such farms, however, live stock can thrive well all the year around. In spring, summer, and early autumn, the short but rich nutritious grasses upon the hill-sides will keep them in fine condition, while the delightful bracing climate, with its almost invariably cool nights, even after the hottest of days, and the pure cold water bursting out of the crevices in the great granite ridges, ensures perfect health and vigorous constitutions. The rich valleys, though they may not in all cases mature wheat in time to preserve it from the frost, will ripen the coarse grains without difficulty, and these, with the product of the luxuriant hay marshes with which the region abounds, will furnish a very liberal yield of winter feed per acre. In these regions to which we refer land can be purchased at merely nominal figures, so that for a very moderate amount of initial outlay one can secure a farm large enough to sustain a large stock of horses, cattle or sheep. When the real value of these rough lands of the north comes to be understood fortunes will be made out of beef, mutton, butter and cheese in regions that are now considered absolutely worthless. The first farmer who has the enterprise to invest a respectable sum in the establishment of a dairy or stock farm in the Laurentian range will achieve results that will greatly astonish the farmers who have all along been confining their operations to the old settled portions of Ontario and Quebec close to the great lakes and the St. Lawrence.

In an enterprise of this kind the farmer would have in his favour cheap land, close proximity to the markets of the world, rich, sweet grass, pure cold water, and a thoroughly bracing and health-giving atmosphere. The great difficulties in the way of such a scheme would be the discouragements with which one is met on the very threshold of such an enterprise. He finds men all around him who are barely "making ends meet," and who are carrying on their farming in the "hand to mouth" system, than which no way of farming is less profitable and less satisfactory.—*Canadian Breeder.*

YOUNG MEN!—READ THIS.

THE VOLTAIC BELT Co., of Marshall, Mich., offer to send their celebrated ELECTRO-VOLTAIC BELT and other ELECTRIC APPLIANCES on trial for thirty days, to men (young or old) afflicted with nervous debility, loss of vitality and manhood, and all kindred troubles. Also for rheumatism, neuralgia, paralysis, and many other diseases. Complete restoration to health, vigour and manhood guaranteed. No risk is incurred as thirty days' trial is allowed. Write them at once for illustrated pamphlet free.

Bees and Honey.



OFFICERS OF ONTARIO BEE-KEEPERS' ASSOCIATION, 1884-5.

President, Dr. Thom, Streetsville; 1st Vice-President, S. T. Petit, Belmont; 2nd Vice-President R. McKnight, Owen Sound; Secy.-Treas. Jacob Spence, Toronto.

EXECUTIVE COMMITTEE—D. A. Jones, Beeton; Wm. Campbell, Cayuga; S. Webster, Doncaster; F. H. McPherson, Beeton; P. C. Dempsey, Trenton.

Communications on the business of the Association, and Bee-keepers' Department of the *Canadian Farmer* to be addressed to the Secretary-Treasurer, 251 Parliament St., Toronto.

TO THE MEMBERS OF THE ONTARIO BEE KEEPERS' ASSOCIATION.

In announcing that we have disposed of the *Canadian Farmer* to the publisher of THE RURAL CANADIAN, we beg to intimate that we have made an agreement whereby the members of the O. B. K. A. are to receive the combined paper on the same terms as they have in the past received the *Canadian Farmer*. The publisher has also agreed in uniting with us to reserve one page for bee-keeping interests, which space will be entirely under control of your Association Secretary, and devoted to your interests. We have no doubt whatever that if any extra space is at any time required, it will be freely given for reports, communications, correspondence, etc., devoted to your loved industry.

In bidding adieu to the beekeepers of Canada as publishers of their organ, we can only say that they have dealt most honourably with us, and that they have borne patiently with many of our shortcomings, which we are bound to say were never intentional or the result of carelessness. Much trouble has always been experienced because the Secretary and the *Farmer* were situated distantly from each other; but now they will both be in the same city, and your Secretary will have much more immediate control over your department.

The publisher, Mr. C. Blackett Robinson, has been considering the advisability of publishing a Canadian bee journal; but has now given up that idea, and will henceforth spare no expense in making your bee department attractive and valuable.

We wish you all success, and hope to meet you at our next annual gathering, and to learn that you think highly of THE RURAL and its Bee Department.
W. H. MONTAGUE, Editor.

The publisher of THE RURAL CANADIAN accepts the trust involved in the foregoing transfer of interest; and until the next annual meeting of O. B. K. A. pronounces for or against the continuance of our relations, will do everything in his power to make this department useful and interesting to every beekeeper in Canada. It is scarcely necessary to add that in this department, as well as in every other portion of the paper, we are free from entangling alliances with the supply business, whether in agricultural implements, trees, seeds, or apianian requisites. No outsiders can influence the editors; and at all times and in every connection, the best interests of our patrons shall have first and constant consideration. Correspondence from beekeepers is always welcome. This may either be sent to the Secretary-treasurer of the Association, 251 Parliament street, or to the editors, 5 Jordan street, Toronto.

We want an agent in every locality where one has not yet been appointed. THE RURAL CANADIAN is popular, and a canvass usually results in a good list. Liberal commissions allowed. Write for terms.

THE CANADIAN FARMER AND RURAL CANADIAN.

In undertaking the responsibilities of the *Canadian Farmer's* arrangements with the Ontario Bee-keepers' Association, the main difficulty to be met seems that of substituting our monthly RURAL CANADIAN for a fortnightly paper. We wish to state very distinctly that it is our fixed purpose to supply in some fair measure, not only what will be full equivalent in value, but also both suitable and acceptable to the Association, officers and members.

Owing to delay in negotiations and transfer, we are unavoidably behind time as well as defective in present issue. Some of the Apiary Department being what ought to have appeared in the *Canadian Farmer* long before now; leaving an accumulation of interesting bee-lore on hand, which it is hoped may yet be used to good purpose in rendering this department—as nearly as practicable—what is wanted by bee-keepers. Meantime meeting the emergency by devoting two pages instead of one to "bees and honey;" and asking reserve judgment until opportunity is had for putting into your hands, more ample evidence of our good intentions in general, and specially in the best interests of the beekeeping fraternity.

TORONTO HONEY MARKET.

Quite a number of anxious sellers from the country have been canvassing city stores offering honey at reduced prices, but do not seem to have accomplished much in sales. The times are decidedly hard, and honey being accounted chiefly as a luxury can be done without. Then the low price of sugar and fruit has influences. However, honey is assuredly growing in favour, and the city increasing rapidly, no doubt in the near future a much larger honey consumption may be fairly anticipated. The best extracted is mostly held at ten cents, and section at eighteen to twenty cents per pound. The early spring months of the year have been the best part of the season for sale. The present season, no doubt, may be looked for as like the former in this respect.

TORONTO CONVENTION.

Questions—(continued).

Shall we clip the queen's wings? MR. WELLS always clips. There was some difference of practice and opinion, but the clipping seemed to have most supporters.

What time should bees wintered in cellars be taken out? MR. CORNELL.—When soft maple blooms or first pollen is to be had. MR. WEBSTER would keep them in as late as they could be kept at rest up to near the end of April. Several others condemned too early taking out.

How many members close up the entrance on cold bright days in spring, to prevent the bees from being chilled? Over half of those present either done so, or heavily shaded the front of the hives.

Can feeding be successfully done in cellars during winter? There was quite the usual divergence of opinion expressed, but no practical experience forthcoming. The placing of full combs of stores gently close to the cluster appeared to obtain most favour. But the unanimous conclusion was that before cold weather in the fall is the right time to make sure that bees have ample sealed stores to do at least until spring, when they can be fed to advantage with good sugar syrup or stores in combs kept over for the purpose.

CORRESPONDENCE O. B. K. A.

The Secretary-Treasurer has lately had many and grievous complaints from subscribing members, chiefly regarding irregularity of delivery; and much, too, as to the non-appearance of important questions and articles forwarded. This unsatisfactory state of affairs may have been in some measure due to distance of publication office of *Canadian Farmer* from that of the Editor of Bee Department. It would be waste of words now to cry out about past shortcomings, more than to prepare the way for saying, firstly, that this very undesirable condition of things has been painfully recognized; and, secondly, that correspondence is earnestly solicited with assurance that efforts shall not be spared to bring our part in this up, at least, to what the *Canadian Farmer*, as organ of the O. B. K. A. was at its best.

DISINFECTING HIVES.

JACOB SPENCE, Esq., Sec'y O. B. K. A., Toronto.

DEAR SIR.—Referring to the article in the *Canadian Farmer* of 30th of April last, by Wm. McEvoy, would Mr. McEvoy kindly state whether he takes any precaution to disinfect hives in which foul brood has been. One would judge that he does not consider this necessary, and that all he apprehends danger from is the infected honey. Disinfecting the hive seems to be a necessity, generally considered all-important by bee-keepers who have combated the disease.

Yours truly,

R. W. McDONNELL.

Galt, Dec. 30th, 1884.

HALDIMAND BEE-KEEPERS' ASSOCIATION.

The eighth quarterly meeting of the above Association was called at Canfield, Ont., on Dec. 12th, at one p.m. In the absence of Mr. E. DeCew, DeCewville, Mr. Stewart was appointed chairman. The Association was organized some two years ago, much to the benefit of surrounding bee-keepers. The meetings are quarterly. Mr. E. C. Campbell, of Cayuga, the secretary read the minutes of the last meeting, which were adopted.

The first question for discussion was

THE BEST FORM OF HIVE.

W. Kindree, of Rainham, stated that he had used several; he did not feel very positive regarding any, and under the circumstances he would say the one which he made himself he preferred. H. B. Jones, of Brantford, stated it would be valuable for every one to speak on this subject, stating the points of merit each one claimed for his hive, and by an intelligent discussion many valuable points might be brought out. Wm. Kindree then stated he had been very successful in wintering, and shows by the report that his yield has been as large as any. His frame is eleven by thirteen; he thinks if less the bees will be too close to the under currents of air, which would be injurious to the bees. He winters on the summer stands. He prefers manipulating sides in introducing, if the queen is balled on the bottom board he can see her without taking out combs.

Mr. Jones thought this was of minor importance; the size of frame and of top story hive or not were of greater importance.

Henry Smith, of Rainham, considered one of Mr. Kindree's good points a bad one, viz., taking frames out at the sides; he used them and discarded them; he wanted them lifting out at the top, which appeared to be the general opinion of the convention. He disliked the tenemen' hive, it was too clumsy, although it had advantages in outside wintering; he preferred his frame fourteen by eleven and a quarter for the same reason that Mr. Kindree did his size.

Mr. Campbell used the deep frame; he had no reason to be dissatisfied; he thought the frame was more easily handled and a better wintering frame; he never tried any other. Mr. Smith looked at two colonies the previous day and found the bees clustered near the top bar of the frames.

Laurence Welsh thought he would not like a single story hive.

Mr. Smith stated he would like the top story, but in his hive he could not get them to work in the top.

Mr. Kindree asked Mr. Jones to give his opinion, as he represented Messrs. Gould & Co., and had manufactured and used several hives, his experience should be of value.

Mr. Jones then stated that he found a two story hive with the proper frame the best. He was an ex-student of Mr. Jones, of Becton. When starting he had used the deep frames for two years, he found there was too much labour about it, during a good flow he had to extract twice a week, or the bees were idle or commenced crowding the brood chamber; then one could only obtain a few pounds of honey from each frame. If farming or from any reason unable to extract, the bees were idle. If in the deep frame honey was allowed to be capped over time was lost. He wanted a hive he could extract about fifty pounds at a time from, and if unable to extract he could raise the full story and lace another empty set of combs immediately above the brood; he did not want the brood displaced and wished to disturb it as little as possible. His first idea was to have a frame ten inches deep, as he was very much prejudiced against the shallow Langstroth frame, but he found the queen did not lay quite up to the top bar and when the bees once commenced storing above the brood in the same comb they commenced gradually crowding the brood out, so he finally was compelled to adopt the Langstroth, and with this he had no trouble as to storing honey above the brood in the same comb. Then, immediately above the brood is the natural place to store, he gets this in the top story and in extracting, the brood is not disturbed, as he gets the honey by itself. In a single story hive he has to take brood and all out, the bees become disorganized, they cease their labour, become more irritated, and there is very often a danger of chilling the brood. With an upper story one can have an extra set of combs for it and one has only to replace the full story by an empty one, which full story, when emptied, takes the place of the next full story and so on. If harvesting, short-handed, ill, etc., he can give the bees room more readily and extract with less labour, as the upper story will hold fifty pounds. In the two story or shallow-framed hive, the bees commence breeding near the top bar, towards one end of the frame, in the other end of the comb they store their honey, as the bees are able to cover the brood, he turns every alternate frame and the queen soon fills the lower story comb with brood. When putting on his upper story he takes two cards of brood, which he places in the upper story, putting a division board on each side of the frames and a quilt above the frames, between the division board and side of hive, and when the bees require more space he takes two more, and so on, replacing the brood frames by foundation, or empty combs. In this way he gives the queen plenty of room to lay and the comb above entice the bees, and as the brood hatches gives them full combs to store in. If they are gathering honey very fast and he sees the honey is just ready to cap, he will slip under the full story another, which gives the bees plenty of room, and the upper story he often removes in the evening when he comes home, as he is engaged in business all day. Unless he had the upper story he could not

manage his bees as he does. A small boy does all the work during the day.

For comb honey he wants the best, which every one admits is placed immediately above the brood. With a shallow frame and upper story we get this, but not by a half story upon a deep frame. The bees, too, object to crossing all that full space of comb honey between brood and upper half story.

Mr. Kindree wished to know if the queen did not go to the upper story?

Mr. Jones stated that he gave them room if they required it; he took out combs of brood and if the queen did occasionally go to the upper story and deposit eggs in extracting combs, he did not mind, as the brood could be made use of; they rarely went to sections; he laid a perforated metal honey board when required.

In a two-story hive he found it easier to find a queen, as all the bees in the top story could be removed; in extracting only the bees in the top story required shaking and brushing off the combs. Towards the end of basswood the queen would commence to contract the brood chamber and the bees would store honey in the lower story; this must be extracted if the bees are to have room to store on; with a single story this difficulty is overcome. In spring the upper story makes a nice repository for a chaff cushion and the brood underneath it is kept in the warmest part of the hive, as it is nearer the top of the frames.

Mr. Kindree was asked why he objected to putting top story, or half story, on the deep-framed hive.

Mr. Jones stated that the distance was too great to the top of the hive, the honey could not ripen next the brood, and the full story was practically between the brood and combs for storing (the space of comb between the brood and top bar of lower story.) Several objected to the bees being so close to the draught in the shallow frame.

Mr. Jones stated that in out-door wintering he took a half-story and put it underneath the lower story and above the bottom board, thus raising the bees very nicely out of all such currents of air.

Mr. Campbell stated that he was very successful with his deep frame hive and referred to large yields.

Mr. Holtermann here stated that the large yield and success, which, depending upon the hive to a certain extent, could be no decisive guide, as the yield depended upon locality, management, etc., very much. Martin Enough had been very successful. Three seasons ago he had about fifty pounds per colony (mostly comb) and he used a shallow frame now. This was, no doubt, largely owing to locality. He found that wherever Alsike clover had been that year there was a better yield, and Mr. Enough's success was, no doubt, largely owing to this.

It was then moved by Mr. Kindree, seconded by Mr. McCallum, that it is the sense of this convention that the two-story hive is the best for all purposes. Carried.

Next question—

THE USE OF FOUNDATION.

Mr. Kindree believed the foundation a decided advantage, full sheets prevent drone comb.

Mr. Holtermann stated that it depended very much upon how the foundation was used. If a colony was put upon full frames of foundation the bees would draw it out very quickly and fill the cells with honey, so rapidly at times that the brood-chamber would be very small, and if the honey was not extracted the colony would probably be in a very poor condition by winter. In fact instances were on record where one's hand would cover all the brood-chamber in a

colony. If extracted all was well and the foundation a very decided advantage.

By giving only starters, the combs were built more gradually and the queen could occupy more cells with brood. He found it an excellent plan to use foundation as soon as a little honey came in, put it in colonies to fasten and draw out in twenty four hours; they could be taken out and would be ready for swarms, etc. Some colonies will work on foundation more readily than others. Placing the foundation between sheets of uncapped brood he found worked well.

Mr. Jones found it well to have the foundation drawn out in the upper story.

Mr. Campbell favoured the use of foundation. When it became hard he found dipping it in warm water worked well.

Mr. Jones thought foundation, if too light, was not good. A foundation with a light ball and a heavy wall was the best.

HOW TO INCREASE COLONIES.

Mr. Campbell preferred dividing, because he runs no risk of losing.

Mr. Jones preferred swarming in the two-story hive, as he could retard swarming by tiering up until he obtained a large swarm.

Mr. Holtermann had divided two years, then thought swarming might be better, and tried it, but now thinks dividing has advantages. He took a strong colony, and, after finding the queen, shook three-fourths of the bees into the new hive and placed one third of the combs with them and removing them to a new stand, the old bees would return to their old home, making the division pretty equal.

Mr. Kindree preferred dividing.

Mr. Jones thought by swarming the bees worked with more energy. He moves his colony from which a swarm issues and puts swarm and new hive upon the old stand, thus getting any bees in the field with the new swarm.

HOW TO PREVENT SWARMING.

Mr. Wm. Smith found it difficult to prevent swarming.

Mr. Kindree finds if the hive swarms once he can generally control it.

Mr. Holtermann thought swarming could be very much checked by ventilation and shade. He thought not enough attention was paid to shade. If the bees were allowed the morning sun and were shaded from the noon and afternoon, he believed they would be much benefited.

Mr. Campbell found shading beneficial; he found hives with slanting roofs and holes in the gables very good.

HOW TO HANDLE BEES MOST SUCCESSFULLY.

Mr. Kindree examined them when they first commenced flying. If weak he built them up by the stronger; he also feeds early. If he desires increase he lets them swarm; towards fall he replaces any poor queens; he gives them enough store for winter early; he fills the upper story with chaff.

Mr. Smith thought early feed paid.

Mr. Jones thought the same; he feeds candy.

Mr. Holtesman thought feeding sugar-cake good, and by its means bees could be kept engaged in the hive on cold winter days; he found keeping them warm, contracting the entrances according to temperature, was beneficial; handling often and feeding syrups he believed often caused the bees to rush out of the hive and be lost.

The next meeting will be held at Cayuga, at ten a. m. on Feb. 12th, 1885.

Mr. Wells, of Phillipstown, exhibited some comb foundation. Messrs. Gould & Co., Brantford, had a very nice exhibit of apiarian supplies. There were about thirty present.

The Grange Record.

DOMINION GRANGE OFFICERS.

Jabel Robinson (re-elected) Middlemarch, M; R. W. McDonald, Picton, N. S. O.; R. J. Doyle, Owen Sound, L.; Henry Glendinning, Manilla, Ont., Secretary; J. P. Bull, Downfield, Ont., Treasurer; Jesse Trull, Oshawa, C.; T. S. McLeod, Dalston, Ont., S.; Charles Moffat, Edgohill, Ont., A. S.; Wm. Brock, Adelaide, G. K.; Mrs. Vancamp, Bowmanville, Ceres; Mrs. R. J. Doyle, Owen Sound, P.; Mrs. Moffat, Edgohill, F.; Mrs. McDonald, Picton, N. S., L. A. S.

EXECUTIVE COMMITTEE—Robert Currie, Wingham, Ont.; A. Gifford, Meaford, Ont.

AUDITORS.—R. Wilkie, Blenheim, Ont.; L. Vancamp, Bowmanville, Ont.

OFFICERS OF PROV. GRANGE.

ONTARIO.

Alex. Servos, Master, Niagara; A. Gifford, Secretary, Meaford.

NOVA SCOTIA.

Master, A. B. Black, Amherst, N. S.; Secretary, A. McQueen, Point de Bute, N. B.

EXECUTIVE COMMITTEE.—Edwin S. Creed, Newport, and W. F. George, Sackville, N. B.

TO THE GRANGE.

Hereafter THE RURAL CANADIAN will have a department for Grange news, and will aim at advancing the interests of the organization in every way. To the thousands of patrons of husbandry throughout the Dominion, who have taken the *Record*, we say continue THE RURAL CANADIAN.

Its Grange department will be edited by a member of the order, and we trust to see our Grange friends throughout the country send in their news as of old. The paper will be supplied to Grangers on the same terms as the *Canadian Farmer* was. In disposing of the *Farmer* to THE RURAL CANADIAN, we do not lose interest in the Grange, and hope in the future to meet many old friends that we have met at Grange gatherings, as well as to become acquainted with many other patrons, whom we have not known up to this time. We will still have the interests of the order at heart, still shall love its principles and be anxious for its ultimate universal success.

Faithfully yours,

W. H. MONTAGUE, M.D., Editor.

We feel our responsibility in thus taking over the subscription list and good will of the *Canadian Farmer and Grange Record*; but if honest effort and persevering labour, coupled with some experience of journalism and an earnest desire to make THE RURAL CANADIAN of the highest value to its readers, are worth anything, then no one will suffer from the change in the proprietorship. This number of THE RURAL is scarcely a fair sample of what after issues will be. We shall try to make every succeeding number better than the previous one; and to this end we invite the valuable aid of friends in every section of the country. Let us have your practical experience in the various departments of husbandry. We do not ask for long essays, but brief, pointed papers, written by farmers for farmers. These will always be welcome to our columns, and welcome to our readers. As elsewhere stated by Dr. Montague, editor of the *Farmer*, the departments of the Grange and the Apiary are to be continued; and we invite the cordial co-operation of the officers of these important organizations to make them interesting and useful in the highest degree.

FRIENDLY GREETING.

MR. EDITOR.—As this is the idle time of the year, I thought I would give you an account of a little of what is going on in this section of country. Morris Grange, No. 988, T. H., is beautifully situated in our S. House, Section No. 7, Morris, on the south branch of the Maitland River; and as you, Mr. Editor, are the controll-

ing element in the *Grange Record*, a little Grange new will not be out of place. Now, Mr. Editor, I have of late heard a great deal about the Grange being dead or dying. Such talk is mere bosh, for I believe the Grange was never in a more healthy state than it is to-day, that is, judging from the feeling in this part of the country. The people are getting more and more alive to their own wants and necessities. I assure you the Grange is neither dead nor likely to die for some time to come. The turn out to our social of December 9th was splendid, when we take into consideration the state of the roads, for it was neither waggoning nor sleighing. The ladies, I may say, had an ample provision for the inner man, and the intellectual part was also pretty tolerably attended to by the parties taking part in it. Bro. Graham gave a very good address to the young men, showing them how many great advantages they are enjoying over their fathers before them; and pointing out to them many places of importance occupied by men that had been brought up on the farm. He claimed that without the healthy constitution that is naturally begotten of the farm, these men never could have attained to so high and exalted a position as they now occupy.

Bro. Wray also spoke, showing the many ways of knowing a prosperous and thrifty farmer, and claiming that the Grange was a school to educate intelligent practical farmers.

Bro. R. Currie was also present, and gave a splendid speech, dwelling chiefly on the advantages of farmers being grangers, showing the vast amount of good that the Grange had done and was doing.

Now, Mr. Editor, we have not the pleasure of your acquaintance, but many of your readers here hope soon to see and hear you at Wingham at no distant day.

Fraternally yours,
Morris, Co. Huron, Dec 17th, 1884. I.

OBITUARY.

Died at Middlemarch, in the County of Elgin, on Thursday, the 18th day of December, Caroline, the beloved wife of Bro. Jabel Robinson, Master of the Dominion Grange, aged fifty years and eight months. The deceased underwent an operation for cancer about sixteen months ago. She was under treatment in Buffalo for eleven weeks, but all to no purpose. She succumbed to the fatal malady. The deceased was of a kind and amiable disposition. She was loved and respected by all who knew her. She leaves, besides her husband, four sons and three daughters to mourn her loss.

DUFFERIN GRANGE, No 624.—Officers elect for 1885: Stephen Pound, Master; Leo Cascadden, Secretary; R. Afle, Overseer; S. Staley, Lecturer; John Pound, Steward; W. H. Law, Treasurer; A. Cascadden, Ass't-Steward; F. Sparksman, G. K. *Lady Officers*: Miss Ida Cahoun, Ceres; Mrs. Leo Cascadden, Pomona; Miss Ella Afle, Flora. *Executive Committee*: O. Baker, James Law and H. Westover. *Lady Assistant Steward*, Miss S. Staley.

ZEPHYR GRANGE, No. 451.—Officers elect for 1885: L. Weller, Master; S. Foot, Secretary; C. Taffender, Treasurer; T. Pickering, Overseer; A. Miller, Lecturer; G. Prout, Secretary; F. Kay, Ass't-Steward; D. Horner, G.K. *Lady Officers*: E. J. Weller, Ceres; Mrs. Weller, Pomona; Mrs. Kertd, Flora; Mrs. G. Prout, L.D.S. *Auditors*: T. Pickering, and A. Weller. *Executive Committee*: L. Weller and S. Prout. *Delegates to Dominion Grange*: G. Prout and F. Kay.

FOREST ROSE GRANGE, No. 77.—Officers installed for 1885:—Bro. Jas. Davis, Worthy Master; Bro. J. G. Chapman, Overseer; Bro. D.

McAlpin, Lecturer; Bro. D. Coulter, Steward; Bro. L. Pranglen, Assistant-Steward; Bro. C. Saywell, Chaplain; Bro. P. Cameron, Gate-keeper; Sister E. Lindsay, Ceres; Sister J. Pickett, Pomona; Sister J. Mills, Flora; Sister E. Lindsay, Lady Assistant-Steward. Bro. Wm. Lindsay, Bro. J. G. Chapman as delegates for Division Grange. Bro. Wm. Pranglen, Secretary and Treasurer.

AVR GRANGE, No. 894.—Election of officers: John McGregor, Master; Colin McDiarmid, Overseer; G. S. McGregor, Secretary; W. D. Fieldhouse, Treasurer; Chas. Stewart, Lecturer; Joseph Riddell, Chaplain; James Milne, Steward; Wm. Ferguson, Ass't-Steward; *Lady Officers*.—Mrs. Millar, Ceres; ———, Flora; Mrs. C. Stewart, Pomona; Miss E. Wright, Lady Ass't-Steward. We were organized on Sept. 16th, by W. R. Dunlop, with officers as above. There are initiations every meeting. In fact, before long every one in the neighbourhood will have been initiated. What is wanted in this country is a good live man as Lecturer for the Order. The farmers are ready to join if made acquainted with the organization. G. S. MCGREGOR.

[The name could not be deciphered.—Ed. R. C.]

Mekwin P. O., Manitoba.

MEETING OF NORFOLK DIVISION GRANGE.

The regular meeting of the Norfolk Division Grange was held on the 28th of last month.

After routine, a question arose for discussion as to what course the Grange should pursue in the event of the Government neglecting or declining to legislate in accordance with the recommendations of the Order. The general opinion was, that if the views of the members were unaltered, they should continue to agitate until the desired legislation was secured.

The adoption of the Torrens System of Land Transfer being a case in point, our delegates were instructed to again bring it before the attention of the Provincial Grange.

Bros. E. M. Crysler and H. G. Glazebrook were appointed delegates to the Provincial Grange.

One of the delegates informed the Grange that his lodge had sued one of their members for non-payment of dues and had obtained judgment against him for the full amount.

After discussing some local matters the Grange adjourned.

JOHN A. CAMPBELL,
Secretary.

We shall be glad to have early reports of the election of Grange officers. These may be sent in on a postal card. Let the names be plainly written, so that errors may be obviated.

A New York cheese was recently sold in the London market which on analysis was found not to contain a single ingredient of milk. Lard and colouring matter were the chief component parts, and of course it was vile stuff. The man who would engage in the manufacture of lard cheese ought to be sent to gaol.

Wood ashes contain all the required elements of plant food except nitrogen. One hundred pounds of beech-wood ashes contains sixteen pounds of potash, three and a half pounds of soda, sixty-seven pounds of lime and magnesia, and five and a quarter pounds of phosphoric acid, and at the average market price of these fertilizers the 100 pounds of ashes are worth \$1.16. Who that thinks of the matter in this light will consent to the wasting of his ashes, or even to selling them to the soap-maker at a few paltry cents per bushel? In no other way can the farmer make so much of his ashes as by keeping them for fertilizing his land.

GARDEN AND ORCHARD.**WALKS IN THE GARDEN.—II.**

The garden just now is covered with its white blanket, but the careful gardener may always find something to do, even in January. The long winter evenings are a good time for laying plans for the work of the spring and summer, and a little forethought now may save a deal of wasted work hereafter. This is a good time, too, for overhauling hot-bed sashes and frames, and getting them in order for the time when they will be put in commission, which, after all, is not so far off. Then, if bees are kept, as they should be by every one who has time and inclination to attend to them, there are hives and frames to be made, sections to be put together and filled with foundation, and many other odd jobs, which are often left till actually wanted, and the pressure of work causes them to be only half done.

A good plan for a garden is indispensable, and saves a great deal of labour. Opinions differ as to looks, but there is no question that the longer the rows can be made, the less work there is in cultivating the same space. In my garden the rows are sixty feet long, and I have a diagram of it ruled with ink on a large card, the walks and trees being indicated, and the portion to be planted divided into spaces representing a foot each in width. In these I pencil the seeds to be planted, using the experience of previous years to guide me in the quantity of each vegetable. At the end of the season the pencil marks can be erased, and the diagram used again indefinitely. By this means uncertainty is avoided, and one can order seeds intelligently, knowing just what quantities are needed.

In making hot-bed sashes, I would strongly advise double-thick glass. Mine have been in use for a number of years, and while those glazed with common glass need repairing every spring, the others have never had a pane smashed. Dogs and cats walk over them with impunity, and they stand rough usage much better. The first cost of the glass is a trifle more, but it pays. It is preferable, I think, to have a frame to each sash. They are lighter and easier to handle, no assistance being needed to place them in position, and the heat can be kept more regular, which is a matter of considerable importance. Those things that require forcing can be forced to any extent, and those that want ventilation can get it. Inch lumber is thick enough for the frames, for all practical purposes.

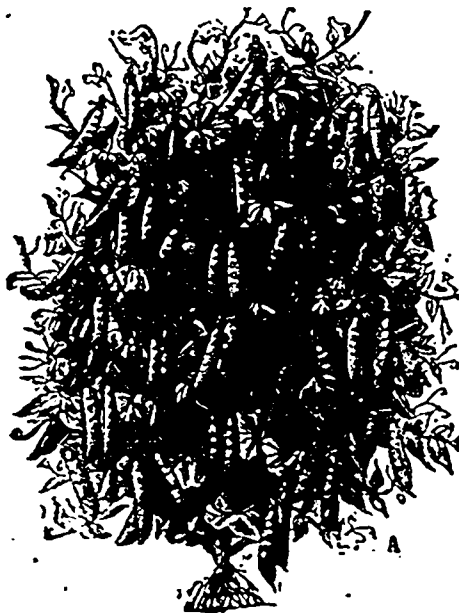
Most of the seedsmen issue their catalogues, and the wide-awake gardener will send post cards to half a dozen or so of the principal firms for them. Most of them are treasure houses of useful information to any one who has knowledge enough to apply it. The pages of THE RURAL CANADIAN will contain the advertisements of a number of reliable houses, all of whom will be glad enough to send their catalogue to all applicants. I have always found it advantageous to buy seeds direct from well-known houses, all of which deliver them by mail or express free of charge. Buying from local groceries is precarious, as the seeds handled by them are often sent out by commission houses and may or may not be good, any way there is the risk. Any seed house with a reputation to keep up will be careful to send out seeds that are true to name and that will grow—it would not pay them to do anything else.

Above all, don't forget to renew your subscription to THE RURAL CANADIAN, if you haven't already done so, and send another subscription

with your own to encourage the publisher. There isn't a number from January to December that will not pay you several times over for all it costs in a year. No one who intends to keep up with the times in agricultural matters, can afford to be without a good publication, and to my mind THE RURAL fills the bill. Y.

BLISS' EVER-BEARING.

This new Pea was thoroughly tested by Mr. William Rennie, gardener, Toronto, in his Trial Grounds last season, and he endorses the description furnished by the introducers: "Season late to very late. Height of vines, eighteen inches to two feet; foliage, very large; pods, three to four inches long on the average, each pod producing six to eight wrinkled peas; size of peas, very large, half an inch and over in diameter; quality, unsurpassed in sweetness as well as in flavour; in fact, it possesses a peculiar richness and marrowy flavour not found in any other variety. Its habit of growth is of a peculiar branching character, forming as many as ten stalks from a single root stalk. One hundred pods have been counted on a single vine. The individual branches are of extraordinary strength and substance, so that when billed up properly,



they stand up well without brushing. We do not hesitate to say that for continuance of bearing this variety is unexcelled, if equalled, a characteristic which gives it especial value for late summer and autumn use."

BEST KIND OF STRAWBERRIES.

EDITOR RURAL:

I am thinking of growing strawberries next year, will you please insert in THE RURAL the best kind of berries and best manures and distance apart? Wm. Carr, Westfield, Huron Co.

The James Vick, or the Wilson, will be found the most prolific, and best adapted to field culture, but for size and quality, the Daniel Boone, or the Prince of Berries, are much superior. There is no manure equal to well-rotted stable manure, which should be thoroughly ploughed in, and the ground well cultivated and drained. Plant the rows about three feet apart.

MAKING HOT BEDS.

In making hot beds for "early gardening," if you have plenty of manure, it is a great saving of time and labour not to dig a trench. Build up a square pile of manure two feet larger every way than the frame of your bed, being careful to tramp it well and keep it level so that it will settle down evenly. Make the depth to suit the season of the year and the crop will be grown. Set the frame

on the manure and put in the earth just as you would into a bed made in the old way. Then bank up the outside of the frame to the top with more manure. This is not theory, but the result of years of experience, and has been tested during some of the coldest winters of Northern Indiana. If more beds are wanted they can be made along side, leaving a foot or fifteen inches between the frames. A great deal of nonsense has been written about the waste of using stable manure for hot beds. Of course, if the manure "fire fangs," as it is called, or burns dry and looks white and mouldy when forked over, there has been waste. But if there is plenty of litter (straw, old hay or leaves) mixed with the manure, and the whole mass soaked with water as it is tramped down, there will be very little loss. When the manure is hauled away it will be found to be black and evenly rotted with seldom any signs of burning. If in making a bed in cold weather, it is found that the manure is not heating satisfactorily, by using boiling water to soak the pile the heat can be hastened very much.

WINTERING GERANIUMS.

Geraniums properly managed may be almost as easily kept as potatoes. Not by hanging them up, although this way sometimes succeeds in a very cool cellar that never freezes, and the air of which is not too wet nor too dry—perhaps one in a hundred. The mode we have long adopted with entire success is to take up the plants as soon in autumn as it is unsafe to leave them out, trim off nearly all the tops, leaving a few buds and small leaves, and then plant them in boxes about two feet square and eight inches deep, using damp old sawdust to plant them in, packing it solid and filling carefully all the interstices. If put in loosely, it will settle away and the roots become dry. A dozen or twenty may be placed in one box of the size we have described. The size of the box is a matter of no importance, only for convenience in handling. Place the boxes square and close against the largest and lightest window in the cellar, where the plants can have good light. A small dark window will hardly answer. The boxes may stand on a step-ladder, goods box, or flower stand, close up to the glass. The sawdust need not be wet, but only slightly damp, and will not require wetting more than two or three times before spring, even in a warm and dry cellar. In such a cellar the plants will make some growth; in a cool department they will remain nearly dormant. In spring, start them in a hot-bed and set out in a well manured bed as soon as the weather will safely admit, and they will bloom all through the season. If there are only a few and there is no hot-bed, they may be started in pots in the house.—Exchange.

WINTER CARE OF FLOWERS.

A beautiful window of flowers in winter is easily had with but little care and attention if properly done. Do not keep the flowers too wet, especially in dull weather. Air as often as possible when not too cold. Do not allow the cold air to blow upon them, but lower the top of the window to air them, and do it in still weather. When there is danger of freezing, place a cotton cloth, such as an old table cover, over the plants and support it by light sticks. Place pails of water among the plants, as the water will freeze before they are injured. If the plants are frozen immerse the whole of them in cold water by turning them upside down, taking care not to allow the water to fall out. The leaves are much improved by giving a small syringe and spray the plants with water which will make fresh, green foliage. —J. Vick.

HOME CIRCLE

THE LOON; AN OJIBBEWAY LEGEND.

Travelling correspondents' letters, immigration pamphlets, and tourists' books, have already given the world so much information about the North-West, that the task would be almost an impossible one, to write anything new of the present condition this country.

I will leave the beaten track, and wander away into the trackless recesses of the wilds, where only the Indian, the hunter and the prospector break the serenity of nature.

The sun was setting, burnishing the already autumn tinted foliage with a richer hue, as my canoe sped like a gull across the calm waters of an island-dotted lake. Long vistas stretched between the islands on every side. Away to the west the sky and water met in a rich ocean of flame, and golden, blue, and purple islands with fretted tops lined the narrowing avenues up to the sun.

In the deep crescent of an island bay nestled an Indian dwelling, a ha-ban-doan, towards which our canoe sped swiftly, propelled by its cedar wings. My guide and I were welcomed by the words "Bo-jhou! bo-jhou! bo-jhou!" from half a dozen dusky forms that came down to the shore to meet us, and by the yelping of numberless fox-like curs that kept at a respectful distance from our paddles.

That night while reclining on a rush matting, smoking a pipe of peace, and surrounded by dusky faces illumined by the fitful glare of the camp fire, an old chieftain, or medicine-man, related the following legend of Nana-bo-jhou and the Loon of which I give a free translation in my own words. As the education of many of your readers has been, I fear, sadly neglected in the original language of their own land, it may be well to explain that a sha-ban-doan is a large, long wigwam with an entrance at each end; also, that Nana-bo-jhou was a great mythological chief, a sort of Hiawatha of the North.

Nana-bo-jhou,
If the story be true

That is told of this wonderful Indian chief,
Was a brave in the far misty days of the past,
Whose toils and adventures would stagger belief,
If told by an ordinary lawyer or thief;

But nevertheless they are true, and, in brief,
The labours of Hercules quite overcast,
And high on the list of canonized saints
In the Indian calendar, Nana-bo-jhou
Is found all decked out in his blue-so paints;
In fact, he's quite near to the Great Manitou.

His wonderful scrapes
And his terrible doings,
His agile escapes
And his fortunate wooings,
His walking and talkings
(He was great in orations,

Just as great on the "stump" as on other occasions),
And, better than all, his transmigrations,
Would fill an octavo, and then not the half
Would be found, though got up at \$2.50 in calf.

He could turn himself into whatever he chose—
A chief or a squaw, a fox or a mink,
And did he live now, I undoubtedly think
His genius for turning would place him with those
Who are tee-total talkers, but tipplers in drink.
It was late in the Fall—I can't tell just the year,
But so far in the past that it does not appear

An adjunct essential,
Or the least consequential

To the truth of the tale—but I think it was near
The time when Confucius, that son of the Sun,
Singed the hair off his head with a pin-wheel, in fun—
But let the date pass: the locality, late in
The untracked North-West, is known as Keewatin;
Or, as Norquay and Miller still better may know it,
The land that was lately awarded to Mowat.

It was late in the day, and far down in the west
The sun was just sinking beneath the calm breast
Of a rock-bordered lake, where stood Nana-bo-jhou
Thinking what in the deuce he was going to do;
For he had n't touched food since that morning at two.

He was just on the point
Of dissolving a joint,

And changing himself to the form of a deer,
So that grasses and weeds
Would suffice for his needs.

When a musical sound struck the drum of his ear.
As a matter of fact 'twas not musical, though
To his ear at the time it was touchingly so;
Just the same as dry bread and cold water are sweet
To a man who for days has had nothing to eat.
The sound that he heard was the cry of a goose.
In less time than I tell it, the joint that was loose
Was back in its place, and in one moment more
He'd a sha-ban-doan built, with rush-mats on the
And then in a jiff.

Or in anything else that will signify hurry,
But without the least effort or bother or flurry,
He was changed to goose, and was quietly standing
On a rock, like a man with a "bus" at a landing,
Who cries through his nose, with a sink and a swell,
"This way for the bus to the City Ho-tel!"

So stood the brave Nana-bo-jhou on the rock;
With one eye on the lake, and one on the flock.

Then, lifting his head,
With well-feigned surprise,
He hurriedly said,
"Hello! bless my eyes!"

Or words that a gander would use in that wise,
"Who o'er would have dreamt to meet with friends here?
Slacken sail and come down, if you'll join in my cheer;
I'm always delighted to meet friends by chance.
What say you, sweet geese, to a supper and dance?"

His tones were so pure in the language in use,
That they took him at once for a blue-blooded goose;
So that without further parley they stopped in their travel,
And with friendly *bon jours*, flopped right-down on the gravel.

'Twas but for a moment that Nana-bo-jhou
Seemed buried in thought—geese are n't wont so to do—
Which the same might have caused a suspicion or two;
But, without a demur, they agreed when he stated
That the dance should come first, while for supper they waited.

I may mention just here, there is matter for doubt—
For tradition, you know, batters legends about,
And leaves the odd bits with historical tinkers,
Who go by the name of original thinkers;
Who, finding the pieces are not quite entire,
Call the story a lie and the teller a liar,
Who would shave all the past of its beautiful mystery,
And present to our gaze a vile, bald-headed history.
There is matter for doubt, or at least for conjecture—
Some scholars assert there's a theme for a lecture—
I was told 't was a dance, which for me was enough,
Though some others maintain it was blind-geese a-buff.
Whichever it was, at least this much is true,
The geese were blindfolded by Nana-bo-jhou,
And arranged in a line at the sha-ban-doan door,
Where the dance was to be on the rush-matted floor.

Now the form of the dance was quite simple; they merely
Were to chase about in a circle as nearly
As blindfold geese could, which really was queerly.

There were laughable jumbles,
And numerous stumbles,
That ended, of course, in a series of tumbles;
While each ridge-pole and rafter
Echoed feminine laughter,
And not a few masculine grumbles.

At the end of the sha-ban-doan just next the door,
Stood the host, while his eye scanned each gander and goose.

Hey! Presto!! he changed to a chieftain once more,
With an appetite good for a whole roasted moose.
He smiled as he looked at the flock at his feet,
With a smile of deep meaning, though not at all sweet;
'Twas half mingled with pity, at least so I'm told,
And yet 'twas enough to make hot blood run cold;
Just the same kind of smile, though girls say 'tis false,
That the devil puts on when he's watching a waltz.

Yes, he smiled, and outstretching his hand caught the neck
Of a matronly goose, then a second and third,
And continued this practice without any check,
Till the flock was depleted of many a bird.

With grim chuckles, and twists
Of his muscular wrists,
He had half a good meal lying dead just beside him,
When the bandage fell loose
From the eyes of a goose,

And while twisting the neck of a gander she spied him.
With a flutter and scream, like the rest of her sex,
She cried, "Nana-bo-jhou is wringing your necks!"
With heartrending screams for the dear dead departed,
And lustier ones for the lives yet at stake,
Yet with unbroken necks, though with grief broken-hearted,
The sorry remainder fled over the lake.

Now can it be wondered, if, just at the moment
When he thought all secure, yet lost one-half his meal,
That, like something resembling a steam-ran, his toe went
In the wake of the bird that made the first equal.
Yes, he struck it full with his moccasined toes,
In that epicurean part of the bird
That goes by the name of His Holiness' Nose.
For a moment the fowl scarce knew what had occurred.

You may smile when I state
That the force was so great
That its body shot forward in front of its toes,
While it barely escaped
In this manner misshaped,
And flopped off alone to lament o'er its woes.
'Twas called "Cripple" at first
Among geese, as they cared
Their reckless adventure that mild afternoon;
But when all its eggs
Hatched out with the legs
Near the tip of the tail, they re-christened it "Loon."

Now, in Europe and Asia, where fables are plenty,
Each tale has a moral, and some of them twenty.
But the Indian Brave doesn't care for such stuff;
He laughs o'er the tale, and the tale is enough.
He doesn't go in for the deep analytic,
And discover what never was there, like the critic.
No, he hunts 'neath the sun, and he sleeps 'neath the moon,
And whenever he can, takes a shot at a Loon.

MR. WISEMAN'S CONFESSION.

I always thought my wife a very careless little woman, and I used to tell her so. She was very good humoured, and did not mind; and on that day when she went to Rutherford to receive the little legacy her uncle left her, and had it paid over in crisp bank notes, which she put in her pocket-book, I said to her, as we went out:

"Now, Anna Maria, my dear, you'll put that in your pocket and have it picked, or you'll carry it in your hand and have it snatched away. So let me take charge of it; three thousand dollars is too big a sum to us, too valuable, to run any risks with."

"Well, yes, that's true, Solomon," said she. "So it is, but I've got the pocket-book in my bag and my bag on my arm, and I think it is very safe."

"So safe that some one may cut the strings," said I.

"So Anna Maria stopped and undid the bag and took out the pocket-book, which I put in the bottom of the inside pocket of my overcoat; and we walked on together arm-in-arm, and talked about the things we'd do with the money, until we got hungry, and I proposed lunch at Stuffem's before we took the cars for home. Anna Maria liked the idea, and we proceeded to carry it out.

That was a very good lunch, and well spread. Anna Maria took off her cloak, and I my overcoat, and we did justice to it. I paid, of course, out of my own purse for it, and put on my overcoat with a comfortable sigh. I helped Anna Maria on with hers, and we left the restaurant; but just outside Anna Maria cried, "Oh!" and dropped my arm and ran back.

She came out again in a moment smiling.

"What was the matter" I asked. "Did you leave anything?"

She held up her handkerchief which she had in her hand, and answered:

"I've found it."

And I laughed.

"You see what a careless little soul you are," I said. "Not to be trusted at all."

She nodded.

"And you are so careful, Solomon," she said. "Of course—of course," I said. "A man has so many things to think of he's obliged to be more business-like. I don't blame you, little woman. Don't think that."

And she giggled, she was so pleased.

That brought us to the station, where we took the cars, and I think I dozed a little on the way up.

Our own house seemed warm and cheerful after the long journey. A bit of supper awaited us, and all looked bright. Children in bed, and servant anxious to go. So we sent her away and sat down. I just threw back my overcoat.

"Before we do anything else I'll put the money in the safe," I said—"your money. Now don't take airs because you are wealthy."

With this jest I dived into my right-hand inner pocket. I never shall forget the dreadful cold chill that ran through me as I found it empty.

"Pshaw!" I said to myself. "What folly! It's the left pocket, of course."

I dipped into that. There was nothing there either.

Trembling and in a cold perspiration, I began to rummage every pocket in my coat. I tore it off. I shook it. I felt it. I felt my other pockets. I seized the lamp and rushed about the room searching the floor; then, with a groan, sank into a chair.

My wife ran towards me.

"What is the matter?" she cried. "Do tell me, Solomon!"

"I can't," I moaned. "You never will forgive me. It is not possible. You'd be more than human. Anna Maria, I've been robbed. The money is gone!"

"What nonsense!" cried my wife. "I tell you it can't be. You put it so safely in your pocket."

"The thief must have cut the cloth said I.

I seized the coat again. But no; there was no cut, no rent anywhere—not a sign of one.

"I don't think it could have been stolen, my dear," said my wife, calmly—very calmly, considering that her little fortune was gone. "But, perhaps, when you hung your overcoat upside down over the chair in the restaurant, it dropped out."

"Good gracious!" I roared. "Is it possible? Yes, it may be. I must go back to New York at once. I must offer a reward. I—"

"What would you give?" asked my wife, saucily.

"Anna Maria!" I cried, "See here, you—you—"

I had no more words.

"Yes, you dear old goose," cried Anna Maria, "I did. After we left the restaurant, I remembered that your coat hung upside down over a chair. I remembered how you lost that cigar case last winter, and I felt prompted to run back at once. I did. My love, there lay the pocket book under the chair. As yet no one had seen it Here it is."

I was too thankful to scold her. At the same time, I rather felt that I had not been well used. I was glad of the relief, but I felt that I should never call my wife a "careless little woman" again. I never have.

HOW EASY IT IS.

How easy it is to spoil a day!

The thoughtless word of a cherished friend,
The selfish act of a child at play,
The strength of a wit that will not bend,
The slight of a comrade, the scorn of a foe,
The smile that is full of bitter things,
They all can tarnish its golden glow,
And take the grace from its airy wings.

How easy it is to spoil a day

By the force of a thought we did not check;
Little by little we mould the clay,
And little flaws may the vessels wreck;
The careless waste of a white winged hour,
That held the blessings we long had sought,
The sudden failure of wealth or power,
And, lo! the day is with ill inwrought.

How easy it is to spoil a life—

And many are spoiled ere well begun—
In home-light darkened by sin and strife,
Or downward course of a cherished one;
By toil that robs the form of its grace,
And undermines till health gives way;
By the peevish temper, the frowning face,
The hopes that go, and the cares that stay.

A day is too long to be spent in vain;

Some good should come as the hours go by,
Some tangled maze may be made more plain,
Some lowered glance may be raised on high,
And life is too short to spoil like this
If only a prelude it may be sweet,
Let us bind together its threads of bliss,
And nourish the flowers around our feet.

—Watchman.

HOW TO IRON SHIRTS.

First be sure that you have a firm table and of the right height. The arrangements for heating the irons should, as far as possible, be such that they can be kept perfectly clean, either in a pan provided expressly for that purpose or by a stove to be used expressly for the purpose. If set on the stove they are in danger of being soiled by something cooking, or becoming rusty from some fluid boiling over on the stove. It is of the greatest importance that the smoothing iron should be kept perfectly smooth, free from rust or burnt starch. A paper or piece of cloth should lie on the table, with a piece of beeswax laid between the folds. If the starch sticks (it never

will if rightly prepared) rub the iron first on some wood ashes or salt, and then quickly over the wax, rub it on a clean cloth, and then, if not rusted in deeply, it will work smoothly. In buying sad-irons be careful and select three sizes, and all of the smoothest surface. One size, large and heavy, for coarse garments; one, a medium size, for linen and cotton, and the polishing iron for starched clothes, rounded at the sides and ends, by which, after a garment is half ironed with a common iron, a polish can be secured by a very brisk movement, tipping the iron a little on the rounded side.

For the ironing table a coarse woollen blanket is needed, and should be stretched double thickness on the table, and large enough to entirely cover it. Then draw the corners down tight and tack them folded over the corners of the table. Four tacks are enough, which can easily be removed if the table is needed for other purposes. By thus tacking the corners to the table and drawing them tight over it a plain, smooth surface is secured, on which to pin a cotton sheet doubled.

A bosom board should be about eight inches wide, and from seventeen to eighteen inches long, and perfectly smooth and level. Cover one side of the board with two thicknesses of coarse flannel or a piece of an old blanket drawn tightly over the board, and large enough to be tacked just over the edge of the board. Cover with two thicknesses of cotton of the same size. The other side, also perfectly smooth, should have but two thicknesses of strong cotton laid and tacked over the edge to lap on the cover of the other side. This is to be used to put the last polish to the bosom after it has been partially ironed. Galvanized tacks with smooth heads should be used, that there may be no danger of iron rust or injury to the linen.

First, iron the shirt all over, wring a clean cloth out of clean hot water and rub over the bosom. Go over the bosom rapidly with a very clean hot iron, then with a plated knife or thin paper-cutter raise the plaits and iron again rapidly. Then rub the bosom again with a damp cloth, turn the bosom-board over, so that the hard surface with the thin cover will come under the shirt bosom, and iron with the polishing iron, expending as much strength in bearing down as possible. Rub briskly with the rounded end of the hot iron back and forth, ironing only a small strip at a time, till the whole bosom is of a clear polish. The polishing irons must be wrapped up in flannel or paper and kept dry and always bright.

It is difficult to give written directions for ironing. Practice is the best teacher. Things that are to be flat when finished, such as cuffs and collars, should be covered with a clean, fine linen cloth—a towel is too coarse, or has too large threads, and will leave their imprint on the article ironed. This cloth is to be placed on the article and the iron passed over it once or twice until there is no mote or starch that will adhere to the iron. This done, remove the cloth, lay the articles smooth, pull the ends and corners straight and even, and go over it firmly and briskly with a smooth, clean iron and finish with a polishing iron.

Fine soft articles such as need no polishing, as lace and muslins, should be ironed on a soft ironing blanket with a soft, fine ironing sheet. All such articles, after a careful sprinkling, must be rolled up smoothly and unrolled one at a time. Laces, of course, are to be carefully brought into shape, and all the edge of purling pulled out like new.

In ironing silks, cover them over with paper or fine cotton, and use only a moderately-heated iron, taking great care that the iron does not

touch the silk at all, or it will make the silk look glossy, and show that it has been ironed. Any white article, if scorched slightly, can be in part restored, as far as looks go, but any scorching injures the fabric, and no effect can entirely control or counteract the mischief.

As far as possible iron by the thread; that is, pull the material straight and endeavour to move the iron in the same line with the thread of the cloth.

THE COOK'S TABLE OF WEIGHTS AND MEASURES.

SOLIDS.

Wheat flour, one pound is one quart.

Indian meal, one pound two ounces is one quart.

Butter, when soft, one pound is one quart.

Loaf sugar, broken, one pound is one quart.

White sugar, powdered, one pound one ounce is a quart,

Best brown sugar, one pound two ounces is one quart.

Eggs, ten eggs are one pound.

Flour, eight quarts are one peck.

Flour, four pecks are one bushel.

LIQUIDS.

Sixteen large tablespoonfuls are one half-pint.

Eight large tablespoonfuls are one gill.

Four large tablespoonfuls are one half gill.

Four gills are one pint.

Two pints are one quart.

Four quarts are one gallon.

A common sized tumbler holds one-half pint.

A common sized wine glass holds one half gill.

A teacup holds one gill.

A large wine glass holds two ounces.

A tablespoonful holds one-half ounce.

Forty to sixty drops are equal to one teaspoonful.

Four teaspoonfuls are equal to one tablespoonful.

POLITENESS REWARDED.

"Will you be kind enough, sir, to hold this ram for me while I open this gate? It is fastened on the inside, and I must climb over."

This modest remark was made recently by a man who was standing at a gate on a lonely road running out of New Dorp, Staten Island, and it was addressed to a stalwart sailor who had just come up. The only other object visible on the long, straight road was the large black ram, whose massive, crooked horns were being held by the man as the two stood quite still in front of the gate.

"Why, sartinly, shipmate," said the obliging tar, as he seized the big horns and relieved the first holder.

The latter climbed quickly over the gate.

"I thank you very much," he said politely when he got to the other side. "You will be surprised to hear that I never saw that ram before to-day. The brute attacked me about half an hour ago, and we have been tussling together ever since. As long as you stand before him holding his horns firmly he can't hurt you much. Good-bye, I hope you will be as lucky in getting away from him as I have been."

The New Dorp man, when telling this story neglected to repeat the sailor's reply. He did not know what became of him.

The culture of flowers is one of the few pleasures that improves alike the mind and the heart, and makes every true lover of those beautiful creations of infinite love wiser, purer and nobler.—J. Vick.

NYMPHS OF THE OCEAN.

molto animato.

Piano introduction in 6/8 time, marked *molto animato*. The music features a lively melody in the treble clef and a rhythmic accompaniment in the bass clef.

First Voice.

First voice part with lyrics. The music is in 6/8 time. Dynamics include *con grazia. p* and *p*.

1. We are nymphs of the o - cean spray; Our home is the rest - less deep..... Where the tur - bu - lent bil - lows
 2. We are found on the cor - al shore, And sport with the mer - ri - est glee..... When the wind with an an - gry

Solo, Second Voice.

Solo second voice part with lyrics. Dynamics include *p* and *colla voce. rall.*

play..... Our rev - els we gai - ly keep. 1. 'Mid the bright foam, as light - ly we roam, The sun - beams swift - ly glide;
 roar..... En - count - ers the migh - ty sea. 2. Lightnings may flash, the bil - lows may dash To the sea - bird's mourn - ful wail, *rall.*

Solo, Third Voice.
a tempo.

Solo third voice part with lyrics. Dynamics include *pp*, *rall.*, *ff*, and *p*.

Oh! sweet is our song as it play - eth a - long The breast of the tremb - ling tide. 'Mid the bright foam, as light - ly we roam, The
 Still gai - ly we throng as the sea - nymph's song is borne on the fit - ful gale. Lightnings may flash, the bil - lows may dash To the

rall.

a tempo.

ritard.

Final section of the score with lyrics. Dynamics include *cres. colla voce.*, *a tempo.*, *colla voce.*, and *a tempo.*

sun - beams swift - ly glide; ... Oh! sweet is our song as it play - eth a - long The breast of the tremb - ling tide.....
 sea - bird's mourn - ful wail; ... Still gai - ly we throng as the sea - nymph's song is borne on the fit - ful gale.....

So mer-ri-ly o-ver the o-cean spray, Danc-ing and sing-ing the hours a-way, So mer-ri-ly o-ver the o-cean spray

Danc-ing the hours a-way, Danc-ing o-ver the spray, And sing-ing where bil-lows play, Sing-ing, sing-ing,

gol-den hours a-way,..... So mer-ri-ly o-ver the o-cean spray, Danc-ing and sing-ing the hours a-way, So mer-ri-ly o-ver the

o-cean spray, o-ver the o-cean spray,..... Danc-ing the hours a-way,..... Danc-ing the hours a-way.....

YOUNG CANADA.

THE THREE BROTHERS.

Three little brothers once lived near a wood where the trees grew thick and large. The names of these boys were John, William and Reuben. Their parents were poor, and in the winter the brothers would go into the wood to gather sticks. These sticks they would tie in bundles, and sell them in the nearest town.

One cold day, when their father was ill, they went alone into the woods, and John, the eldest boy, said:

"Now, Willie, you and Reuben go and get the biggest sticks you can find and bring them here to me, and I will bind them up into fagots."

So the little boys went to work, though it was bitter cold, and Jack Frost nipped their hands and feet till they were numb. They worked till it was dark, and then it began to snow.

Little Reuben was so tired and sleepy that he could hardly see. So John took him on his back, and the three boys started for home, leaving their fagots piled up where they could get them the next day.

But the snow fell faster and faster, and soon covered up the track which led to their home, so that they wandered out of their way.

The mother sat watching for them, and hoping every moment to hear their voices at the door. The snow drifted up under the window of the little cottage, and covered the bridge that lay in sight.

As hour after hour went by, and the boys did not come, she became alarmed, and at last went to Farmer Dawson, who lived near by, and told him her fears.

"There, there, stop crying, my good woman," said Farmer Dawson; "if the boys have lost their way the captain and I will find them. Never fear. Here, Susan, bring me my great coat and my lantern and my staff, and tell Jones and Tom to come with me."

The captain was a dog; and, as he was called, he came barking out from the wood-shed, glad to be of some use in the world. Jones and Tom were men who helped the farmer.

They had not gone half a mile into the woods, when the captain darted off towards a great tree and began to bark.

"There they are! The captain has found them. I knew he would," said Farmer Dawson.

And so it was. The poor boys, tired and chilled through, had sat down under a tree; and they could hardly speak when the men came up.

Each man took a boy on his back, and in this way they all went home; and there the boys were rubbed with snow till they were warm and well.

How glad were their mother and father to have them safe once more in their arms, by the cheerful cottage fire! They laughed and they cried.

The captain had a big bowl of milk that night as a reward for his good conduct.—*Wired Story.*

HOW CLOTHES PINS ARE MADE.

A dealer thus describes the manufacture of clothes pins to a reporter: "They whittle 'em out at the rate of eighty a minute. A beech or maple log, a foot in diameter and ten feet long, will whittle up into 12,000 clothes pins. That log won't cost more than \$2. The clothes pins they cut out of it will be worth \$96.40. It will take them two hours and a half to run that log into clothes pins, which is whittling out 4,800 an hour. At ten hours a day they get away with four logs and have on hand 48,000 clothes pins worth \$865.60. Now, the lumber for those pins has only cost \$8 or so. But then those logs must

be sawed up by four different kinds of saws. One separates the log into lengths of sixteen inches; another saws these into boards three-quarters of an inch thick; another cuts the boards into strips three-quarters of an inch square. These strips are caught on a wheel that hurries them to a gang of saws which chop them into clothes-pin lengths. These lengths are carried by a swift moving belt to a machine that seizes them, sets them in a lathe that gives them their shape in the twinkling of an eye, and throws them to an attendant, who feeds them to a saw that moves backward and forward as if it were madder than a snake. This saw chews out the slot that the washerwoman shoves down over the clothes on the line, and the clothes pin is ready, all but kiln drying and polishing.

"The latter is done in a revolving iron cylinder, the same as castings are cleaned. All these processes cost money, and when the manufacturer puts up his goods for sale he finds that his profit on the 48,000 pins, his day's work, is only about \$193. We pay the manufacturer a cent a dozen, or a trifle more than \$8 a thousand. We are compelled, in these close times, to sell them for 4 cents a dozen, or \$92 a thousand."

ABOUT BEING THE CAPTAIN.

I heard a droll story, the other day, about a company of little fellows who were formed into a club by their teacher. She had planned a great many delightful things for the club to do. They were to go on excursions, to play base ball, to have regular military drills, and I don't know what else which boys take pride and pleasure in.

But all the fine plans came to nothing. Can you imagine why? When they met to organize the club every boy wanted to be captain. Nobody would consent to be in the ranks, and as all could not command, the poor little teacher gave up in despair.

It is very well to be captain, boys, but Aunt Majorie wants you to remember that before one can lead, one must always learn to obey orders. The great armies which have conquered in the battles of the world have had splendid soldiers to command them, but they have also had columns of splendid men, who were glad to do just as they were told without the least delay, and without any shirking of duty.

A person who wishes to be captain, must learn, in the first place, to control himself. You know what the Bible says about this, do you not? "He that is slow to anger is better than the mighty, and he that ruleth not his own spirit is like a city that is broken down and without walls."

A captain that flies into a rage, or gets into a fright whenever there are difficulties in the way, will never be able to manage his forces. Control yourself, and then you may hope to govern others.

You see that though this is quite simple, yet the office of leader has its grave cares. Before you can guide, you must know how to follow, and before you rule others, you must have yourself in hand.

Then, too, you must learn a great deal, and be quick to see what ought to be done, and prompt in ordering it. "King" means the man who "can" do a thing, and when a boy is rex, or king on a playground, or at the picnics, or in the school-room, you may make up your mind he is a lad who can do some things better than his comrades, and of whom the other boys are proud.—*Harper's Young People.*

A NEW GAME FOR CHILDREN.

We mention this game, which we believe has appeared in print, because not only many may take part, but, like really good games, amusement

and perhaps some instruction may be derived in playing it; and any number may play at the same time. Let us suppose that ten children decide to play this game of "Names." Each player is provided with a long slip of paper and a pencil, and if one of the players has a watch so much the better, if not a clock must be used. One commences by calling out: "Girls' names commencing with A; two minutes allowed." Each player then writes down all the girls' names that he (or she) can recollect and at the expiration of the two minutes "time" is called. Then the oldest player reads from his (or her) slip all the names he or she has written down—say Amy, Anabel, Alice Ann, Annie, Amanda, Aileen, etc. All the other players as the names are read out, cancel any name read out. If, for instance, all have written Amy, all cancel Amy, and count one mark. Say six players have Anabel and four have not, each of the six count one mark, those who have not thought and written down Anabel get nothing for Anabel, and so on through the list. The object of the game is to teach the children all girls' and boys' names. When the marks have been allotted for all the names the total of the marks are read out and noted on each slip. The players then proceed in similar manner for all boys' names commencing with A, such as Alfred, Abel, Adam, Andrew, Arthur, etc. The game can be continued till all the letters of the alphabet are exhausted, but practiced young players rarely care to "do" more than thirty sets, or fifteen letters consecutively. Various names crop up, and the memory is well exercised, and children vote it great fun. Any one introducing pet or fancy names, such as Pussy, Kit, Peddy, etc., forfeit two marks, unless it be arranged that they be allowed.—*Little Folks' Magazine.*

THE LABORATORY THAT JACK BUILT.

This is the laboratory that Jack built.

This is the window in the laboratory that Jack built.

This is the glass that lighted the window in the laboratory that Jack built.

This is the sand used in making the glass that lighted the window in the laboratory that Jack built.

This is the soda, that melted with sand, compounded the glass that lighted the window in the laboratory that Jack built.

This is the salt, a molecule new, that furnished the soda that, melted with sand, compounded the glass that lighted the window in the laboratory that Jack built.

This is the chlorine, of yellowish hue, contained in the salt, a molecule new, that furnished the soda that, melted with sand, compounded the glass that lighted the window in the laboratory that Jack built.

This is the sodium, light and free, that united with chlorine, of yellowish hue, to form common salt, a molecule new, that furnished the soda that, melted with sand, compounded the glass that lighted the window in the laboratory that Jack built.

This is the atom that weighs twenty-three, consisting of sodium so light and free, that united with chlorine, of yellowish hue, to form common salt, a molecule new, that furnished the soda that, melted with sand, compounded the glass that lighted the window in the laboratory that Jack built.

This is the science of chemistry that teaches of atoms weighing twenty and three, and of sodium metal so light and free, that united with chlorine, of yellowish hue, to form common salt, a molecule new, that furnished the soda that, melted with sand, compounded the glass that lighted the window in the laboratory that Jack built.

A PITIFUL FATE!

HOW A MINISTER'S GOOD DEED LANDED HIM IN AN INSANE ASYLUM. THE STORY OF HIS ESCAPE.

To the Editor of the Milwaukee Sentinel:

SIR:—I have read a good many stories of late concerning the confinement of sane persons in lunatic asylums, and I am thereby prompted to relate a bit of personal experience.

In the year 1855, while I was serving the Methodist Episcopal Church in a New England town, a neighbour's house took fire. In common with others, I stood on the edge of the roof, passing buckets of water, exposed to intense heat on the one side and freezing winds on the other. I took a fearful cold. For twenty-five years it worked havoc in my physical and mental systems. Nevertheless I continued in my ministerial duties. I preached many a sermon when suffering intense agony. At certain periods, however, I would be comparatively well, and then again, my head would get heavy, my breathing laboured, my appetite fickle. I would lose interest in life; feel sleepy at mid-day, and wakeful at midnight. My heart occasionally gave me great concern. Not knowing to the contrary, I attributed this ill-feeling to malaria. But eventually strength failed away, and I was utterly prostrated. I was cauterized, cupped, blistered and treated by many physicians in many different ways.

My case was a puzzle as much to my physicians as to myself. For one of them at first prescribed for delirium tremens, and yet I never had tasted intoxicating liquors. Another said I had brain disease, another spinal difficulty, another nervous prostration, heart disease, etc.

My mind eventually gave way, and in 1882 I was confined in the Brattleboro, Vt., Insane Asylum for six months. When I knew where I was, I demanded instant release. I then made a visit to Oceanic, N. J., but I had reckoned too much on my strength. I again lost my reason for a considerable period.

That I was in a desperate condition is evident. My blood had become infected with virus, which inflamed my brain occasionally and doomed me to early death; for no physician gave me any hope of a cure. I finally found out what my real disorder was, and undertook my own treatment. In a few months I was restored to such a state of health as I never expected to enjoy. That was over three years ago, and my physical and mental health have remained intact to this day.

Last March I came west, and engaged in garden farming. In all that time I have not lost a day's work; have apparently enjoyed the most vigorous health, and I expect to live the full term of life. The remedy I used was Warner's safe cure, and if I should live a thousand years, I should never tire of telling its praises.

You will confess with me, Mr. Editor, that such a change is remarkable. And you will, also, I am sure, agree with me, when I say that whatever created such a mental and physical restoration is deserving the highest praise.

Very truly yours, REV. E. D. HOPKINS.

Dodge's Corners, Wis.

There are undoubtedly thousands who have an experience similar to the above, to whom Mr. Hopkins' recital will appeal with persuasive force.

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Miscellaneous.

To keep cheese from moulding rub the cut part with butter, or cover the cut with jam paper. This will keep the cheese dry.

A POIPIO, with one end cut off is better than a rag for counting the knives. A thin shave must be taken off each time to give a moist surface.

TAKE small pieces of old newspapers after being wet and sprinkle them over the carpet before sweeping. This plan is better than using tea leaves.

GOOD FOR ALL. - For all diseases of the blood, liver, kidneys and bowels take Burdock Blood Bitters. It is purely vegetable, can do no harm, and is always beneficial.

STALE buns may be made to taste as nicely as when fresh, if they are dipped a moment or so in cold water, then put into a hot oven for five or ten minutes. They will turn out as light and crisp as when first baked.

THERE should be water plants in the glass globe in which gold and silver fish are kept, and the water should not be very frequently changed. Very fine bread crumbs, flies, worms and dried and powdered yolk of eggs may be given to fishes in very small quantities.

THE CHEAPEST AND BEST. - On account of its purity and concentrated strength and great power over disease, Burdock Blood Bitters is the cheapest and best blood cleaning tonic known for all disordered conditions of blood, liver and kidneys.

CHEESE pudding is made by grating half pound of cheese very fine, mix with two eggs, whites and yolks beaten up together and half an ounce of fresh butter, season well with pepper and salt. Bake in a small dish lined with puff paste, or else merely butter the dish before pouring in the mixture.

A GOLDEN OPINION. - Mrs. Wm. Allen, of Acton, declares that Hagar's Yellow Oil is the best household remedy in the world for colds, croup, sore throat, burns, scalds and other painful complaints. Her opinion is well founded.

GRAHAM PUFFS. - Graham puffs for breakfast are richer and a great deal nicer than the plain gem: take one pint of sweet milk, one pint of graham flour, half a teaspoonful of salt, and one egg, beat the egg, then add the milk, and then the flour gradually, beat it very briskly for four or five minutes, then pour into buttered and gened pans; bake in a hot oven.

To get the full flavour of dried or evaporated peaches, they should first be allowed to soak for at least three hours, then cook them slowly; when they are almost done add the sugar, then set them away and let them get perfectly cold. If not used until the second day they will be still better, as they will absorb the sugar and be much apparently richer.

A NICE TEA DISH. - Make a short sweetened pie crust, roll thin and partly bake in sheets; before it is quite done take from the oven, cut in squares of four inches or so, take up two diagonal corners and punch together, which makes them basket-shaped now fill with whipped cream or white of egg, or both, well sweetened and flavoured, and return to the oven for a few minutes.

BEEF DEVIL. - Cut slices of cold cooked beef about half an inch thick; trim them to an even-size, spread them with salad oil or melted butter, mixed thick with mustard and pepper; dip them in cracker or bread crumbs, rolled and sifted; put them between the bars of a double wire gridiron which had been buttered or oiled, and just colour them over the fire. Serve with a little gravy under them.

To clean stained wood work which is also varnished, an old house wife recommends saving tea-leaves from the teapot for a few days. Drain them, and when you have a sufficient quantity put them in clean soft water; let them simmer for half an hour; when almost cold strain them out, and dipping a flannel cloth in the water, wipe off the paint, drying it with another flannel cloth. One cup of tea-leaves to one quart of water is the due allowance.

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11/2 no two alike, with name, 10c.

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Those languid, tiresome sensations, causing you to feel scarcely able to be on your feet, that constant drain that is taking from your system all its former elasticity; driving the bloom from your cheeks; that continual strain upon your vital forces, rendering you irritable and fretful, can easily be removed by the use of that marvellous remedy, Hop Bitters. Irregularities and obstructions of your system, are relieved at once, while the special cause of periodical pain is permanently removed. None receive so much benefit, and none are so profoundly grateful, and show such an interest in recommending Hop Bitters as women.

A Postal Card Story.

I was affected with kidney and urinary Trouble - "For twelve years." After trying all the doctors and patent medicines I could hear of, I used two bottles of Hop Bitters; And I am perfectly cured. "All the time!" Respectfully, R. F. Booth, Saultsbury, Tenn. - May 4, 1883.

BRADFORD, PA., May 3, 1875.

It has cured me of several diseases, such as nervousness, sickness at the stomach, monthly troubles, etc. I have not seen a sick day in a year, since I took Hop Bitters. All my neighbours use them.

Mrs. FANNIE GREEN.

\$3,000 Lost.

"A tour to Europe that cost me \$3,000. I done me less good than one bottle of Hop Bitters." they also cured my wife of fifteen "years' nervous weakness, sleeplessness and dyspepsia."

R. M., Auburn, N. Y.

SO. BHOOMINGVILLE, O., May 1, 79.

SIR:—I have been suffering ten years, and I tried your Hop Bitters, and it done me more good than all the doctors.

Miss S. S. BOONE.

Baby Saved.

We are so thankful to say that our nursing baby was permanently cured of a dangerous and protracted consumption and irregularity of the bowels by the use of Hop Bitters by her mother, which at the same time restored her to perfect health and strength.

The Parents, Rochester, N. Y.

None genuine without a bunch of green Hops on the white label. Shun all the vile, poisonous stuff with "Hop" or "Hops" in their name.

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A CARD TO THE PUBLIC. - The prevalence of Diphtheria in Canada at present is just cause for you to feel uneasy about your children. Have you any medicine at your homes? It may be too late when you call in your Physician. What do the Physicians say about my medicine? They who have seen its effects recommend it highly, and have openly expressed the opinion, that if this medicine be applied in the first stages of Diphtheria, there would be very few fatal cases of it. In cases of Ulcerated Sore Throat, Canker Mouth, and Croup, it has never failed as to Catarrah. I challenge any other medicine in America to compete with it, either as to the quickness or to the permanency of the cure. Those people who are afflicted with Catarrah can receive satisfying proofs of the curative power of my medicine by referring to those persons whose testimonials have been published from time to time. Yours truly MADAME SANDSTEEL, 120 Wellington Street, North, Hamilton. Sold by Harrison Bros., Hamilton.

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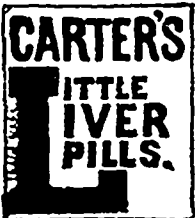
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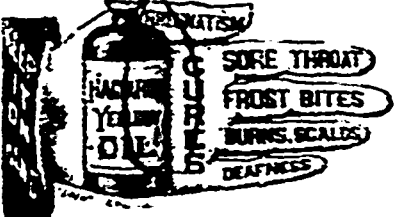
ache they will do so. They are the only pills for those who suffer from a distressing complaint, but find relief only in a few minutes, and do not find relief in any other way. They are the only pills to do without them. In the case of a head

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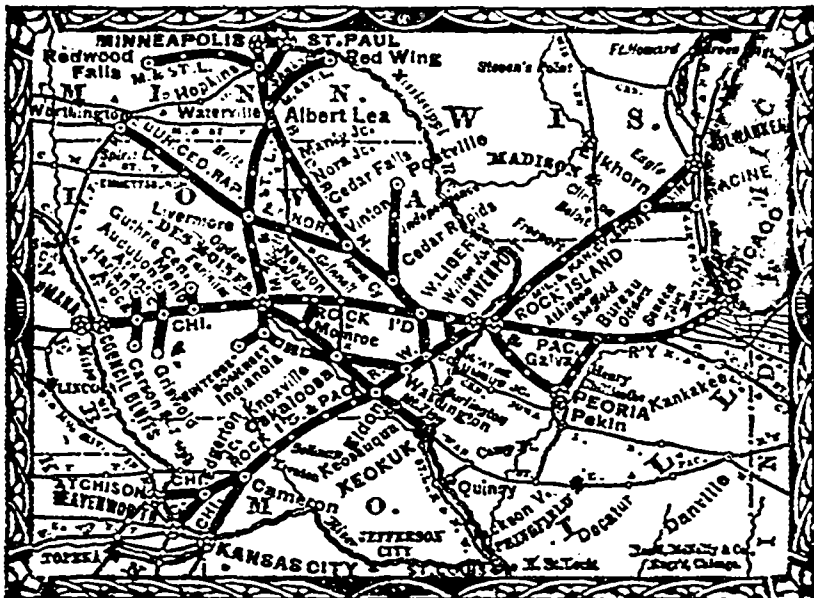
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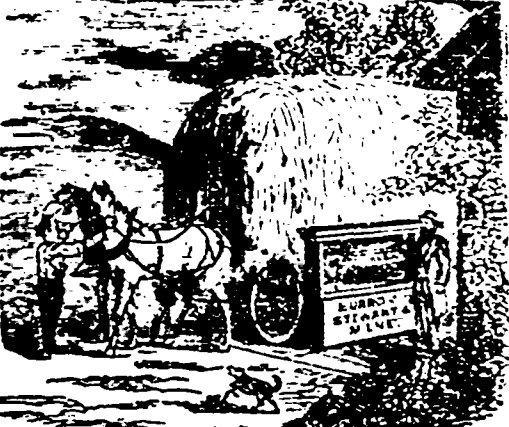
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Yours, with many thanks,
REV. E. B. STEVENSON.