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RURAL NOTES.

ENSILAGE appears to be unsafe diet for horses. Several cases in which it has been used with fatal results are reported in the *Country Gentleman*.

POLLED cattle are fast rising in price. A correspondent of the *Rural New Yorker* says that in Scotland they now bring more money than the Shorthorns.

THE directors of the Stratford Horticultural Society have decided to offer prizes for the best kept amateur gardens, at their next exhibition to be held in mid summer.

How kind! It is advertised that the Jersey bull "Polonius," for which, as recently stated in the *RURAL CANADIAN*, \$4,500 were paid, "will be allowed to serve a limited number of approved cows at \$250 each!"

IRRIGATION, as a means of preventing the disastrous effects of such a protracted drought as that of last summer, should be resorted to by all farmers who have the facilities for so doing, as large numbers of them have.

A CORRESPONDENT of the *Philadelphia Press* says:—

"Six miles from me lives a rich farmer, made rich by farming, who has a lawn which is so ornamented that people ride miles, I among them, for the pleasure of looking at it. This man has expended a little money not only for his own gratification, but to create 'a thing of beauty' for all of us who pass along the road."

LITTLE FALLS, N. Y., is the largest interior dairy market on this continent, and probably in the world. The whole number of boxes of cheese sold there during 1881 was 289,972, and the sum brought by them was two millions of dollars. Utica, N. Y., is not far behind, the sales there for the same year having been 240,746 boxes.

THE Birdsell Manufacturing Company, of South Bend, Indiana, U. S., advertise as follows:—"To every farmer sending us his name we will send *The Clover Leaf*, an eight-page, forty-eight-column farmer's paper, full of valuable information on the culture and harvesting of clover for seed." We earnestly advise every farmer who reads this offer, to send a postal card, with his address on it, at once.

THE *N. Y. Tribune* says that Mr. H. Roe, Kearney, Neb., commenced planting seeds of forest trees in 1875, and estimates that he has 45,000 soft maples, white ashes, cotton woods, box elders, gray willows, locusts, and black walnuts, of all sizes up to thirty feet high, and as many inches in circumference. "There will certainly be enough to cut out from now to keep two or three families in wood if judiciously done."

This would be a far nicer world to live in if mankind could be persuaded to do business without the aid of lying. The Kentucky Legislature is trying legal suasion in that direction. A bill has been introduced into that body declaring "that any one who, by word of mouth, attempts to deceive his fellow-man, shall be fined not less than \$1, nor more than \$20." If that bill becomes law, and is duly enforced, it will be safe even to trade horses in Kentucky.

It is a matter not sufficiently known, that sheep give material assistance in keeping land free from weeds. Many of the most pernicious weeds which farmers have to contend are generally relished by sheep, in their early or soft state, and ultimately eradicated in this way. It may also be observed that the younger the pastures are when the sheep are put to graze, the more effectual they will be in keeping in subjection and finally killing out the weeds.

THE Holstein breed of cattle illustrated in this number of the *RURAL CANADIAN* is already widely diffused in the United States. Vol. V. of the *Holstein Herd Book* is just published. It contains a large amount of information concerning this breed of cattle, and carries the number of recorded animals to 2,758—bulls, 1,098; cows, 1,720. The book is for sale at cost price, \$1.50, post-paid, and can be had of the Secretary, Mr. Thomas B. Wales, Jr., Iowa City, Iowa.

A MAN in Burlington, New Jersey, has discovered a process by which watermelons can be kept fresh and good all winter. He sold a number to Philadelphia dealers the other day at a high price. American epicures are so fond of this fruit, that there can be little doubt there will be a brisk demand for it "all the year round," if it can be supplied. But looked at in the light of healthfulness, it is doubtful if watermelon-eating is commendable in the winter time. It is risky for some people even in the summer season.

A RECENT editorial in this journal, on Professor Brown's address before the Markham Farmers' Club, contained the statement:—"He makes the startling assertion, that were every farm in Ontario possessed of a properly managed five-acre permanent pasture plot, the gain to the whole country would be \$5,000,000 annually." At the Belleville Dairy meeting, held the other day, the Professor stated that the amount should have been \$11,000,000. We quoted from the *Markham Economist*, and gladly correct the figure, as it makes the statement more than twice as "startling." We hope it will startle many of the farmers of Ontario to do their part toward realizing this immense possible gain.

BECAUSE they wear such thick, warm coats, many suppose that sheep do not need any shelter in winter. This is a great mistake. When the weather is drizzly and cold; when bleak winds blow, when there are long-continued snow-storms; and when the thermometer gets into the zeros, they should be housed. No animal on the farm will do so poorly in close, ill-ventilated quarters as a sheep. But the fact that, in rough weather, their instinct impels them to huddle together on the lee side of a hill, fence, or any friendly protection, proves that they should not be consigned to helpless exposure. An ample shed, tight and snug on the side whence the prevailing winds blow, but open on the warm side, should be provided. Under such a shed, there should be racks commodious enough for every sheep to feed at once, and they ought never to be compelled to buy comfortable shelter at the price of starvation.

At the close of Professor Brown's admirable address on the pasturage question to the dairy-men assembled at Belleville, that shrewd old farmer, Hon. Harris Lewis, of Frankfort, N. Y., made some highly complimentary remarks. Among other things, he said:—

"The lecture and diagrams accompanying it would, if acted upon, be of vastly more value to the Province than all that the maintenance of the Agricultural College and the Experimental Farm would cost in forty years. He thought that the Kentucky blue grass was indigenous to the soil of North America from the 34th parallel to the North Pole. At the same time, there were some soils that were not as well adapted for it, while others were found to produce it in great luxuriance. He did not think timothy a good pasture grass. It had a large bulbous root at the very surface of the ground, which was subject to be ousted by the hoofs of the animals, or scorched by the sun in dry, hot weather. The suggestions of Prof. Brown thoroughly met his approval, and in view of the system of seeding pursued by Canadian farmers, they were particularly well-timed. Prof. Brown had given them not only thoroughly sound theory, but had very lucidly demonstrated how his theory could be put in practice."

THERE need be no difficulty, surely, about teaching agriculture in common or any other schools, now that an enterprising lady has demonstrated that it can be done even in a "Kindergarten." A *New York Tribune* reporter attended an exhibition of one of these institutions, and writes as follows of what he saw:—

"A shallow box, three feet broad and about eight feet long, filled with earth, stood at one side of the room. This represented a field ready for planting spring wheat. In another box green wheat was growing. One of the boys took the part of the farmer, and directed three or four others in the farm work. They ploughed the ground, and harrowed it with miniature implements; then sowed the wheat and harrowed it in. The box with growing wheat was abandoned to the cattle by the young farmer's direction, as it is a hopeless crop from flies, worms, thistles, daisies, and other enemies of wheat. The wheat from the 'wet lot' was then threshed with flails and taken to the mill, where Graham flour and white flour were ground from it. The mill was a coffee-grinder. Then the farmer's wife (one of the little girls) went through the process of bread-making, explaining every step and giving the different ingredients used and their proportions. At intervals little choruses sang songs in praise of farm life."

FARM AND FIELD.

PASTURAGE IN ONTARIO.

Professor Brown, of the Agricultural College, Guelph, gave an excellent practical address on the above subject at the recent annual meeting of the Eastern Dairymen's Association in Belleville. He went over part of the same ground traversed by him in his address before the Markham Farmers' Club, recently reported in these columns; but the following extracts embody, for the most part, entirely new matter, and will well repay careful perusal:—

"It was obvious that the Ontario farmers stood in need of pasture that—First, gives several crops per annum; second, offers an early and late bite; third, cannot be destroyed by drought or frost; fourth, gives the largest quantity and best quality of dairy produce at the least possible cost; fifth, gives the largest quantity and best quality of beef and mutton at the least cost; sixth, can be used as a soiling crop; seventh, keeps animals in the best health; eighth, is inexpensive to produce and maintain; ninth, is reliable at all times, and permanent. In establishing a permanent pasture, it was desirable that the kinds of grass selected should not all, or even many of them, ripen during one month or leave off altogether at the same time of the year. Beginning in 1877, they had had very great satisfaction in building nine grasses and five clovers, in connection with this subject, at the experimental farm. The lecturer here exhibited a diagram showing all the plants mentioned in the order of precedence. He called particular attention to the Lucerne clover, which gave the pasture a start at the end of April, and continued right into the snow. Its persistent monthly reproduction of a branchy succulent, giving sixteen tons per acre per annum, made it the king of soiling crops, and the most reliable in permanent pasture because of its repeated annual growths and durability. It was the only safe starter in April. The common red clover was not much behind, but only good for two cuts or 'bites' per season. It did not give a monthly crop like the Lucerne. The famous British soiling grasses, Italian and perennial, followed these; and under very favourable circumstances helped from May to part of September. The people of Ontario would be surprised, indeed, were they able to grow these grasses as at Edinburgh, Scotland, where the annual rent, by cuttings for dairy cows, fetches \$150 per acre. Fan oat grass was a four months' crop, and a thoroughly reliable one in any weather. Indeed, along with timothy, orchard meadow, fescue, and fan oat made of themselves all the bottom and variety the most of graziers need desire. Meadow fescue was a strong plant, not afraid of heat and difficulties. The common trefoil or yellow clover, while not much relished by animals, was yet of account in regard of variety, and stood well between the early red clover and the later white and alsike. The hunchy, strong, self-willed orchard was one of our standards, safe to stand, though equalled by meadow fescue and fan oat. In regard to the drought difficulty, it was not necessary to say much about timothy, the American hay plant, which was certainly of immense value in the list. It was later than some other grasses, but is always present from the end of May on to winter. The Kentucky blue grass was but one of the many members of the same family, common in nature all over the continent. Late grasses were not generally valuable feeding ones, and in his list were two—red top, and bent—which were not high in any part of the world for rich produce. As would be seen by the diagram, the combination of grasses which had just been described would furnish one growth in April, nine in May, thirteen in June, fourteen in July and August, with ten in September, and four fresh in October. Thus, he thought, should meet the desires of the most fastidious of cattle and sheep. In spite of the severe drought of last summer, the experimental farm permanent pasture was never bare nor wanting a fresh bite, though heavily stocked, but so close and strong was the growth that it had to be separated with the hand in order to afford an opportunity to examine the surface of the soil. The lecturer then proceeded to give the result of experiments or observations as to the conduct of some of the principal grasses as they stood in separate plots, side by side, on August 30th, 1881. Rye grasses and perennial chiefly look fresher, and are better as pasture than red top and timothy. Fan oat is about equal to meadow fescue, which is saying a good deal. Meadow fescue stands the drought better than orchard and timothy. Close, rich green, and vigorous orchard is somewhat behind meadow fescue and fan oat, but not much. Timothy is very good, but presents no bite for cattle. It is dry and somewhat withered, and takes a fourth place. Kentucky blue grass is wiry and dry, with a good sward. Red top, a good tough sod, is about equal to timothy, though presenting no bite. The lecturer next adverted to the fact that dur-

ing the last half century the best managed old pastures of England had stood at more value per acre than the richest arable land, partly because of their permanency and the reliability of crops; and largely because of their being able to graze three cows per acre. He thought there was no reason why Ontario could not at least do one-third as well as England had in this respect. For three years in succession on the experimental farm, on a small scale, on comparatively old, permanent pasture, as well as on that of two years' standing, they had clearly proved that seven sheep per acre could be well grazed on permanent pasture. There was therefore no other form of fodder that could do the same thing. The average timothy and clover pastures of the Province in connection with mixed farming, just grazed one animal to every three acres, taking from the first of May to the middle of October. On an average of years it had been shown that three and three-quarter cows could be kept on three acres of permanent pasture of the kind required, and as two-year-old steers and heifers preparing for the butcher eat more than ordinary milk cows, he would say one beefing animal per acre. There were at present 20,000,000 of arable acres in Ontario, possessing practically no permanent pasture, but 3,500,000 acres of rotation pastures that do, or should, maintain 1,190,000 head of beefing cattle. If there was only one-tenth of this rotation pasture under permanent form, the annual gain to the Province would exceed \$11,000,000. The magnitude and material value of a few acres per farm in first-class permanent pasture was thus apparent. When everything was propitious, and where no regular soiling crops were upheld, continuous crops could always be had from well-managed permanent pasture, early and late, at ten tons per acre green weight. While it could not be maintained that there was no trouble, time, and expense incurred in establishing successfully all that was desired in this connection, nor that its permanency and value could be upheld without fertilizing materials, it was difficult to see that once fairly afoot, permanent pasturage cost a great deal less per acre each year, proportionately to the produce received, than any other crops could possibly do. The successful establishment and maintenance of such a pasture implied: first, a favourable position; second, a deep, retentive, dry soil; third, a rich, fine, friable surface; fourth, early, thick, shallow feeding; fifth, no accompanying crop; sixth, no grazing during the first year, very little the second year, but heavy in after years; seventh, fertilizing every third year."

WHEN TO SOW ORCHARD GRASS.

In reply to a correspondent, the *Louisville Journal* says: Sow as soon as you can work the ground in spring, and on until the middle of April. For field culture use one and one-fourth to one and one-half bushels of seed per acre; for a thick lawn, two bushels.

MORE ABOUT THE "WORMS."

Rural New Yorker: Pasteur's observations of the action of worms are scarcely less remarkable, though less extensive, than those of Darwin. During his investigations as to the suspected propagation of virulent diseases by bacterial germs, a case occurred of cattle being attacked by splenic fever in pastures where they were isolated and apparently not exposed in any way to that particular infection. It turned out, however, that several years ago animals dying of that disease had been buried there, but very deeply. It occurred to Pasteur that although these carcasses had been covered with ten or twelve feet of soil, the deadly germs might be brought to the surface by earth-worms. On inoculating rabbits and guinea-pigs with matter from the alimentary canal of some of the worms, all the symptoms of that form of anthrax were exhibited.

SILOS—ENSILAGE.

Country Gentleman: In answer to a question our contemporary says: Its disadvantages are—1st, the cost of the silo; 2nd, the cost of machinery for cutting with horse or steam power; 3rd, the necessity for cutting the fodder and filling at a busy season of the year, or near the time for sowing winter

grain. The advantages are—1st, a sure method for preserving the fodder in a fresh state, without the usual loss of long exposure to rains; 2nd, the entire consumption of the whole fodder, stalks and all; 3rd, the ready digestibility of the fodder, shown by the increase of the milk of cows in bulk and quality, in all cases where properly tried.

CLAY UPON SAND.

New England Homestead: An article in the "Homestead," setting forth the efficacy of dressing mowing land with clay, reminds us of what a successful Vermont farmer told us not long since. The soil of his farm is a sandy loam, quite exhausted when he came into possession. Not far from the barn is a clay bank, from which he has annually filled his barn yard, for use as an absorbent. Carting it upon the light land, it not only served as manure, but also added to the sandy soil just the tenacious, heavy material it required. As our friend said, "That clay bank has raised my crops, supported my family, paid off the mortgage, and sent my son to college and my daughter to the seminary."

FENCES.

It is, of course, next to impossible to do away with fences altogether. Division fences of some kind are desirable; yet thousands of miles of useless fences exist throughout the country, which the thoughtful farmer should seek to remove. Few realize how costly a fixture the farm fence is. Illinois is said to have ten times as much fence as the whole of Germany, and it is claimed that Dutchess county, N.Y., has more than all France, Germany and Holland combined. A few years since, in South Carolina, the improved land was estimated to be worth \$20,000,000, while the fences at the same time had cost \$16,000,000. The annual cost of replacement is at least a tenth of the first cost. A calculation made some eight years since placed the cost of the fences in the United States at \$1,300,000,000. More than forty years ago Nicholas Riddle said the fences in Pennsylvania had cost \$100,000,000. In Ohio they have cost a still larger sum; while in New York, only a few years since, the estimated cost of the fences was \$144,000,000. Some time in the future many fences now in use will disappear, and boundaries will be marked with fruit and shade trees or neat hedge rows.—*American Cultivator*.

MR. JOSEPH HARRIS, in his "Talks on Manures," says that we can make our lands poor by growing clover and selling it; or we can make them rich by growing clover and feeding it out on the farm.

A FEW years since, says a writer, I had an old pasture that had almost run out, covered with weeds and patched with moss. I mixed a few barrels of salt and wood ashes, and applied about two barrels of the mixture per acre, covering about half the lot. The result surprised me. Before fall the moss had nearly all disappeared, and the weeds were rapidly following suit, while the grass came in thick, assuming a dark green colour, and made fine pasturage. The balance of the lot remained unproductive as before, but the following year was salted, with like results.

BEES AND POULTRY.**ARE POULTRY PROFITABLE?**

EDITOR RURAL CANADIAN.

SIR,—I am in receipt of the second number of the RURAL CANADIAN, have read it, and like it first-rate. Knowing by whose hand it is guided, I am satisfied that it will be a success. The first two numbers are so full of real useful knowledge to many others as well as the farmer, that they cannot fail to be appreciated by the rural people of Canada.

In looking over No. 1, I see in the Poultry Department that you doubt the profitableness of keeping poultry where all feed has to be purchased from the market to maintain them. Just so. I know that the profits should be rather meagre to do so; but take into consideration any other stock that is reared and made use of either on or off the farm. Will it secure the amount of profit compared to capital invested that will be secured by poultry? Well, sir, I do not believe there is anything that can equal this kind of stock, except bees, and that is because "they work for nothing and board themselves."

Take a cow, for instance, at three years old. If a man had to buy everything she fed upon from calfhood until of that age, I presume her sale "at even a good round price" would not cover the cost, or anything near it. Or, even after first giving milk, not one in a hundred can make it pay to keep a cow and buy all the provender she consumes annually, taking one year with another. The year before last, I heard many farmers say that the prices realized for butter did not pay.

What better is the average horse, sheep or swine? Hundreds of farmers will tell you, time and again, that "they eat their heads off."

Now, sir, I hold that the real profits derived from farm stock cannot be enumerated in the dollars and cents expended in purchasing market feed, but by marketing feed in and through farm stock by feeding it to them; thus retaining the droppings or excrements made from such stock while being fed with such products as are raised on the farm.

I have been paying considerable attention to the rearing and marketing of poultry, both for slaughtering and breeding purposes. It has paid me better than I expected, notwithstanding the many dollars' worth of feed purchased on the market, but the greatest profits are derived from feeding my own produce. Notwithstanding the good prices derived from butter this year, our poultry has paid us better than cows, or anything else handled on the farm. Our greatest profits have been from selling stock as breeders, but it is enormously expensive to run this line and be successful.

I see that you have been through the mill; very probably you were like many others. The hen fever got hold pretty strong, and you tried to run half-a-dozen varieties at the start, when you had not mastered even the first principles of breeding. Hence the reaction. I started with but one variety, but it was hard work to confine myself to it. I purchased ever so many books, and read and observed whenever an opportunity for so doing presented itself. The past year we had twenty varieties, and every one paid a handsome profit.

But advertising is the main source of it. This pays, even considering the great outlay it involves.

R. A. BROWN.

Cherry Grove, Ont.

PREPARE FOR SPRING WORK IN THE APIARY.

Right now is the time to get ready for our season's work in the apiary. By-and-by our bees will be coming out from their winter quarters, and we shall then be so busy attending to their wants that the little items, which have a vast bearing on the success or failure of the honey crop, will be neglected or entirely omitted. And say what we will about the pleasures of bee-keeping, the stubborn facts of the case are, that we are after the dollars and cents of the business, with very few exceptions, and they who expect to make a success of bee-keeping, to get large yields of honey, or increase of swarms, without attending to the little things of the business, need expect naught else but a failure in their efforts. Let us begin to get our "house in order," these long winter evenings; let us spend a part of the time in discussing what we need to do to help our little pets when the time comes for them to work. Most of us have but little to do during the winter season, and the busiest ones can spare now and then a day to the bees. Last fall, in the hurry of getting our honey ready for market, and the bees packed away nice and snug for winter, many of our tools and fixtures were set to one side, tucked away into the handiest place at hand "for now," meaning to clean them up by-and-by. That by-and-by has come now; here we go at it with a vim. First is that pile of unfinished sections that we extracted the honey from last fall, and put away in a hurry. We get them all together, and with an old broken stub knife we will scrape off every bit of propolis smooth and nice, so that they will go together like new ones without any bother. There, see what a nice lot of them we have. Won't the bees fairly laugh to get at them? The mice have got at a few of them; we cut out their nibbling, unless soiled too much; if so, cut out all of it, and replace with a good piece of comb foundation. Now we will estimate about how many cases of sections we will need to use this season, and use our partly-filled sections accordingly. We ought to put in one or two of them to each row of sections to give the bees something to climb up on, which seems to help them very much. Then there are the honey boards, or cases, to hold the sections on the hive; we must clean them all up too, then put in the sections, tin separators, and wedge all up firmly, and set up on the shelf ready for use. It is not always best to put on a full complement of sections at the first, so when the time comes we can only put on so many as we judge the stock can take care of best. Now for the hives and extra combs. We look them all over; dig out a mud dauber's nest here, a patch of propolis there; clean them all out. Our frames of empty combs need pruning some—a bit of draw comb here, another spot where the moth may have spoiled it—and fill up the vacancies with a piece of foundation. This work you will need to do in a warm room, for foundation and comb are brittle things in cold weather, but propolis comes off the best where

it is cool. Then there is our old smoker; look how it is "stuck up," not with pride, but honey and soot. Don't forget to clean that up too, and set the old shop to rights generally, and we will find plenty to do, I will warrant you. Now let's see—have we got as many sections and as much comb foundation as we will need this season? I don't believe we have. And now we have been pretty busy, and got rather tired; to-night we will write out an order to send off to-morrow to the dealer for the needed supplies. If we order now, he can get our goods ready at his leisure, but after a while he will be so busy filling orders that we may have to wait, and lose precious time, for when the honey is coming in fast, time is honey, and honey is money. "In times of peace, prepare for war." Go now, get ye ready for spring work!"—*Cor. Prairie Farmer.*

SOILING POULTRY.

Mr. George May Powell cites the case of a family who, on a village lot, raised two kinds of fancy fowls, for which they have gained a reputation in the community, and for which, and for whose eggs, there is ready market for breeding purposes at moderate, but paying rates. He also mentions a poor widow who, on premises equally contracted, raised eggs, the sale of which was the principal source of support of herself and two children. A leading feature of her successful management was "soiling the poultry," especially in winter. The ingenious method of accomplishing this is described in the *Christian Union*, and, looking in the same direction, a plan is suggested which is otherwise advantageous in two or three ways:

"She kept the south windows of her house full of trays about eighteen inches wide, three feet long, and three inches deep. These trays were filled with earth and sowed with wheat. The earth was kept well watered, and the grain grew with remarkable thriftiness. As often as the spires or foliage grew to be two or three inches long, she clipped it with her shears and fed it to the laying hens. This soiling method may be enlarged on and supplemented by a system of grazing. Few sights are more desolate than most gardens in late autumn, during the winter and in early spring. Much of this may be changed. As late even as the sunshiny days of the last of November, and which extend often into December, the whole surface of the garden may be raked over and sown with winter wheat or winter rye. Of course it is better to be done in October. It will do often, however, as late as November or December. This winter grain comes up, and during the late fall, at open times in the winter and in the early spring, it furnishes first-class grazing for the hens, increasing their laying qualities to a remarkable degree. At least a bushel of seed should be sown on a quarter of an acre. This is more than double the seed used when sowing for a crop of grain. It makes the ground look even and green, instead of rough, disorderly and desert-like. It therefore pays abundantly for the trouble and expense, simply as an element of beautifying the premises and making the home surroundings look cheerful. Last, but not least, the heavy growth of green, when turned under in the spring, more than pays for itself by fertilizing for the next season's garden growths. The chief gain on the whole operation, however, is the grazing it supplies to the laying hens."

HORSES AND CATTLE.

HOLSTEIN CATTLE.

At the recent dairy meetings held in Woodstock and Belleville, several references were made to a breed of cattle highly esteemed in their native country, Holland, and already well distributed in the United States, but unknown in Canada, except by repute. Mr. Ballantyne, a high authority, has expressed the opinion "that we have now no cattle equal to the Holsteins for dairy purposes." The Ontario Agricultural Commission collected some valuable information concerning this breed, which will be found at length in Vol. I. of their admirable report. They also expressed the opinion that it would be well if the Government through the Agricultural College, or some of the many public-spirited breeders of the Province, would undertake the task of introducing these animals into this country. They are a distinct breed of horned cattle, with marked characteristics;

2,862½ lbs. in 1 month; 9,593½ lbs. in 5 months; 13,540½ lbs. in 8 months. P. of Boomster, 4 years old, 55½ lbs. in 1 day; 1,537 lbs. in 1 month; 6,799½ lbs. in 5 months; 10,113½ lbs. in 8 months. Sappho, 3 years old, 64 lbs. in 1 day; 1,755½ lbs. in 1 month; 5,502½ lbs. in 4 months; sold. Lady of the Lake, 2 years old, 45½ lbs. in 1 day; 1,341½ lbs. in 1 month; 7,056½ lbs. in 6 months; 9,891½ lbs. in 9 months. Matron, 2 years old, 4½ lbs. in one day, 1,243½ lbs. in 1 month; 5,641½ lbs. in 5 months; 8,226½ lbs. in 8 months. Harvest Queen, 2 years old, 44 lbs. in 1 day, 1,249½ lbs. in 1 month, 4,952½ lbs. in 5 months; 6,850½ lbs. in 7½ months.

"Netherland Queen made a two-year-old record in 1879 of 58 lbs. 12 oz. in one day; 1,670 lbs. 9 oz. in one month, and 13,574 lbs. 3 oz. in one year. Maid of Parmer in 1879 made a two-year-old record of 10,893 lbs. 1 oz. in one year."

Messrs. Smiths and Powell, after giving the foregoing figures, go on to say:—

"We have made a careful study of the breed, its origin, growth, native country, its prominent characteristics, etc., and after several trips through Holland, visiting many farms where these cattle are, importing, breeding, and observing the effect of change of location, we have decided in our own minds that they are the coming breed for milk, or milk and beef combined. Our herd now numbers about 150 head, and our record proves their superior merit."

BREAKING HALTER-PULLERS.

The following is a cheap, safe, and sure remedy for breaking even the most confirmed

halter long enough to let him settle back a foot or two when he is ready to perform his accustomed tricks.

After fastening him securely in this manner, step aside and watch the result. When he settles back to business he will find an impediment in the rear that will bring him up with a round turn, and you will see as surprised a horse as ever was foiled in a vicious trick. If he is not inclined to pull at first, contrive a way to get something in front of him to frighten him a little, and encourage him to exert himself vigorously once or twice, and after that you probably cannot induce him to make the attempt. A few lessons of this kind will break the worst cases, and the cost will not exceed the value of the cord, while all risk of injury is avoided.

TRAINING A COLT.

Bad horses are more frequently made than born. It is very much in the bringing up—in the way a colt is cared for, and the manner



HOLSTEIN BULL, "UNCLE TOM"—OWNED BY SMITHS AND POWELL, SYRACUSE, N.Y.

colour, spotted black and white. They have a larger frame than the Ayrshires, and are therefore better adapted for beefing when no longer serviceable for the dairy. The accompanying illustrations will give a good idea of their general appearance. They represent specimens from the herd of Holsteins owned by Messrs. Smiths and Powell, of Syracuse, N.Y., and the following extract from the milk record kept by this firm will show how excellent are the milking qualities of these cattle:—

"Milk records of thoroughbred Holstein cows of the herd of Smiths & Powell, for one day, and for one to six months, according to time in milk, to date August 24th:—

"Neilson, 7 years old, 74½ lbs. in 1 day; 2,206½ lbs. in 1 month, 9,805½ lbs. in 6 months, 11,744½ lbs. in 8½ months. Jannek, 7 years old, 71½ lbs. in 1 day; 2,110½ lbs. in 1 month; 9,250 lbs. 6 months; 11,644½ lbs. in 8½ months. Ægis, 6 years old, 82½ lbs. in one day, 2,289½ lbs. in 1 month; 10,904½ lbs. in 6 months; 14,402 lbs. in 9 months. Aggie, 6 years old, 84½ lbs. in 1 day;

cases of halter-pulling in horses. Take a half-inch cord twelve or fourteen feet long and double it in the centre, place the middle of the cord under the animal's tail like a crupper, cross the ends on his back and carry them forward under his neck, tying them firmly in front of and close to his breast; buckle a surcingle or tie a cord around his body, just back of the fore legs, to keep the cord which passes under his tail in place; put a strong head halter on him which has a rope attached instead of a chain; have a strong iron ring fixed to his manger, placing it in such a manner as to allow the rope of the halter which passes through it to slip easily; place the end of the rope which is not attached to the head-piece through the ring, carry it back to his breast and tie it firmly to the cord which passes under his tail, leaving the

in which it is broken. Firmness with kindness goes very far in making a valuable horse. The colt should early learn that it is never to be deceived, that it is to be encouraged and rewarded when obedient, and punished by the withholding of caresses when disobedient. The same natural qualities that make a horse vicious, will, with proper treatment, make one of those intelligent and spirited horses that all desire to possess. The true trainer of colts is gentle, loving, firm and thoughtful, and the young animals of his charge partake of the same qualities.

Messrs. McGREGOR & McINTOSH, of Brucefield, have disposed of their young heavy draught imported stallion, "The Major," to Messrs. Colquhoun & Dow, of Hibbert, for the sum of \$2,000.

THE DAIRY.

THE A B C OF DAIRYING.

The Editor of this journal gave an address on the above subject, before the Dairymen's Associations of Western and Eastern Ontario, at their recent annual meetings, the main points in which are summarized in the following verses:—

There once was a dairyman whom I know well,
And some of his history now I will tell:
He started a dairy with much show of glee,
But neglected to study his A B C.

His cows were poor milkers, and didn't repay
The cost of their keeping, in pasture and hay;
He got little manure, and threw it out-doors,
Where the sun and the rain stole half of its stores.

His pastures were bare, and his cattle were lean,—
That he was not thriving was plain to be seen;
So he got a few pigs, and was heard to say,
"I'll make me some money by feeding them whoy."

His pigs didn't thrive any more than his cows,
And he found himself poor as any church-mouse,
Till, thinking, at last he came plainly to see,
He was wrong in not learning his A B C.

Then he made up his mind, and to himself said,
"I'll harbour no cow that eats off her head;"

BUILDING UP DAIRY HERDS.

FROM AN ADDRESS BY THE EDITOR OF THE RURAL CANADIAN TO THE DAIRYMEN OF ONTARIO.

The first letter in the dairy alphabet is C, which stands for cow. When I had the honour of addressing you two years ago, I ventured the opinion that not more than fifty per cent. of the cows composing the dairy herds of Ontario yielded a profit to their owners, and the great burden of my song was, "WEED OUT THE POOR COWS." Gentlemen, has this been done? Have you learnt this first letter of the dairy alphabet? Who among you dare bring his worst cow and exhibit her at this convention? Wouldn't you rather shoot her than show her here? Well, any man who keeps a cow that he is, or ought to be ashamed of, has yet to learn the first letter of the dairy alphabet. The dictionary definition of the word "cow," is, "a female of the bovine race, a quadruped with cloven hoofs, whose milk furnishes an

what was once known in the State of Massachusetts as the "Cream-pot" breed of cows, and could not help thinking how practicable it would be to have such a breed in every rural neighbourhood. It was originated by Colonel Samuel Jacques, of "Ten Hills Farm," in Somerville, Mass. Having observed that one cow in a herd might produce three pounds of butter a week, and another nine pounds on the same food, Col. Jacques thought he would try to effect an improvement in the way of securing a strain of cows that would give the largest possible quantity of rich milk. He is said to have found a "native" cow, raised in the town of Groton, giving milk so rich that it was often converted into butter by the simple motion of carrying. Shorthorn blood was the means chosen of fixing permanently this heavy milking tendency. The bull Calebs, imported in 1818, was used, and a course of in-and-in breeding pursued for four generations, and yet, instead of injuring the milk secretion, the experimenter was at length able to boast that he



HOLSTEIN COW, "NETHERLAND QUEEN"—OWNED BY SMITHS AND POWELL, SYRACUSE, N.Y.

So he beefed his poor milkers, and got in their place
A few first-class cows, of a milk-giving race.

He stabled them warmly,—housed all the manure,
And spread it abroad on his land that was poor;
A pit for the urine, a tub, and a pump,
Gave his meadows a dressing that made the grass jump.

His fortunes began to go up with a bound;
His wallet got plump, and his face became round;
He paid off the mortgage that covered his land,
And, no longer in debt, bought with cash in his hand.

His home very soon quite improved in its looks,
He took the best papers, and bought some choice books,
Increased the subscription he gave to his church,
And left poverty far behind in the lurch.

His sons became eager to get some knowledge,
And went to the Agricultural College,
Became well-to-do farmers, Reeves, M.P.'s,
And his daughters got husbands who "had the cheese!"

And, now he is old, he sits calm in his chair,
With plenty of time, and some money to spare;
A prosperous dairyman he came to be,
Just by thoroughly learning his A B C.

abundance of food and profit to the farmer." But you can't always trust even the dictionary. A cow is often "a quadruped with cloven hoofs," that, like a certain biped with cloven hoofs, is better at promising than performing, and the less we have to do with such animals, whether quadruped or biped, the better. Both make fools of us. The one holds out the lure of gain to land us in loss, and the other holds out the bait of pleasure to plunge us in pain; so that without the slightest irreverence or profanity, it may be said of many a female bovine, "She's a devil of a cow," even though she hasn't a bad temper and isn't a kicker.

It is so easy, comparatively speaking, to learn the letter C, that the wonder is so many stick at it as they do. I was reading only the other day, a most interesting account of

had a cow whose milk produced *nine pounds of butter in three days*. Though the "Cream-pots" were long famous, a permanent breed was not established, but an example was set which only needs to be followed, to fill the land with "Cream-pots," instead of skim-milk jars. "What man has done, man can do." There is no district of our country where there are not more or less of "native" cows that have earned the renown of being extraordinary milkers. You can buy one of these natural "Cream-pots" for far less money than a thoroughbred cow of any breed will cost, and for dairy purposes she is just as valuable. In every such district, a good Shorthorn bull can be found, so widely is this valuable breed now diffused. Here then is the foundation for a dairy herd, ready to hand. Why do not our dairymen build on it?

I don't think it is indifference. The supposed expense and delay of the process are probably the chief hindrances. Most people have the idea they must begin with a fabulous priced Jersey or Shorthorn, and that discourages them. Then they want immediate results, forgetting that "the more haste the worse speed." To start and build up a "Cream-pot" breed of cows, is within the ability of every thrifty, well-to-do dairyman, and he will become more thrifty, and better-to-do, by taking this course. Fewer and better cows; more calves and heifers; less of dairying as a specialty, and greater attention to a mixed husbandry; these are the milestones of progress, that measure the road along which our dairymen ought to travel.

We are constantly reading of incredible sums of money having been paid for fancy cows and bulls of popular and fashionable breeds. The Shorthorn craze reached its acme in the \$40,600 cow sold at the New York State Mills auction in September, 1873. The Jersey craze is now on its upward march. It has reached \$1,400, \$2,500, and \$3,000 for cows; \$3,500 for the bull "Farmers' Glory," and \$4,500 for the bull "Polonius," and how much higher it will go, goodness only knows. Meantime, it is undeniably on record, that grade Shorthorns have beaten the thoroughbreds as beef producers, and that grade Jerseys have equalled those with all the fashionable points in milk-pail performance. Farmers and dairymen are shrewd enough surely to draw their own inferences from such facts, and to leave speculating in fancy animals to the class of whom it is proverbial that they and their money are easily parted. Meantime we shall not err, if we go on quietly improving the best strains of native cattle.

It will be inferred from what has been said, that I go in for dairymen raising their own cows. I do, most decidedly, and for this reason, if there were no other, that I do not see how we are going to get rid of the scrub bulls until it becomes an object with dairymen to raise choice calves. Just so long as the only aim is to get a cow pregnant in order to renew her yield of milk, we shall have our dairy districts infested with worthless male bovines. It may be said, what matter, if the calves are all deaconed? They will not all be deaconed. Some will be permitted to live. All calves, like all babies, are pretty, and there are sentimental people who will spare a calf because it looks pretty, and it will survive to perpetuate the evil qualities of an unworthy ancestry. But, even if all worthless calves were sure to be slaughtered at three days old, the question arises where is our supply of good cows to come from? We will suppose that in every dairy neighbourhood, one or more breeders make it their business to raise first-class milking stock. They do it at the risk of their best cows forming a chance acquaintance with the worst bull in the region round about. Cows, like human beings, are given to sly courtships, and apt to contract foolish marriages. You can only influence human beings by reason, persuasion, and motive; but you can absolutely control cows and bulls; you can render it impossible that there should be improper mating, and the best interests of

dairying demand that it be done. Beside all this, there are other good and sufficient reasons why dairymen should raise their own cows. It is the true business-like way of going to work. The law of supply and demand requires it. I hold that every calf should live until it either produces beef or milk. When calves are too valuable to be sacrificed for "deacon skins" or for veal, they will be allowed to live. Is it objected, that then there will be no veal in the shambles? It would be a good thing if there were none. Veal is no more fit for human food than an unripe apple or a green blackberry. I don't subscribe to the old English doggerel:

"Winegar, veal and wenison.
Are wery good wittles I wov."

Besides, a fatted calf is never converted into veal except at a dead loss to somebody. I defy any man to produce a six weeks' old calf fit for butchering at a less cost than \$10, and \$5 is about the top market price for it. With the large and growing demand for beef and dairy stock, there is no need and no excuse for killing a single calf unless it be hopelessly deformed, and I wish there were a law against it. We have laws for the protection of game and wild animals; why not have similar laws to prevent the destruction of calves? Every slaughtered calf is a loss to the country. If it were once made illegal to kill calves, very few would be raised but such as are fit to live, and the gain to our stock interests would be immense.

Further, I would ask, is there any more profitable mode of farming than to raise a creature that, at from two to three years old, will be worth \$50 or \$60, either for beef or milk? Then, there is the satisfaction of raising your own stock, and seeing it improve before your eyes. Every man should pursue his business so as to derive the largest amount of pride and pleasure from it, and there is honest pride,—there is a pleasure in surveying a herd of sleek animals, every one of which has a well-known history, and belongs to your own out-door family. Moreover, it is a well-attested fact, that cows do best on the farms where they have been born and bred. They have a home feeling, as well as human beings, which it is well to cultivate.

I think I have made out a strong case in favour of dairymen rearing their own cows. But if you are not convinced—if for any reason you think you cannot be your own cow producer—still heed the advice to keep no animal that you are not sure yields a profit. Have no *cow devils* about your premises, to deceive you with delusive hopes of gain, that never can and never will be realized.

I am glad to know that this subject attracted prominent attention at the recent meeting of the American Dairymen's Association, held at Syracuse, N.Y. No less than three of the leading speakers read papers on it. Hon. J. Shull, of Ilion, spoke on the improvement of dairy stock by selection, transmission, training and feeding. Mr. S. Hoxie, of Whitestown, pointed out the possibilities and ways and means by which new breeds, better adapted to the wants of different sections of our broad domain, might be developed from the stock now in hand, building up on the soil and in the

climate and environs where they are to live, American breeds, as, for example, a breed for New England; for New York and the Middle States; for the present West and North-west; and one for the trans-Mississippi. Prof. I. P. Roberts, of Cornell University, presented an excellent discourse on improving *milking qualities* through the selection of milking animals from milking ancestors, and maintaining them with high feeding and extraordinary care; and he condemned emphatically the one-sided practice so much in vogue with dairymen, of selecting choice dams for breeding, but disregarding the qualities of the sires.

I do not take much stock in the anxiety to get up distinctively American breeds. It seems to be a kind of needless aching for something purely national, and even sectional. Surely there is more of sentiment and fancy than of sound common-sense in aiming to get one breed for New England, another for New York and the Middle States, a third for the present West and North-west, and a fourth for the trans-Mississippi region. What is the use of throwing away the labours of others? Cattle are cosmopolitan. The Shorthorn, a native of England, improves by emigration, and specimens have been sent back to the old world from the new, that have commanded the highest prices in the British market. Herefords, Ayrshires, Jerseys, Holsteins, and Polled Angus cattle, all take kindly to the climate of this country, and make themselves at home here. He must be fastidious, indeed, and little better than a patriotic crank, who, for the sake of earning a national name, would start to do over again what has already been done so well, that it is doubtful if it can be done any better. If an improved American edition of the Shorthorn or any other breed can be got out, all right, but there is no necessity for going back to the place of beginning, in order to make progress. I notice with pleasure that our able friends Prof. Wetherell and Hon. Harris Lewis warned their dairy brethren against *in-breeding*, scouted the idea of American breeds, and urged building on the foundations already laid so well by European agriculturists and stock raisers.

The N. Y. *Tribune*, in reporting the meeting just referred to, makes the following excellent comments:—

"Though seeking it in different ways, all seemed intently aiming for the same end. The earnestness, readiness and force with which the speakers presented and defended their positions, showed that a good deal of attention has been devoted to the matter, and that a strong conviction is entertained of the necessity for, in some way, changing the *non-paying 'scrubs'* for animals that will turn out better yields of butter and cheese. That this is not a spasmodic effort peculiar to this convention, is evidenced by the fact that it occupied equal attention at the late convention in Cedar Rapids, Iowa, and also at the recent meeting of the N. Y. State Dairymen's Association. There is clearly a thorough waking up in regard to the defects of cows now in use, running through the whole dairying fraternity, and a growing appreciation of the needless loss sustained by keeping so many inferior animals, which augurs well for improvement, and a consequent reduction in the cost of producing milk. It would have been fortunate if such a waking up had occurred years ago."

Scientific and Useful,

To keep steel knives from rusting, rub with mutton tallow, wrap in paper and put into a balze-lined chest.

WHITENING CLOTHES.—A tablespoonful of turpentine boiled with your white clothes will greatly aid in the whitening process.

ZINCS may be scoured, with great economy of time and strength, by using either glycerine or cresote mixed with a little diluted sulphuric acid.

REMOVING RUST.—The easiest method of removing rust from iron is rubbing it with a rag dipped in oil of tartar. The rust will disappear immediately.

IRON or steel immersed in a solution of carbonate of potash or soda for a few minutes, will not rust for years, not even when exposed to a damp atmosphere.

OYSTER SOUP.—In making oyster soup take two quarts of boiling milk, and put one quart of oysters, and add pounded cracker, salt, pepper, and butter. Boil five or ten minutes.

GLUE frequently cracks because of the dryness of the air in rooms warmed by stoves. An Australian paper recommends the addition of a little chloride of calcium to glue to prevent this.

CARPET MOTHS.—You will not be troubled with carpet moths if you scrub your floors with hot brine before tacking the carpet down, and once a week scrub your carpets with coarse salt.

CABBAGE WITH CREAM.—Boil, drain and cut up a moderate-sized cabbage. Put in a saucepan with a couple of tablespoonfuls of butter, a gill of cream, a tablespoonful of flour, salt and pepper. Add the cabbage, boil slowly ten minutes, stirring well.

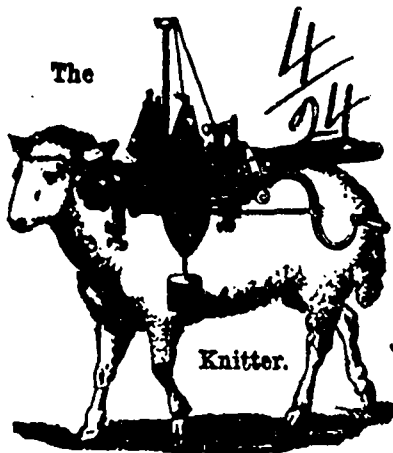
THE "Journal de Pharmacie" gives the following recipe for a mucilage that will unite wood, or mend porcelain or glass: To eight and a half ounces of a strong solution of gum arabic add thirty grains of a solution of sulphate of alumina dissolved in two-thirds of an ounce of water.

MUTTON BROTH.—One pound mutton or lamb cut small, one quart of cold water, one teaspoonful of rice or barley, four tablespoonfuls of milk, salt, pepper, parsley; boil the meat without the salt, closely covered, until very tender; strain it and add the barley or rice; simmer for half an hour, stirring often; add the seasoning and milk, and simmer five minutes more.

OATMEAL PUDDING.—Mix two ounces of fine Scotch oatmeal in a quarter of a pint of milk; add to it a pint of boiling milk; sweeten to taste, and stir over the fire for ten minutes; then put in two ounces of sifted bread crumbs; stir until the mixture is stiff; then add one ounce of shred suet and one or two well-beaten eggs, and a little flavouring or grated nutmeg; put the pudding in a buttered dish and bake slowly for an hour.

GRAHAM BISCUIT.—Stir with a spoon tepid water into a Graham flour until stiff enough to form into a dough as soft as can be kneaded; roll out when sufficiently kneaded to be well mixed, and cut into cakes three-quarters of an inch in thickness. Lay them in baking pans so they will not touch each other, and bake in a quick oven, letting them remain long enough to become brown and crisp, which, with a good heat, will require about twenty-five minutes, or taking them out when just done through, as one prefers; if not sufficiently baked they will be heavy at the bottom. Put them on a grate or colander to cool, that they may not steam and become heavy. This bread is excellent for growing children and for brain workers. None of its nutritive qualities are diminished by fermentation, and eaten with good cow's milk and some sub-acid fruit it forms perfect food.

For burns and scalds a good application, that can always be obtained, is cooking soda. Sprinkle the burnt surface at once with this powder, and cover it with a wet cloth, or immerse the burnt part in alum water, strong brine or soap suds. A good salve for sub-sequent application is sweet oil and cooking soda, linseed oil and turpentine. The thing to be done is to protect the burnt surface against the influence of the air. An excellent application to make at once is a tablespoonful of unsalted lard, the white of one egg, and a teaspoonful of cooking soda, well mixed. Burns or scalds upon the face are best treated by applying mucilage or gum arabic. It forms a complete covering, and obviates the use of rage. Repeat the application every ten to fifteen minutes, until a thick artificial skin has been formed. It is so transparent that the condition of the burnt surface can be seen from day to day. It ultimately scales off and leaves a new skin, perfectly smooth and fair.



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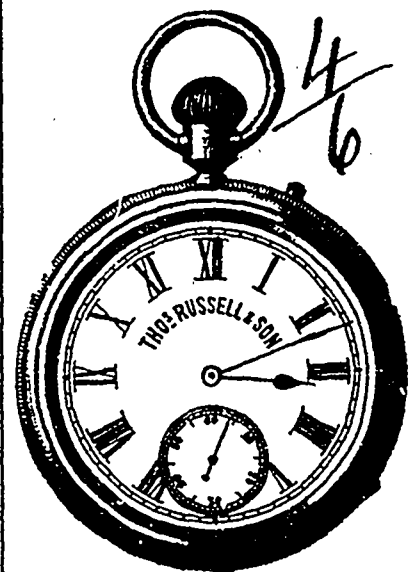
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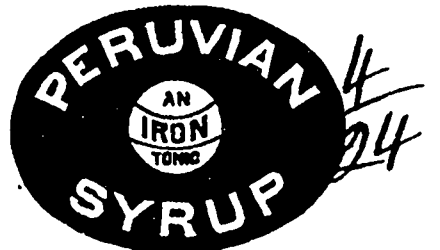
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The Rural Canadian.

EDITED BY W. F. CLARKE.

TORONTO, WEDNESDAY, FEBRUARY 15th, 1882.

PREPARATION FOR SPRING.

There are many things in regard to which it is desirable to "take time by the forelock," in view of the near approach of what is always, in this country, the busiest season of the year. One of them is taking care that farm tools and implements are in good working order. Another is, provision of seed, always with an eye to getting the best that is obtainable. Farmers too often find themselves in the thick of spring work with an insufficient supply of seed on hand, and are sometimes obliged to sow an inferior article, for want of leisure to look round for a better. Therefore it is wise to provide in time against these emergencies. Ordering fruit-trees, plants, and shrubs is another thing that should be done early. Every spring something should be undertaken in the way of improving one's place by planting, and that it may be done to the best advantage, it should be attended to before the season of hurry comes on. The earlier nurserymen get orders from their customers, the better they are likely to fill them. It is also of the greatest importance that the work of the year should be thoroughly thought out and planned beforehand, as far as possible. It is well to make a map of the farm, study how each field can be cropped to the best advantage, and plan accordingly. Afterthought may lead to some changes, but a wise man will usually adhere to what, on mature deliberation, he has decided to be, on the whole, for the best. Just as a good packer will get more articles into a trunk than one who does the work at haphazard, so a good planner of farm-work will get more into and out of a year than one who lets things "take their chance."

OUR DAIRY ASSOCIATIONS.

The recent annual meetings of the Ontario Dairymen's Associations—the Western, held at Woodstock, Feb. 1-3, and the Eastern at Belleville, Feb. 7-9—were highly successful, both of them. These institutions have been styled "Dairy Parliaments;" but they are, more properly, schools of dairying, in which the principles of the business, from its A B C up to the most advanced principles, are taught, by means of addresses, discussions, diagrams, and answers to questions asked, by members of the audience. They are well-attended schools. Upwards of 300 were present at Woodstock, and fully two-thirds of that number at Belleville, most of whom were actually engaged in dairying. The amount of knowledge given and received in the course of three

successive days of instruction—long days, too—must be very great, and cannot but leave its mark in improved theory and practice hereafter. Indeed, the gratifying development of the dairy interest in the Province of Ontario may be largely attributed to the influence of these meetings.

Addresses on set subjects were given at Woodstock by Hon. X. A. Willard of Little Falls, N. Y.; Prof. Arnold of Rochester, N. Y.; Hon. Harris Lewis of Frankfort, N. Y.; Prof. Roberts of Cornell University, N. Y.; Prof. Wetherell of the Boston *Cultivator*; and the Editor of the RURAL CANADIAN. Prof. Barnard, Agricultural Commissioner from the Province of Quebec, took a prominent part in the discussions, as did Messrs. Ballantyne, Caswell, Richardson, Losee and others. The set addresses given at Woodstock to the Western dairymen were repeated at Belleville for the benefit of the Eastern dairymen, with the addition of two very valuable addresses by Prof. Brown of the Agricultural College, Guelph, on Permanent Pasturage and Forage Plants. The addresses, discussions and proceedings of both Associations have been fully reported in the great Toronto dailies and several of the local papers. They will be given in full in the forthcoming Reports of the Associations, from the manuscripts of the speakers and the shorthand reports taken officially. In this way the information conveyed will be put on permanent record; and as each member of the Associations is entitled to a copy of these Reports, reference to them can at any time be made for the refreshment of the memory on forgotten points.

The dairy interest is evidently growing in the Province of Ontario. Better still, it is improving in quality of product, and consequently its reputation is rising in the British market. Canadian cheese is no longer at a discount, or liable to be branded as inferior because made in this country. There is, however, much further progress which it is both practicable and desirable to make. A better class of dairy cows is needed. Too many unprofitable animals are kept. The cost of keeping a cow which lands its owner in loss, is just as great as that of one which yields a handsome profit for her board and lodging. This important practical subject occupied a large share of attention at the recent dairy meetings of this Province. It did so at similar meetings lately held in the United States. The breeding and rearing of high-class dairy cattle are felt to be matters of present and urgent necessity by all the intelligent dairymen on the continent of America. The importance of more attention to pasturage is felt to be another vital point. Grazing lands, well stocked with a variety of grasses that will give a good bite all the season through, are needed in every dairy district. Next to this, a supply of green forage plants, as a precaution against the failure of pasturage during summer droughts, demands attention. These topics were largely dwelt on by Prof. Brown and other speakers, and it is to be hoped that the earnest words that were spoken in regard to them will bear fruit practically. Careful manipulation in every part of the process of dairying was largely dwelt upon. New modes of manufacture were not proposed, but rather

scrupulous regard to principles and practices, that are known, admitted, and have been tested over and over again. Too many fail by disregarding what may be called the *minutia* of dairying. Close attention to every detail of the business was urgently insisted on by several speakers, and the fatal consequences attendant on little neglects were clearly pointed out. The enviable reputation of some Ontario dairymen whose brands of cheese are eagerly sought for in the British market, was referred to, and they were closely questioned as to their methods by others anxious to emulate their success. These gentlemen seemed quite willing to impart all they knew. Apparently, they had no secrets. Their success resulted from such simple causes as cleanliness, watchfulness, honesty and uprightness, combined, of course, with a skill which some people attain in every line of business, while others do not. This difference, however, is mainly attributable to want of application and perseverance.

The social element was introduced into these meetings in the shape of public banquets. Woodstock set the example, and Belleville followed suit. They were very pleasant reunions to those who, having met together year after year for the promotion of a common object, have begun to feel the ties of friendship and brotherhood binding them together. Sympathy and fellowship are worthy of cultivation, and there is no good reason why they should not be permitted to have scope on such occasions as bring together those whose aims and interests are identical. It is to be hoped, therefore, that this social feature will be continued in connection with future annual gatherings of Ontario dairymen.

BORROWING AND LENDING FARM IMPLEMENTS.

The highest authority has enjoined, "Give to him that asketh of thee, and from him that would borrow of thee, turn not thou away." But these commands are not to be taken in an unlimited sense. And if there is a duty of lending, there are also certain obligations that rest on borrowers. Ownership should be fully recognised. A correspondent of the *Country Gentleman*, writing on this subject, says he has certain neighbours who are wont to ask, "Are you going to use your waggon to-day?" and if a negative reply was given, would take it without further ceremony. He also refers to certain parties who regarded their right to his property as better than his own, positively refusing to return a machine or tool until they are done with it, although he was in equal need of the borrowed article. Such conduct is manifestly unjust. Care of articles kindly lent and scrupulous particularity in returning them without damage beyond inevitable wear and tear, are obvious duties of borrowers. But they are often shamefully neglected. It is a noteworthy fact that it was said to the Jews by their great lawgiver, Moses, "Thou shalt lend, but not borrow." This was prophetic of their state of prosperity and independence. Such a state should and will be coveted by all truly noble minds. There is a neighbourly spirit which all should cultivate, and there is also a nobility of soul above all mean depen-

dence, which ought to be fostered. Some borrow tools and implements who can well afford to own them, and ought to do so. In like manner, some borrow newspapers and periodicals who can, and therefore should, subscribe for them. The *Country Gentleman's* correspondent referred to above, states that the Elmira Farmers' Club has been discussing this subject, that several members complained of having suffered inconvenience and loss by lending, and that the opinion was expressed that some parties could, and would, pay a fair price for the use of an implement or machine which they felt unable to buy. The result of the discussion was that a proposition was made to post up in large sign letters on the barn a notice like the following:—

"FARMING TOOLS TO LET.

For roller.....	50 cents per day.
" lumber waggon.....	50 " " " "
" grain drill.....	25 " " " "
" cultivator.....	12½ " " " "
" plough.....	12½ " " " "

and similar rates for other things, the days to count from the time the article is taken till its return, and to be returned in as good order as when lent, natural wear excepted."

This appears fair and equitable. It is a favour often to get the loan of an implement or tool, even if a moderate charge be paid for its use. An arrangement of this kind would be highly satisfactory to those—and there are such—who feel a delicacy about borrowing an article which they need occasionally, but do not possess. No doubt some would object to paying for a thing borrowed, but it would be the mean class of people who are always wanting something for nothing. Owners could of course use their discretion, and not exact payment from worthy neighbours who are unable to pay. The principle itself seems so manifestly just, that the wonder is it is not more generally acted on. It is not only just, but there is this advantage about it, that were it adopted, borrowed articles would be much more likely to be returned promptly.

BENEFITS OF A FARMERS' CLUB.

Some of the many advantages growing out of attendance at these useful institutions are forcibly stated by President Ferris, of the Onondaga Farmers' Club, N. Y., in an address from which we take the following extracts:—

"What have we learned? To stay on our farms, and attend to our own business. We have learned to summer-fallow with a good crop of corn; to take off two crops in place of one, at double the profit—members of this club are doing it—forty bushels of barley, and thirty bushels of wheat to follow, to the acre. We have learned that straw is worth from \$8 to \$12 per ton; that phosphates and commercial fertilizers have been of great benefit in some localities, and in others worthless; that a good sod, barn-yard manure and wood ashes are true friends of the farmer when rightly applied. We have learned to please the eye rather than the taste; we have lost thousands of dollars in trying to please the taste, hereafter we will try to get it back by pleasing the eye.

"We learned from a discussion of the water question, that to put wood ashes in a bag and put it into our cisterns, will purify the water; also, that the germs of disease which are thrown into the cesspools of city or country, sink into the ground and are carried long distances in veins of water, which is one great cause of spreading typhoid fever.

"I now come to the last question: 'What benefit have you been to the country, or to yourselves?' There is a great strife among the members of this club to get to the front; they are taking all the noted agricultural papers of the country; they are watching every experiment made by their neighbours, to seize upon everything that is successful, and get all the glory, and all the money they can out of it; and by so doing they are a benefit to the country and to themselves. The club deserves the support of every farmer who would be progressive."

A BEEKEEPERS' Association has been formed at Bloomsburg.

SKETCHES OF CANADIAN WILD BIRDS.

BY WILLIAM L. KELLS, LISTOWEL, ONT.

THE BLUE JAY.

The blue jay is a large and beautiful bird, but rather noisy and marauding. It generally frequents all parts of our woods, but is more partial to the low, soft wood lands than to the rolling hard wood tracts. When the stormy winds and withering frosts of autumn indicate the approach of winter, it generally retires into the densest woods, particularly the evergreen swamps, where it is chiefly found during the cold season of the year—for it is not migratory, but remains in Canada throughout the year, enjoying the luxury of our summer and autumn with delight, and sustaining the severity of our winter without harm. The blue jay has no song, but utters various notes, the most common of which, resembling the words "Pay-up, Pay-up," uttered in a loud, harsh and screaming tone, may be heard in our woods at all seasons of the year. The blue jay is twelve or fourteen inches in length; its plumage is a beautiful blue, mingled with white and ashen colour; its wings and tail are crossed with bars of black; its neck is encircled with a ring of black, and its head is ornamented with a crest of loose, silky plumes, which it can erect or depress at pleasure, but it is mostly erected when the bird is angry or excited. The blue jay builds a large nest of brambles and fine roots. The eggs are five or six in number, of a dull greenish hue, mottled with pale brown. The nest is placed in various situations: as in the root of a fallen tree; among the thick branches of balsam, cedar, or hemlock; and in the forks of high trees. It is an omnivorous bird, and readily devours anything eatable that comes in its way. During the winter it subsists on moss, buds, the seeds of evergreens, and occasionally on nuts and grain. The nuts it often finds in the rough bark of trees, where they have been deposited by nutcrackers and squirrels. When it has found a large nut, it carries it in its beak to a branch, where it holds it down with its foot and breaks it open with its strong bill. It sometimes makes a marauding visit to the barns of the back woods settler, where it feeds upon grain, and when disturbed flies off with an ear of grain in its beak, or uttering loud screams. It has sometimes been caught in a trap set to catch squirrels. In the early spring these birds will sometimes collect in large flocks on the borders of the woods, and devour the grain left uncovered by the harrow. At other times parties of them will visit the gardens and orchards, but they meet with little welcome from the farmer or his family, as plunder is well known to be their object. They will also attack and destroy the eggs and young of all other birds that are too weak to defend their nests, and while thus plundering, they will lift up their heads and in mocking tones mimic the distress of the parent birds; and when the work of spoliation is complete, they fly off to the woods uttering loud screams, as if exulting over the mischief they have done; but when discovered by the king-bird, robin, or blackbird in the vicinity of their nests, they are soon caused to retreat with precipitation and disconcerted notes. The blue jay

is a keen-sighted, shy, and cunning bird, and it is not always easy for the hunter to come within gunshot of it, as the smell of powder or the sight of a gun will send it, uttering defiant notes, into the tops of the highest trees or the depth of the densest woods. Yet it is an affectionate bird, and will defend its eggs and young with boldness and sagacity. Its progeny are often destroyed by owls, hawks, and nocturnal animals. The blue jay is abundant in the new settlements; but as it prefers the wild freedom of its native woods to scenes of cultivation, and loves not the presence of man, nor the sound of the woodman's axe, it is yearly driven further into the wilderness by the onward progress of civilization.

"The blue jay is of all birds the most bitter enemy of the owls of this country. No sooner has he discovered the retreat of one of them, than he will summon the whole feathered fraternity to his assistance, who, surrounding the glimmering *solitaire*, and attacking him from all sides, raise such a noise as may be heard half a mile off, the owl meanwhile returning every compliment with a broad, guggling stare. The clamour becomes louder, until the owl is at length forced to betake himself to flight, and is followed by his impudent persecutors until driven beyond their jurisdiction. The blue jay is not only bold and vociferous, but possesses considerable talent for mimicry, and seems to take great satisfaction in mocking and teasing other birds, particularly the sparrow-hawk, imitating his cry whenever he makes his appearance, and squealing out as if caught. This soon brings numbers of his tribe around him, who all join in the frolic; darting about the hawk, and feigning the cries of a bird sorely wounded. But this ludicrous farce often ends tragically. The hawk singles out one of the most insolent and provoking, swoops upon him in an unguarded moment, and offers him as a sacrifice to his hunger and resentment. In a moment all is changed; the jay's buffoonery vanishes, and loud and incessant screams proclaim the disaster."

MR. HENRY GRAY has sold his fifty acre lot in Hibbert to Mr. W. Delaney, for the sum of \$2,800.

SINCE the 1st of January Mr. Andrew Burrows, Carleton Place, has purchased 120 tons of pork from farmers in the counties of Lanark and Carleton.

THE County Councils of Peterboro' and Oxford have passed resolutions recommending that the grant to the Agricultural and Arts Association of Ontario be continued.

AN American has been defrauding farmers throughout the county of Oxford, by purchasing turnips for shipment, paying thereon about twenty per cent., and giving due bills for the balance. The due bills are now found to be worthless.

MR. SOLOMON CROSSEN, of Enniskillen, has sold his farm to Mr. Joseph Bostick, of Plympton. This farm, better known as the Steadman farm, consists of 200 acres, 100 cleared, with good buildings. The price paid is \$10,000, or \$50 per acre. Eighteen years ago this farm was a dense forest, and a frog pond, and a person could float a canoe over the greater part of it.

GARDEN AND ORCHARD.

THE SHARPLESS.

BY T. C. ROBINSON, OWEN SOUND.

What is the Sharpless? A strawberry, of course, every fruit-grower will reply. But what are its characteristics and its relative value among strawberries, both for home use and market? This can be determined for the country at large only by reports from those who have tried it in different districts and on different soils. Here is how it does with me on fair loam at Owen Sound. First it must be candidly stated that while it stands the winter well, the blossoms seem more easily killed by a late spring frost than some of the commoner kinds. Its most notable feature is its size. It is got up entirely on a large scale—large plant, large leaf, large fruit. No man need think to grow it on the matted row or broadcast principle; the plants must each have about two square feet or more of garden area to spread their roots through, or else only half-coloured, poor-flavoured berries, and very few of them, need be expected; for the foliage will have a certain amount of sap, whether enough is left to develop fruit buds and perfect the berries, or not. Plant in rows two feet apart, or farther, and one foot apart in the row, clip off the runners and hoe down the weeds, and you will see what Sharpless is. I have it growing this year on light, poor land, both with and without a good manure mulch applied after planting; also on the rich loam on which it has fruited, and if its crop next year on this light land only fulfils the promise of this year's growth, and as its record on light land in other places gives me reason to hope, I expect good satisfaction. But while its size and vigour of growth are all that can be asked, I cannot say as much for its shape. The fact is, most large berries run a great deal to humps and crannies, and the Sharpless is no exception to the rule. Yet there is a symmetrical sweep in the irregularities of this berry that redeems them from the ugliness and deformities of other large berries. There is nothing, as far as I have seen, to compare with the abrupt small lumps and furrows found in the Cheney and Miner's Prolific. Those large Sharpless berries, that lie so heavily on their straw mulch, so impress you—even while you are noting their flat, coxcomb shape or other irregularities of contour—with their roundness of outline and shining smoothness of surface, that it scarcely needs the further attraction of its rich, bright crimson colour—the handsomest in the garden—to induce a trial by the palate as well as the eye. Let us take this big fellow of over an ounce in weight, and noticing that the last spot of pink on the under side is just merging into scarlet, at which stage it is in the right condition for shipping or eating; let daylight into the centre with our organs of mastication—tools that in this case will give entire satisfaction. Observe, as you do so, that while the berry is two inches to two and a half in diameter, and the outer edges of the exaggerated coxcomb are almost meeting in a complete circle, still enclosing the large green hull in the centre, yet it is nearly flat like a cheese, with a short diameter of barely

an inch. Now smack your lips over the choicest morsel you are likely to find till you pick the next Sharpless, and as you will make two bites of this strawberry—whatever you may do with a cherry—see from the remaining half the firm, solid quality of the flesh, which, nevertheless, your organs of taste inform you is not at all wanting in juice. Then finishing, you will need no further invitation to go for the next, and give it the company of many of its fellows. But stop! While yet there is room, step over here to my Wilson rows and sample the best specimens, as grown on the hill system. See, here is one of the largest, about the size of the medium or smaller run of Sharpless. See, it is of the rich (murky?) dark crimson, with mahogany-coloured seeds, which shows the stage of ripeness praised in the Wilson by Prof. Clarke and other supporters of this old market fruit. "Yes, not so bad!" you say as your glance strays to the patch you have left. But you will try another, and help yourself. Oh! This time you got a Wilson—"red but not ripe,"—just in condition for marketing, as it is so firm, and you turn away with a face suggestive of pickles. But hold on! You are just stepping over a row of Crescent—that famous berry for a near market. See what a grand crop of handsome, bright berries. You must know what they taste like; and help yourself, because I can't tell from the colour which are the ripest ones. Yes, that sent you, didn't it? "Wilson or more so," did you say? Now, don't head right for the Sharpless again. See here, I have a little petted strip of Triomphe de Gand, that will serve as a gauge of flavour. So you are willing to stay here awhile, though you speak enviously of the superior size of the Sharpless. Do you like these Triomphe better? You do, a little, if you can stand the muskiness. But lo! the supply runs out. The Triomphe is too dainty to grow a large plant, or bear heavily even with petting. Try these Miner's Prolifics in passing. Grand crop of large fruit, eh? But rather dark and soft. What! insipid, did you say? I believe you—after tasting Triomphe. But here is the famous Glendale! Just beginning to ripen, you observe, and a great bearer of large, late berries. Try this one, just red enough to pick for market—firm as Wilson, you see. Did you throw it over the fence, and ask for a cooling drink of vinegar to sweeten your mouth? No! But remember the Glendale, like Wilson, is not ripe till its colour is quite dark, and it is therefore commended to the lovers of Wilson, whose peculiar excellence it prolongs till very late in the season, being thus truly valuable. And you don't care to try Windsor Chief and other new sorts beyond the Charles Downings? Well, call again when I have more and better specimens growing. Meantime I must go to my pickers for a while, and will call for you at the Sharpless patch—an absence that I think, from your looks, is the greatest favour I can do you.

If the reader should glean from this that I have a high opinion of the Sharpless, he will not miss the fact. My only doubt is as to its relative productiveness, which, settled favourably, will induce me to set it out further by the acre, and for the settling of which I have some five thousand plants in hills to fruit next year.

From experience and reports of others, I think its crop will be not less than about two-thirds the bulk of Wilsons in hills; and if it is that, it ought to pay better. But that is a question for market growers. There are new berries coming that promise great things; notably Bidwell and Manchester, which claim to be equal or superior to Wilson and Crescent in productiveness, with all the excellences of Sharpless. Their promises may be fulfilled, and I am testing them. But they are the birds in the bush. The Sharpless is in hand, and of all tested varieties I regard it as *facile princeps*—without a possible rival in its season for home use, and very promising for market: but as it is rather late, it needs a few plants of an earlier sort to begin the season.

ORNAMENTING SCHOOL GROUNDS.

At the twenty-seventh annual meeting, in Rochester, of the Western New York Horticultural Society, the question of ornamenting public school grounds was considered at length, their barren and desolate appearance being considered a reproach, resulting in examples of disorder and depravity to children, whereas cultivation of love for the beautiful and orderly enlarges and enriches the character. School yards are too small; an acre is none too large. Three dollars expended for plants and seeds will, in proper hands, completely transform neglected school grounds. As the actual planters take the greatest interest in what is planted, it may be wise to appoint committees from among the boys for planting and caring for trees, and among the girls for flowers, making the leading members feel responsibility in the premises. Any school teacher may receive seeds free for decorating school yards by addressing James Vick, Rochester, N.Y., or D. M. Ferry & Co., Detroit, Mich. A committee of five was appointed to suggest plans for further work in this direction.—*N. Y. Tribune.*

RENEWAL OF AN OLD ORCHARD.

In the winter of 1862 I rented a farm near Lockport, N.Y., that had been leased for twenty-five years continuously, with an "old orchard" on it of from two to three acres. The real plight it was in would take pages to describe. It looked as though fruit would be scarce "off" or "on" years. A number of trees were so near dead the owner said I never could save them. I began to trim trees every day I could bear the cold in winter, and worked every hour of spare time trimming until July. I scraped the limbs and trunks of the trees, with the help of a hired man and two small boys, every time a rain would come, so the old bark and filth could readily be removed. In the course of the season I ploughed the ground five times in that orchard before the fruit began to fall, and dragged it as thoroughly in proportion. I manured nearly all of it once, with from two to three extra doses at different times around the sickly trees till they were waked into life. The result was: That fall, the "bearing" year, I sold 208 barrels for 63 cents per barrel for the fruit. Many came to see and admire the beautiful crop. Even the purchaser pronounced all beautiful, but

added: "I have bought fruit here for twenty-five years, but never such Roxbury Russets as these." Twenty-two covered a barrel head, by actual count. Now for the "off" year. Friends and parishioners would say: "Elder, you have a beautiful large crop of apples this year, but don't expect any next year, it is the 'off' year." The next year I picked and sold over 300 barrels of apples from the same orchard, and received \$1.94 for the fruit per barrel. Over one-third of the cash receipts for 1863 from that 100-acre farm were from that "poor old orchard." For more than three years after, another tenant could not use it so mean and cruel, but it still showed the good effects of good treatment for two years. There are varieties that are inclined to overbear one year and rest the next, the Baldwin and the Greening especially so. But keep the dirt whirling; feed your trees high, and give them plenty of "soft soap;" and you will be almost secure from "knotty," "wormy" apples, and your trees can no more help bearing every year, if the elements permit, than a high-fed colt can help playing. My word for it! Try it. If you fail, charge results to bad advice from—
J. F. Wade, in N. Y. Tribune.

THE WILSON STRAWBERRY.

The *N. Y. Tribune* says that disseminators of new varieties who think it necessary to decry the Wilson strawberry in order to promote demand for their plants, do not seem to have had much influence in the fruit-growing neighbourhood of South Haven, Mich. Mr. Dyckman, of the Pomological Society of that place, said at a recent meeting that, after testing other kinds during several years, he is not prepared to exchange the good old standby for market. One advantage he notes in its favour is that if the picking is delayed a day or so it is not so likely to be injured as the other sorts. Mr. Malbone "had rather have Wilson than all the rest." Mr. Newton would plant "nothing but Wilson." President Lannin said that if his proportion of Wilson were larger his profits would be correspondingly increased. Mr. Williams would "choose Wilson every time," not only for profit, but for the table. "It has the best flavour of all, if picked when fully ripe. One would soon sicken of the other varieties. It is the best for canning, retaining its flavour better than any other."

AFTER discouraging trial of other plants for carpeting shady places, a writer in the *British Garden*, obtained partial success with periwinkles under yew-trees: "In order to give the periwinkles (*Vinca major* and *minor*) a fair start, the soil around the yews, which is generally a perfect mass of fibrous roots, should be replaced with fresh loam, and the periwinkles planted in tufts about one foot apart. They should receive a good soaking with water after being planted, and be duly attended with the same until thoroughly established. I have also seen ivy luxuriate beneath yew."

MR. JOHN THOMSON, living on the 12th concession of Blenheim, has sold his farm of 100 acres to Mr. Andrew Perry for the sum of \$6,200.

SHEEP AND SWINE.

PROTECTION OF SHEEP AGAINST WOLVES AND DOGS.

Kansas, early in its history, was infested with wolves, and since they became scarce, has been hardly less troubled with prowling and sheep-killing dogs. The last quarterly agricultural report of the State Board contains the following item in relation to these pests of sheep husbandry:—

"J. R. Mead, a well-known citizen of Sedgwick county, and who has resided on the frontier twenty-five years, gives the following as the result of his experience in destroying wolves and prowling dogs: He purchases a drachm bottle of crystallized strychnia (at a cost of 35 cents), and pulverizes the poison. He takes the carcass of a sheep with the skin off, and fastens it with a rope to the horn of his saddle, and drags it three or four miles about the range just at dusk, occasionally dropping a bait on the trail on which has been rubbed the thirtieth part of the contents of the bottle, and on leaving the carcass does it liberally. Rides over the trail in the morning and looks for dead wolves. By a method similar to this, he has in early days killed seventy wolves in one night." Mr. Mead adds: "If this method was generally adopted, there would not be a wolf or stray dog alive in the country by January next, unless they came from elsewhere, and the wolf pelts would pay the expense."

RAISING PORK AT A PROFIT.

Among our farmers there is a very general impression that hog-raising does not pay. How general this idea is may be seen by reference to page 332 of the Report of the Ontario Agricultural Commission, which states that "only in Kent and Essex did anyone pretend to find it a profitable business beyond supplying the family demand."

An Iowa farmer is reported as saying that "he could raise three pounds of pork for one pound of beef." This we may well believe, when we take into account how extensively corn is grown, and its low price, and how little grazing is practised there. At page 295 of the Report of the Ontario Agricultural Commission, Mr. Geary, Mr. Renny, and Professor Brown agree that the only profit in cattle feeding is that received indirectly from the improved condition of the land. Hogs can be fed with much better results, as I can substantiate from ten years' experience, during which I have kept from fifteen to thirty hogs each year. For two years of these ten I had common pigs, and the pork cost me about five cents per pound. One year I had a few Suffolks, and the pork from them cost nearly as much, for when fed off they did not spread out like the Berkshires feeding with them; and when dressed weighed less than the Berkshires by an average of seventy-five pounds each, though kept and fed together right along, and about the same age. The result in this case somewhat verified the evidence of Mr. Snell at page 333 of the above Report.

The Berkshires are now the only kind of hogs I care to keep, and the following is my method of keeping them: I like to have the young pigs come in September, so as to have

them weaned before the cold weather sets in. They are then wintered in a pen made with poles or rails under the straw stack, open towards the south, fed twice a day on grain soaked in barrels, and soured with slop, etc., from the house. In the spring I ring them and turn on to a clover field, one about to be fallowed if possible, and as the cattle are taken off a field the pigs are turned in. They are fed about one and a half pints of grain each day on the clover pasture, put in little heaps a distance apart on the ground, and attention is paid that they get water. As soon as the crop is off they are turned on to the stubble, and are kept along till the middle of October, when they are fed off on peas, soaked or chopped, as may be convenient.

Under this practice my pork this year cost me three and three-quarter cents per pound. In years when feed was cheap I have raised pork at a little over three cents. The following is a statement of my operations the past year:—

To 14 Berkshire pigs raised on farm.....	\$14 00	
" 1 do boar pig bought	5 00	
" 3 do common shorts bought	6 00	
" 50 bushels peas bought, at 55c	28 00	
" 48 do cob-corn raised, 25c	12 00	
" 30 do corn, bought at 55c	16 50	
" 101 do peas raised, at 70c	70 70	
		\$152 20
By 3,449 lbs. pork, at \$7 10.....	\$244 87	
" Store hogs.....	70 00	
		\$314 87
To net profit		162 67
		\$314 87 \$314 87

Eliminating the store hogs from this statement, it stands:

To value of young pigs	\$ 16 00
" do feed.....	115 00
	\$131 00
By 3,449 lbs. pork, at about 37c.....	131 00

In the above no charge is made for the pasturage on clover or on the stubbles; still, the result is better than I have ever accomplished with cattle, and have never equalled with any but Berkshire hogs.—*Cor. Globe.*

DIPPING SHEEP.

The effect of a dip is to free the sheep from all external parasites, as ticks, scab, etc., and skin diseases, the cause of some of which are not fully understood. A dip of twelve pounds of tobacco and six pounds of flour of sulphur, to fifty gallons of water, is one that has been so generally used, that it can be recommended. Some add to this a little concentrated lye, a pound or so, and about the same quantity of arsenic. If arsenic is used, proper caution should be exercised, and the poisonous nature of the mixture kept in mind. The sheep are dipped while the mixture is warm. Those who have had experience claim that the dip of tobacco and sulphur will do all that can be accomplished by the use of arsenic. It may not be generally understood that sulphur does not dissolve in the dip; hence, in order that each sheep may get its share, the mixture, while in use, should be frequently stirred up from the bottom, and the sulphur thus thoroughly diffused.—*American Agriculturist.*

THE Elms and Wallace Agricultural Society directors have decided to incorporate the society. Its name in the future will be the Union Agricultural Society, Listowel.

CURRENT NEWS ITEMS.

THE Ontario Poultry Show for 1883 will be held in Toronto.

FROM 2,000 to 3,000 tons of potatoes are now imported weekly from Great Britain and Germany to New York.

MR. ALEX. HAY has sold his farm, lot 4, con. 2, Bosanquet, consisting of fifty acres, to Mr. Jonas Stone, for the sum of \$2,125.

MESSRS. W. & P. ROBINSON have purchased from their stepfather, Mr. Jacob Hanes, the valuable farm at Mariatown, consisting of about 175 acres, for \$1,200.

GEORGE KIRKBY has sold his farm in Morris, containing ninety acres, to Isaac Rogerson, for the sum of \$3,500. Mr. Kirkby has purchased 125 acres from Mr. McDonald, near Walton, for \$3,300.

MR. W. G. HAY, of Listowel, has sold a farm on the first concession of the township of Wallace, containing seventy-five acres, to John Swinburn, of the township of Maryboro', for the sum of \$3,000.

THE price of clover seed has recently advanced, and the firms that bought heavily early in the season made a good strike. As high as \$5.20 is being paid at western points. Much of the seed is being shipped to England.

MR. ROBERT ANDERSON, of the Lake Road, Bosanquet, sold last week to Mr. J. James, for the Winnipeg meat market, two three-year old steers and a fat cow, which jointly weighed 4,095 pounds, the cow alone weighing 1,385 pounds.

W. B. UNDERHILL, Esq., Mt. Vernon, had a splendid sale of farming stock, etc., a couple of weeks ago. Everything was favourable, and the sum of \$1,400 was aggregated, of which \$1,000 was paid in cash. Mr. Underhill goes to Manitoba.

THE Wallaceburg Record says: The Sombra Literary Society have entered an action against Mr. Morrison to recover money placed in his hands about nine months ago to purchase books. He never invested the same; consequently the suit.

MR. JOHN STIRTON, an enterprising farmer of the township of Brooke, has just purchased from J. Hughes, of Metcalfe, a bull of a very fine strain of blood got by the Seventeenth Duke of Airdrie, and bred by Mr. Peter Toles, Mt. Brydges, for which he paid \$105.

MR. JOHN WATSON, of Ayr, has signified his intention, through Mr. Cockburn, M.P., to contribute ten of improved "Black Swan" ploughs for the benefit of farmers in Muskoka who lost their farming implements during the ravages of the bush fires of last summer.

MR. A. A. MEYERS, who is one of the most enthusiastic patrons of the Sombra Cheese Manufacturing Company, has purchased the north half of lot eight, in the tenth concession of Sombra, for the sum of \$850, and intends to fence the same and use it as a pasturage for his cattle.

MR. JOSEPH MORRIS, of Colborne, has purchased a superb team of horses from Mr. John Buchanan, of the same township, for \$400. This is the second team Mr. Buchanan has sold for the above named amount. The first team was taken out to Dakota by Mr. Bates, and sold for \$500.

A PAPER published in western Ontario says: A short time since, a party sold to one of our merchants, a quantity of lard, nicely put up, but which turned out to be tallow, with about an inch of lard on top. Fortunately for the storekeeper, he knew his man, and compelled him to "fork over." Such rascality is unpardonable, and the perpetrator ought to be punished. No more talk of wooden nutmegs or basswood hams after that.

THE Galt Reformer says:—Mr. C. K. Pratt last week purchased at Mitchell four very fine heavy draughts from the following gentlemen: One stallion from Mr. James Colquhoun, \$500; one stallion from George Graham, \$700; one span of mares from James Johnson, \$400. All the above animals are from the stock of "Lord Haddow," one of the finest Clydesdales ever imported into this country, and whose progeny in the counties of Huron and Perth are justly celebrated. Mr. Pratt left Galt on Tuesday morning, intending to take his fine Clydesdales with him to his stock farm at Lowell, Indiana.

A WASHINGTON despatch says: Representative Thomas yesterday addressed the Committee on Ways and Means, urging the passage of his Bill to regulate the manufacture and sale of oleomargarine. He urged legislation on the subject for the protection of the legitimate butter trade and for the protection of the public health. He stated that the rapid increase in number of oleomargarine manufactories threatens the extinction of legitimate dairy interests. In New York alone are manufactories and material enough to produce 16,000,000 pounds of oleomargarine annually, while the entire product of butter of the State is but 111,000,000 lbs. Oleomargarine can be produced for 9c. a pound, and consequently when sold in imitation of butter will drive genuine butter out of the market. At present it is not and cannot be sold as oleomargarine or as a substitute for cheap butter, but is sold in imitation of and under pretence of being butter.

ONTARIO POULTRY ASSOCIATION.

The annual meeting of the Ontario Poultry Association was held in the Kerby House, Brantford, on the 14th inst.

The meeting was well attended, and the members congratulated themselves on the success of the exhibition. The treasurer's report showed the Association to be in a healthy financial condition; after the reading of which, on motion, the city of Toronto was chosen as next place of meeting.

ELECTION OF OFFICERS.

The election of officers for the ensuing year resulted as follows:—

President, W. H. Doel; 1st Vice-president, A. Bogue; 2nd Vice-president, E. Kester. Directors: Messrs. Butterfield, Buck, Sprague, Saultor, Eastwood, Boddy, Bonnick, Thorne, and Main. Auditors: H. J. Hill, Toronto, and J. O. Weldon, London.

Messrs. Doel and Dilworth were appointed delegates to attend the Industrial Exhibition.

The retiring President, Mr. E. Kester, and Mr. W. Sanderson, the efficient Secretary, were voted unanimous and hearty votes of thanks for their untiring zeal and interest in the welfare of the Association.

Mr. J. W. Buck asked for the appointment of a committee to draft a constitution and by-laws for the Association.

Some other minor business was attended to, and the Association adjourned, while the new Board at their first sitting elected their Secretary and Treasurer. Mr. Wm. Sanderson was re-elected Secretary, and Mr. John James, of Toronto, Treasurer for the years 1882-83.

GENERAL GARIBALDI has been given up by his physicians.

THE English life-boat crews last year saved 33 vessels and 996 lives.

GUIREAU, the assassin of President Garfield, is sentenced to be hung June 30.

THE number of students attending Edinburgh University this session is 3,237.

THE Sultan of Turkey has sent to the United States for farming implements.

ALTHOUGH the small-pox still lingers in some portions of Philadelphia, the January report shows a decrease in the number of deaths of nearly seventy-three per cent.

THE Episcopal church of Ellicottville, N.Y., has a bell that was cast in Moscow in 1708 for a chime in one of the cathedrals in that city, which was burned by Napoleon in 1814.

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HOME CIRCLE.

WINTER ROSES.

O, perfumed winter roses with tints of creamy white,
How swiftly ye carry me backward to a year ago to-night,
When other roses were breathing their blessed fragrance out,
And a child, as she held the blossoms, her misery forgot!

The Christmas air was icy, and the frost-king held his sway,
And waved his wand of crystal abroad o'er land and sea;
The trees were locked in splendour, and the city's spires
were seen

In hues of gold and jasper, with precious stones between.

In her stall sat a market woman, of visage grim and stern;
By her side a little maiden, with her fifth year yet to turn;
And you would have said, had you seen her that bitter
wintry day,
That never a flower more fragile e'er bloomed in the early
May.

Through long hours she had listened to the tramp of busy
feet,
And the harsh discordant clamour of the voices on the street,
Till the world seemed spinning round her in the never-ceas-
ing buzz,
And she wondered why God made her, and where His dwell-
ing was.

The night was slowly falling when one of noble mien,
With his little dark-eyed daughter, approached the stall
unseen.

"And where did you find this maiden with her wealth of
golden hair?"
He said to the woman, who sat so cold and silent there!

"This is the child of my brother, and good for naught was
he;
He is dead, they say, and buried, and his offspring falls to
me."

"Ah! I see," replied the stranger, in a grave and earnest
tone,
While he noticed the pet of [his household embracing the
homeless one.

"What shall I give you for Christmas?" now pleaded a
coaxing voice,
"If you will but tell me, dear, I will make your heart re-
joice;
I have dolls with costly dresses, and toys without number
too,—
Say what you want, little darling, and it shall be brought
to you."

From under the sunny lashes and over the pallid cheek,
A pearly tear-drop trickled, as she vainly tried to speak.
"I want some—one—to—love me," was uttered at last
with a sob;
And the heart of the child in ermine gave back an answer-
ing throb,

As she said, with a joyous cadence that rang through the
market wide:
"Why, I'll be the one to love you, more than all the world
beside;
See! Here are some winter roses of lovely cream-white
hue;
With a kiss accept them, sister, in proof of my love for you."

A voice was heard to whisper, that night in the firelight's
glow:
"I have promised to love her, mamma, will you help me
keep my vow?"
You may talk of the rough world's contact and of those by
sin defiled,
But it never can crush the angel that dwells in the heart of
a child!

O, wise were they and loving who planned a rare surprise,
When their child should wake on the morrow, to greet her
wondering eyes:
On a couch with silken curtains as blue as the azure sky,
Lay the little orphan sleeping in her fresh young purity.

The Christmas morn was icy, and the frost-king held his sway,
And waved his wand of crystal abroad o'er land and sea;
But a sunny face was brighter for the rapture pictured there,
And a home of wealth was richer for a cloud of golden hair!

HOUSEWORK.

Girls whose parents can afford to keep servants get the
impression sometimes that it is quite out of the question to
engage in any kind of household work, some even leaving the
care of their own room to the charge of hired help. Such
girls seem to us the embodiments of laziness. There is no
reason why every girl should not understand the running of
the household machinery, so that if at any time mother was
sick and unable to oversee the usual arrangements, the
daughter might be able to take her place, managing satisfac-
torily. It is a false notion that to become a housekeeper
is to become also a domestic drudge, and if any of the girls
who read this have made up their minds to that effect, let
them abandon it instantly, and by experience prove it a libel.
When there are two sisters in a family a good plan is to di-
vide the work, each one being responsible for that portion
that is entrusted to her care. Let each understand clearly
what is expected of her, not doing it haphazard, but
promptly and regularly each week; or the work could be
alternated, if this arrangement would be more agreeable.
One reason we would give in favour of household work for
girls is, that it gives a chance to learn the many details con-
nected with women's work that cannot be learned in any
other way than by experience, and without which knowledge

no woman can govern a house well. We don't want to con-
vey the impression that the girl should shoulder the respon-
sibility of her home, but simply to shew her how much bet-
ter it is to be able to know how to do it, should it ever be-
come necessary. Housework is not degrading; on the con-
trary, we consider it elevating, for,

"She who sweeps a room as to God's law,
Makes that and the action fine."

And a girl can be just as much a lady in sweeping-cap, with
broom in hand, as in breakfast-cap, reclining languidly with
book in hand. The truest, noblest, and best woman we
know, has been trained from her girlhood to look, practi-
cally, to the ways of the household, and yet she is a lady in
every respect—an ornament to the most cultivated society.
When you have homes of your own, girls, and are obliged
to get along with little or no help, you will be thankful for
the training you have imposed upon yourselves in youth; or
if it falls to your lot to have servants in abundance, you will
still be glad that you can rule and direct them; and should
they leave you without any warning, as they are sometimes
disposed to do, you will be "mistress of the situation," able
to take hold successfully until such time as relief may come.
—*Christian at Work.*

THE FARMER'S WIFE.

Up with the birds in the early morning,
The dew-drop glows like a precious gem;
Beautiful tints in the skies are dawning,
But she's never a moment to look at them;
The men are wanting their breakfast early;
She must not linger, she must not wait;
For words that are sharp and looks that are surly
Are what men give when meals are late.

Oh, glorious colours the clouds are turning,
If she would but look over hills and trees;
But here are the dishes, and here's the churning,—
Those things must always yield to these.
The world is filled with the wind of beauty,
If she could but pause and drink it in;
But pleasure, she says, must wait for duty,
Neglected work is committed sin.

The day grows hot, and her hands grow weary;
Oh, for an hour to cool her head
Out with the birds and winds so cheery!
But she must get her dinner and bake her bread.
The busy men in the hay-field working,
If they saw her sitting with idle hand,
Would think her lazy, and call it shirking,
And she never could make them understand.

They do not know that the heart within her
Hungers for beauty and things sublime;
They only know that they want their dinner,
Plenty of it, and just "on time."
And after the sweeping and churning and baking,
And dinner dishes are all put by,
She sits and sews, though her head is aching,
Till time for supper and "chores" draws nigh.

Her boys at school must look like others,
She says, as she patches the frocks and hose;
For the world is quick to censure mothers
For the least neglect of the children's clothes.
Her husband comes from the field of labour;
He gives no praise to his weary wife;
"She's done no more than has her neighbour;
'Tis the lot of all in country life."

But after the strife and weary tussle
With life is done, and she lies at rest,
The nation's brain and heart and muscle—
Her sons and daughters—shall call her blest.
And I think the sweetest joy of heaven,
The rarest bliss of eternal life,
And the fairest crown of all will be given
Unto the way-worn farmer's wife.

THE MARKET-PLACE IN JERUSALEM.

In the market-place thronged the peasants, chiefly wo-
men. Each sat beside her basket, calling to the passers to
buy of her. There were poor fowls tied helplessly by their
two feet, huge cauliflowers from the well-watered gardens
of Siloam, oranges, lemons, citrons, and dates heaped up
together, and here and there, but not often, a bunch of
spring flowers. The days were past, with little promise of
returning, when St. Jerome wrote of the valleys about Jeru-
salem as "pleasant and woody spots full of delightful gar-
dens watered from the fountain of Siloam." The gardens
of roses of his day are now but heaps of dust, only the
memory of them smells sweetly; what has been may yet be
again.

Now and again a man with lemonade or simple drinking
water cried in a shrill voice, "Come buy of me," while he
clinked the brass cups at his side to attract customers.

The poor women and little children sat on the bare stones
dressed in their tattered and beautiful clothes, their naked
arms braceleted up to the elbow with silver and glass orna-
ments, chains of silver about their necks, coins of silver and
even gold upon their heads. How was it that with all these
possessions they were only sellers of eggs and vegetables?
In truth, these peasants carry all they possess upon their
poor lired bodies; they have no savings bank where to
keep their earnings; they must carry them always with
them; so when they have bought three pairs of thick
bracelets, rings for each finger, and chains for the neck,
they set to work to sew the coins themselves upon their
head-dresses, which they never leave off, not even while
sleeping.

In one street, oil, olives, and salt fish were set out in
glazed dishes upon the board which served as a counter;

while rope, nets, candles, and corks were hung from the
roof inside; barrels of sardines stood on either side of the
entrance, with fish brought from the sweet, cool waters of
the Sea of Galilee, from whose pebbly shores a few poor
fishermen still draw their livelihood, while their scattered
mud huts occupy the site of the cities of the past.

At another stall tobacco alone was sold. In a third only
soap, made into all manner of shapes—soap crosses, soap
hearts, soap fishes. A fourth contained fruit and vege-
tables piled temptingly together. A fifth bread only. In
the last sat a barber, waiting for heads to be shaved, his
booth hung round with infaid hand-mirrors and embroidered
towels.

Through narrow arches to right and to left were seen the
bazaars for cotton and silk clothing, as they stretched in far
perspective, away to the meat bazaar, a most unpleasant
quarter, which happily could well be avoided.

STUPIDITY IN COURT.

Mr. Howells, in the *Atlantic Monthly*, gives his obser-
vations in a police court. To show the difficulty of getting
an answer out of a stupid witness, he says, if it were
necessary, for example, to establish the fact that a handker-
chief was white, it was not to be done without some such
colloquy as this:

"Was it a white handkerchief?"
"Sor?"
"Was the handkerchief white?"
"Was it white, sor?"
"Yes, was it white?"
"Was what white, sor?"
"The handkerchief,—was the handkerchief white?"
"What handkerchief, sor?"
"The handkerchief you just mentioned,—the handker-
chief that the defendant dropped."
"I didn't see it, sor."
"Didn't see the handkerchief?"
"Didn't see him drop it, sor."
"Well, did you see the handkerchief?"
"The handkerchief, sor? Oh, yes, sor! I saw it,—I
saw the handkerchief."
"Well, was it white?"
"It was, sor."
A boy who complained of another for assaulting him said
that he knocked him down.
"How did he knock you down?" asked the judge. "Did
he knock you down with his fist or his open hand?"
"Yes, sor."
"Which did he do it with?"
"Put his arms round me and knocked me down."
"Then he didn't knock you down. He threw you
down."
"Yes, sor. He didn't throw me down. Put his arms
around me and knocked me down."

HUMAN ENDURANCE IN THE WATER.

Men and animals are able to sustain themselves for long
distances in the water, and would do so much oftener were
they not incapacitated, in regard to the former at least, by
sheer terror, as well as complete ignorance of their real
powers. Webb's wonderful endurance will never be for-
gotten. But there are other instances only less remarkable.
Some years since, the second mate of a ship fell overboard
while in the act of fisting a sail. It was blowing fresh; the
time was night, and the place some miles out in the stormy
German Ocean. The hardy fellow nevertheless managed to
gain the English coast. Brock, with a dozen other
pilots, was plying for fares by Yarmouth; and, as the main-
sheet was belayed, a sudden puff of wind upset the boat,
when presently all perished except Brock himself, who,
from four in the afternoon of an October evening to one the
next morning, swam thirteen miles before he was able to
hail a vessel at anchor in the offing. Animals themselves
are capable of swimming immense distances, although un-
able to rest by the way. A dog recently swam thirty miles
in America in order to rejoice his master. A mule and a
dog washed overboard during a gale in the Bay of Biscay
have been known to make their way to shore. A dog swam
ashore with a letter in his mouth at the Cape of Good Hope.
The crew of the ship to which the dog belonged all perished,
which they need not have done had they only ventured to
tread water as the dog did. As a certain ship was labour-
ing heavily in the trough of the sea, it was found needful, in
order to lighten the vessel, to throw some troop-horses over-
board, which had been taken in at Corunna. The poor
things, my informant, a staff-surgeon, told me, when they
found themselves abandoned, faced round and swam for
miles after the vessel. A man on the east coast of Lincoln-
shire saved quite a number of lives by swimming out on
horseback to vessels in distress. He commonly rode an old
gray mare, but, when the mare was not to hand, he took
the first horse that offered.—*Popular Science Monthly.*

ABOUT 80,000 acres of land between Jaffa and Jerusalem
have been secured on which to form a colony for the perse-
cuted Jews of the Continent of Europe.

THE Irish Court of Queen's Bench last week granted
conditional orders quashing the verdicts of coroners' juries,
in three cases in which police officials had been found guilty
of murdering persons who lost their lives while rioting.

THE "Publishers' Weekly" states that during 1881 2,061
new books were published in the United States, being 915
more than in 1880. Of these 507 were fiction, 335 juvenile
books, 341 of theology and religion, and 212 biography and
memoirs.

A RUSSIAN dispatch says: "The scheme of the Govern-
or-General of Moscow, for assuring the safety of the
Imperial cortege to Moscow on the occasion of the corona-
tion ceremonies, proposes that the Emperor shall come to
Moscow by carriage road instead of the railway, and the
crowds in the streets shall be separated from the procession
by trenches, barriers and lines of troops."

YOUNG CANADA.

THE SQUIRREL'S LESSON.

Two little squirrels out in the sun,
One gathered nuts, and the other had none.
"Time enough yet," his constant refrain;
"Summer is still only just on the wane."

Listen, my child, while I tell you his fate:
He roused him at last, but he roused him too late.
Down fell the snow from a pitiless cloud,
And gave little squirrel a spotless white shroud.

Two little boys in a school-room were placed,
One always perfect, the other disgraced,
"Time enough for my learning," he said,
"I will climb by and by from the foot to the head."

Listen, my darling, their locks are turned gray:
One as governor sitteth to-day,
The other, a pauper, looks out at the door
Of the almshouse, and idles his days as of yore.

Two kinds of people we meet every day:
One is at work, the other at play,
Living uncared for, dying unknown,
The busiest hive hath ever a drone.

Tell me, my child, if the squirrels have taught
The lesson I longed to implant in your thought.
Answer me this, and my story is done,
Which of the two would you be, little one?

HOW MARBLES ARE MADE.

Marbles are known from the Latin word *marmor*, by which similar playthings were known to the boys of Rome two thousand years ago. Some marbles are made of potters' clay, and baked in an oven just like earthenware is baked, but most of them are made of a hard kind of stone found in Saxony, Germany. Marbles are manufactured in great number, and sent to all parts of the world, and even to China, for the use of the Chinese children. The stone is broken up with a hammer into little square pieces, which are then ground round in a mill. The mill has a fixed slab of stone, with its surface full of grooves or furrows. Above this a flat block of oak wood, of the same size as the stone, is made to turn rapidly around, and while turning, little streams of water run in the grooves and keep the mill from getting too hot. About one hundred of the square pieces of stone are put into the grooves at once, and in a few minutes are made round and polished by the wooden block.

China and white marble also are used to make the round rollers which have delighted the hearts of boys of all nations for hundreds of years. Marbles thus made are known to the boys as "chinas" or "alleys." Real chinas are made of porcelain clay, and baked like chinaware or other pottery. Some of them have a pearly glaze, and some of them are painted in various colours that will not rub off, because they are baked in, just as the pictures on plates and other tableware.

Glass marbles are known as "agates." They are both made of clear and coloured glass. The former are made by taking up a little melted glass upon the end of an iron rod, and making it round by dropping it into an iron mould, which shapes it, or by whirling it around the head until the glass is made into a little ball. Sometimes the figure of a dog or a squirrel or kitten, or some other object, is placed on the end of the rod, and when it is dipped in the melted glass the glass flows all around it, and when the marble is done the animal can be seen shut up in it. Coloured glass marbles are made by holding a bunch of glass rods in the fire until they melt, then the workman twists them round into a ball or presses them in a

mould, so that when done the marble is marked with bands or ribbons of colour. Real agates, which are the nicest of all marbles, are made in Germany, out of the stone called agate. The workmen chip the pieces of agate nearly round with hammers, and then grind them round and smooth on grindstones.

TELLING FORTUNES.

I'll tell you two fortunes, my fine little lad,
For you to accept or refuse;
The one of them good, the other one bad;
Now hear them, and say which you chooseo.

I see by my gifts within reach of my hand,
A fortune right fair to behold;
A house and a hundred good acres of land,
With harvest fields yellow as gold.

I see a great orchard with boughs hanging down
With apples, russet and red;
I see droves of cattle, some white and some brown,
But all of them sleek and well fed.

I see droves of swallows about the barn doors,
See the fanning mill whirling so fast;
I see them threshing wheat on the floor—
And now the bright picture has passed.

And I see rising dismally up in the place
Of the beautiful house and the land,
A man with a fire-red nose on his face,
And a little brown jug in his hand.

Oh! if you beheld him, my lad, you would wish
That he were less wretched to see;
For his boot toes they gape like the mouth of a fish,
And his trousers are out at the knee.

In walking he staggers now this way, now that,
And his eyes they stand out like bug's;
And he wears an old coat and a battered-in hat,
And I think that the fault is the jug's.

For the text says the drunkard shall come to be poor,
And that drowsiness clothes men in rags;
And he doesn't look much like a man, I am sure,
Who has honest hard cash in his bags.

Now, which will you have? To be thrifty and snug,
And be right side up with your dish;
Or go with your eyes like the eyes of a bug,
And your shoes like the mouth of a fish?

CAPTURING MONKEYS.

Monkeys are frequently captured in nooses and in traps built in the shape of houses. The only entrance is a trap-door in the roof, which communicates with a trigger set upon the ground. Food is spread about inside, the monkeys enter, and skirmishing around, disturbs the trigger and the trap shuts them in. The third method for catching them is a most ludicrous one. An old, hard cocoanut is taken, and a very small hole made in the shell. Furnished with this and a pocketful of boiled rice, the sportsman sallies into the forest and stops beneath a tree tenanted by monkeys. Within full sight of these inquisitive spectators he first eats a little rice and then puts a quantity into the cocoanut with all the ostentation possible. The nut is then laid upon the ground, and the hunter retires to a convenient ambush. The reader may be sure that no sooner is the man out of sight than the monkeys race helter-skelter for the cocoanut. The first arrival peeps into it, and, seeing the plentiful store of rice inside, squeezes his hand in through the tiny hole and clutches a handful. Now, so paramount is greed over every other feeling connected with monkey nature, that nothing will induce the creature to relinquish his hold. With his hand thus clasped he cannot possibly extract it; but the thought that if he lets go one of his brethren will obtain the feast is overpowering. The sportsman soon appears on the scene; the unencumbered monkeys fly in all directions, but the unfortunate brute who still will not let the rice go is thereby handicapped beyond hope with a

cocoanut as large as himself—a state of affairs quite fatal to rapid locomotion, either terrestrial or arboreal. The sequel is that he falls an easy capture to the hunter, a victim to his own greed.

BOB RYAN AND DANDY.

"Never make an enemy, even of a dog," said I to Bobby Ryan, as I caught his raised hand and tried to prevent him from throwing a stick at our neighbour Howard's great Newfoundland. But my words and effort came too late. Over the fence flew the stick, and whack on Dandy's nose it fell. Now Dandy, a great powerful fellow, was very good-natured, but this proved too much for him. He sprang up with an angry growl, bounded over the fence as if he had been light as a bird, caught Bobby Ryan by the arm, and held it tightly enough to let his teeth be felt.

"Dandy! Dandy!" I cried, in momentary alarm, "Let go! Don't bite him!" The dog lifted his dark brown, angry eyes to mine with intelligence, and I understood what he said: "I only want to frighten the young rascal."

And Bobby was frightened. Dandy held him for a little while, growling savagely, though there was a great deal of make-believe in the growl, and then, tossing the arm away, leaped back over the fence and laid down by his kennel.

"You're a very foolish boy, Bobby Ryan," said I, "to pick a quarrel with such a splendid old fellow as that. Suppose you were to fall into the lake some day, and Dandy should happen to be near, and suppose he should happen to remember your bad treatment and refuse to go in after you?"

"Wouldn't care," replied Bobby; "I can swim."

Now it happened, only a week afterward, that Bobby was on the lake in company with an older boy, and that in some way their boat was upset in deep water, not far from the shore, and it also happened that Mr. Howard and his dog Dandy were near, and saw the two boys struggling in the water.

Quick as thought Dandy sprang into the lake and swam rapidly toward Bobby; but, strange to say, after getting close to the lad, he turned and went toward the larger boy, who was struggling in the water and keeping his head above the water with difficulty. Seizing him, Dandy brought him safely to the shore. He then turned and looked towards Bobby, his young tormentor; he had a good many grudges against him; and for some moments seemed to be hesitating whether to save him or let him drown.

"Quick! Dandy!" cried his master, pointing to poor Bobby, who was trying his best to keep afloat. He was not the brave swimmer he thought himself.

At this the noble dog again bounded into the water and brought Bobby to land. He did not seem to have much heart in the work, however, for he dropped the boy as soon as he reached the shore, and walked away with a stately indifferent air.

But Bobby, grateful for his rescue, and repenting his former unkindness, made up with Dandy on that day, and they were ever afterward fast friends. He came very near losing his life through unkindness to a dog, and the lesson it gave him will not soon be forgotten.—*Children's Hour.*



HOW TO KEEP COOL.

TORONTO WHOLESALE MARKETS.

OFFICE RURAL CANADIAN,
Toronto, Feb. 15th, 1882.

GRAIN.—Trade generally has been exceedingly quiet; wheat is depressed on account of the great drop in outside market, and recovery is anxiously looked for by some holders. *Fall Wheat*—Stocks in store, 230,127 bushels, as compared with 217,822 bushels last week, and 105,805 bushels at a like time in 1881. The only sales reported yesterday were 10,000 bushels of No. 2 at \$1.25, delivery any time up to May, and 10,000 bushels of the same grade at \$1.28 May delivery. There is a buyer of 10,000 more of the latter at \$1.27. Holders are asking about \$1.27 for No. 2 and \$1.30 for No. 1, but the demand is small. *Wheat*—Stocks in store 84,443 bushels, against 75,794 bushels last week, and 74,354 bushels at a like time last year. During the latter part of last week, several cars of Nos. 1 and 2 sold at \$1.31 on track, but prices closed much easier. Yesterday, values were nominal at \$1.28 to \$1.29 for No. 1, and \$1.26 to \$1.27 for No. 2. *Oats*—Stocks in store, 4,513 bushels as compared with 4,554 bushels last week. Offerings have been limited and prices steady; one or two cars of Western sold daily at 42c. on track, and Eastern at 40c. on track on Monday. Street prices 42c. to 44c. *Barley*—Stocks in store 293,947 bushels, against 303,545 bushels last week, and 427,799 bushels at a like time last year. There have been numerous sales of round lots for shipment west on p.t., the chief grade being No. 1. Car lots quiet, with sales also on p.t., but values are pretty much the same as those at the close of last week, viz., 88c. to 89c. for No. 1, 84c. for No. 2, and 78c. to 79c. for No. 3 extra. Street prices ranged from 78c. to 83c. *Peas*—Stocks in store 16,860 bushels, against 16,095 bushels last week, and 71,777 at a like time in 1881. Market remains dull in absence of offerings; prices close nominal at 79c. for No. 1, and 77c. for No. 2. Street prices 78c. to 80c. *Rye*—Stocks in store 17,007 bushels—same as last week. Offerings are fair and prices steady. A few sales have been made at 83c. delivered.

CLOVER.—There has been a good demand, and offerings are liberal; prices have a wide range on account of difference in quality. Choice lots are wanted, and remain firm at \$5 to \$5.15 per bushel, while inferior seed is easier at \$4.80 to \$4.85 per bushel. *Alsike* continues firm at \$7.50 to \$8.25. *Timothy* nominal, at quotations in absence of offerings.

PROVISIONS.—The demand for butter has been fairly active and prices firm. Large quantities have been bought up for shipment to the States and to the Lower Provinces. They were medium and good qualities, very little choice offering. The latter is worth 20c. to 22c. in tub lots, and good selections in lots are in demand at 16c. *Cheese*—There has been a moderate inquiry, and prices continue steady at 12½c. to 13½c.; in Liverpool there has been a fall of 1s. *Eggs* are scarce and firm at 22c. to 23c. for fresh, and 20c. for pickled. *Pork* quiet, with stock very small; it is held at \$20.50 to \$21. *Bacon* is in fair demand and steady at 10½c. to 11c. for long clear and 10c. to 10½c. for jobbing lots of Cumberland cut. *Ham* unchanged, at 12c. to 13c. *Lard* continues in fair request and steady at 13½c. for tierces, and 14c. to 14½c. for tubs and pails. *Hogs* scarce and steady at about \$8.50 to \$8.65, but buyers not so anxious since the drop in the west.

FLOUR AND MEAL.—Stocks in store, 6,933 bbls. against 7,423 bbls. last week and 9,829 bbls. at a like time last year. *Flour* seems to be demoralized, and buyers hold off in anticipation of even lower prices. It is nominally lower than last week, in consequence of the decline of wheat. No sales have been reported, and fortunately for holders stocks are not heavy. Superior extra is nominal at \$5.50 to \$6.50 and extra at \$5.40 to \$5.50. *Bran* continues very scarce and prices are higher at \$15.50 to \$16.00. *Oatmeal* unchanged, at \$4.40 to \$4.65, with few car lots moving.

CATTLE.—Receipts somewhat larger this week, amounting to about 630 head. The majority were inferior to good quality, and prices were relatively high. Several exporters were in the market buying to ship by way of Portland. A few head of choice steers sold at 5c. per lb., average weight 1200 to 1300 lbs. First-class butchers' cattle sold at 4c. to 4½c., and second-class at 3c. to 3½c. *Sheep* in good supply and steady, prices ruling at 4c. to 5c. per lb.; only few sold at the latter figure. *Lambs* in moderate demand and unchanged at 4½c. to 5c. per lb. *Calfes* wanted, and prices firm at \$6 to \$12 per head. *Hogs* rather easier, at 6c. to 6½c. per lb.

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